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March/April 2026

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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**.

Iran conflict continues to put pressure on the industry

Uncertainty is increasing significantly



Anja Hoffrichter
Editor IDM
International Dairy Magazine
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The war against Iran initiated by the United States and Israel is far more than a regional escalation. With the blockade of the Strait of Hormuz, it is hitting one of the most sensitive chokepoints of the globalized economy – and thus also the dairy industry. What at first glance appears to be a distant geopolitical conflict is increasingly developing into a tangible structural problem for dairy farmers, processors, and consumers in Europe.

The Strait of Hormuz is not only a key energy corridor. Around 30% of globally traded fertilisers pass through this narrow waterway. If this bottleneck fails, prices rise – immediately and sharply. For the industry, this means increasing production costs at a time when margins are already tight. At the same time, rising oil and gas prices are driving up costs for production, transportation, and processing.

The situation could become particularly critical for exports. The Gulf states are among the most important buyers of European dairy products. In 2025, more than 40% of EU condensed milk exports, over 30% of whole milk powder, more than 16% of skimmed milk powder, and around 120,000 tons of cheese were shipped to this region. The total value of EU dairy exports to these countries amounts to more than €2 billion annually. If key shipping routes are blocked or become significantly more expensive, these trade flows will slow down.

For consumers, this means rising prices in the medium term, as higher energy, transportation, and fertiliser costs will sooner or later become noticeable at the retail level. Policymakers must now act and diversify export markets. A new opportunity may lie in the new trade agreement between the EU and Australia. It offers expanded bilateral trade opportunities with clearly defined tariff-rate quotas – such as 5,000 tons of butter, 8,000 tons of skimmed milk powder, and 2,000 tons of whey protein concentrates. Improved market access conditions provide the EU dairy sector with additional planning security in a market that offers potential beyond the €380 million in EU exports recorded in 2025.

Even though Australia cannot replace the Gulf region, every additional stable trade window helps reduce geopolitical risks

thinks
Anja Hoffrichter

TETRA PAK invests €60 million

New pilot plant

Tetra Pak has introduced a solution in its aseptic beverage cartons where the traditional aluminium foil layer is replaced with a new paper-based barrier. This innovation increases the paper content in beverage cartons to approximately 80% and, when combined with plant-based polymers, increases the traceable renewable content of a carton up to 92% – cutting the carbon footprint by up to 43%¹. By simplifying the material structure from three to two main materials: paper and polymers, further benefits are anticipated for recycling infrastructure. These include maximising the recovery of paper content during the recycling process of carton packages and delivering high-quality fibre and non-fibre fractions.

To accelerate the development of this innovative aseptic packaging material, Tetra Pak is investing €60 million in a new paper-based barrier pilot plant in Lund, Sweden. This facility will also provide its customers with valuable insights into the new solution across the entire manufacturing journey – from barrier creation to packaging material and filled package production.



Tetra Pak is investing €60 million in a new paper-based barrier pilot plant in Lund, Sweden (photo: Tetra Pak)

The paper-based barrier pilot plant will be located in Lund, selected for its strong ties to existing research and material development, close collaboration with Lund University, and access to advanced testing capabilities at the MAX IV Laboratory in Lund.

FONTERRA invests \$75 million

Expansion of butter production at Clandeboye

Fonterra has announced a NZD 75 million investment to expand butter production at its Clandeboye site in South Canterbury, as part of the next phase of strategic investments by the Co-op signalled in its FY25 Annual Results.

CEO Miles Hurrell says the Co-op plans to invest up to \$1 billion over the next three to four years in projects that will generate further value for farmers and drive operational cost efficiencies.

The investment will enable construction of a new butter line at Clandeboye, expanding the site's current butter production capacity by up to 50,000 MT per annum.

The new line will expand the Co-op's capacity to produce a range of butter formats, tailored for both global ingredients customers and professional kitchens.

The plant will be capable of producing products that meet diverse market requirements, including Halal and Kosher certifications, supporting our growth in key international markets.

Fonterra Chief Operating Officer Anna Palaret says the expansion of the Clandeboye site strengthens Fonterra's network in the South Island by improving flexibility and resilience.

Construction at the Clandeboye site started in December 2025, with commissioning scheduled for early 2027 and first product expected off the line in April 2027.

This is Fonterra's third investment in the South Island in the past year.

“Let’s Mix Up Something Better!”

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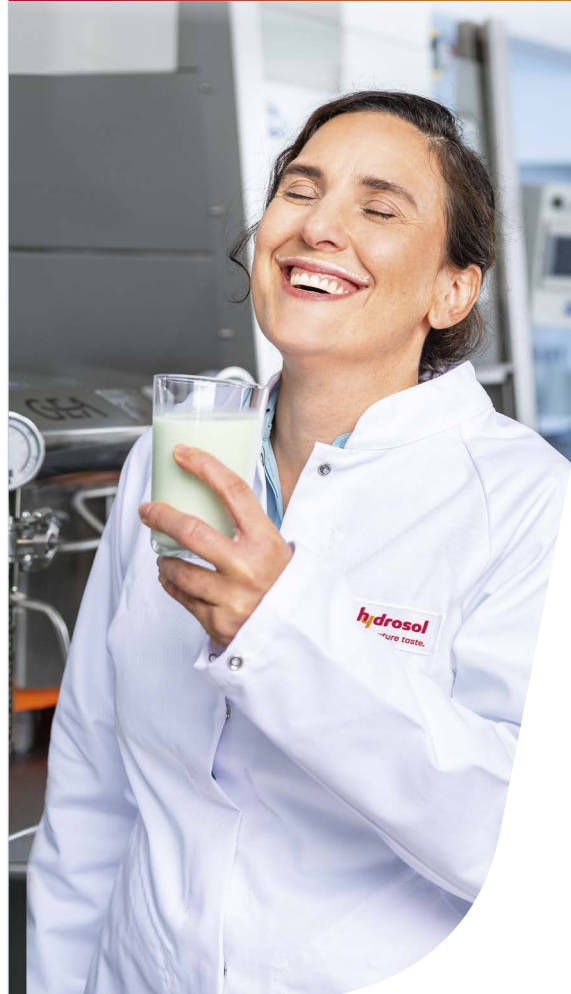
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Balanced milk drinks are trending.

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Mission “Mixing”

Flexible level measurement in the fruit yoghurt mixing tank



Author: Joachim Schmalz, Industry Manager Food & Pharma, VEGA

Level sensors must also be able to cope with different product consistencies in yoghurt production.

When processing small quantities of a product, the question often arises as to whether it is worthwhile to feed them fully automatically from one processing stage to the next. Savoie Yaourt, a well-known French dairy, answers this question with a “yes”. The company produces fruit yoghurts that are mixed with the help of 80-GHz VEGAPULS 6X radar sensors according to the high hygiene and automation standards.

Quality is the decisive factor

In order to successfully develop its brand, the fruit yoghurt producer Savoie Yaourt in the French thermal spa town of Aix-les-Bains, on the “Riviera of the Alps”, has adopted a strategy of long-term thinking. Instead of following short-term trends, like



new yoghurt varieties, the company, which currently employs 39 people, now places a higher priority on local sourcing, sustainability and quality. The organic milk from cows and goats comes exclusively from France – the cow's milk for all fruit yoghurt varieties is even sourced 100% from the immediate Savoyard region. The company also declares its recipes to be free of additives, preservatives and colourings.

Its product portfolio is correspondingly modest and of limited scope: The popular fruit yoghurt "Plaisir des Alpes", for example, is available in only four flavours: red fruits, yellow fruits and summer or winter fruits according to the season. By limiting its product palette, the producer remains down-to-earth. The organic products and recyclable packaging alone demonstrate its

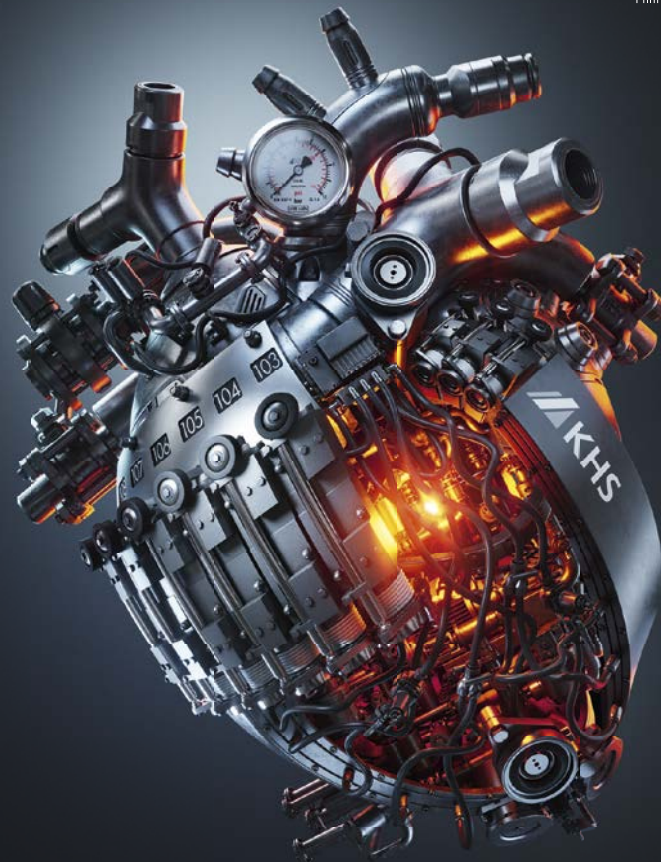
ability to innovate and adapt to the outside world. Internally, its innovative prowess is evident in the multi-stage production process that features a high degree of automation. This helps to maintain consistently high quality and comply with strict hygienic regulations. The entire production process is certified according to IFS Food.

The stages in yoghurt production

Savoie Yaourt obtains most of the milk from the region, collecting it every other day from farms within a maximum radius of 50 km. Between the milk pickup and the refrigerated storage of the packaged yoghurt, the natural product goes through three

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processing stages: yoghurt preparation, filling and storage. Strict controls and modern technology are fundamental to each.

The resulting product range essentially comprises only three different products: the fruit yoghurt “Plaisir des Alpes”, organic yoghurt and goat’s milk yoghurt. However, each is available in different packaging: individual or family-size portions in recyclable plastic cups, cartons or glass jars. The sizes vary from 120 ml in glass jars to 500 ml in plastic cups. Savoie Yaourt markets the latter as “yoghurt to share”.



*The fruit yoghurt maker
Savoie Yaourt in Aix-les-Bains*



The fat content of the processed milk is specified according to the desired end product. Pasteurised milk cooled down to 8 °C first flows into a mixing tank. Here it is tempered to 58 °C after a stirring sequence, then heated to 95 °C for a few minutes before it cools down to its fermentation temperature of 35 °C. At this point, bacterial cultures are added. They convert the natural milk sugar into lactic acid and thereby lower the pH value into the acidic range. This causes a structural change in the milk protein and the mass becomes firmer: yoghurt-like.

Exact level measurement in the fruit mixing tank

When the yoghurt is pumped into the fruit mixing tank, it has already had several hours of “fermentation time”. Just like the fermentation process, the fruit blending also takes place under aseptic conditions. The critical process parameters here are the hygienic design of the system components, the homogeneity achieved by stirring and the measurement of the level. The level should not fall below 20% of the total

The hygiene-compliant radar sensor VEGAPULS 6X reports any overshooting or undershooting of the specified maximum and minimum filling levels reliably and promptly.

container volume – and not exceed 90%. In this way, the directly subsequent filling process can run smoothly and without interruption. The demands on the measurement technology are high: since different varieties are processed in the same fruit mixing tank, the sensor must be able to react to the different consistencies resulting from different recipes. In the past, this requirement created additional work at Savoie Yaourt, as a previously used capacitive measuring probe for point level detection, installed in the same place, was not precise enough and caused mistakes again and again.

No two fruits are the same

The level inside the fruit mixing tank changes constantly during yoghurt production. The composition of the mixture in the tank also changes in rapid cycles. Each fruit confection has unique properties that place special demands on the process technology. Without reliable monitoring and timely refilling, there is a risk of the

filling process downstream at the packaging machine coming to a standstill. Here, prefabricated crates are waiting to be filled with cups of fruit yoghurt and stacked in accordance with the packing scheme.

Overfilling could also bring the process to a standstill. Continuous measurement of the filling volume is therefore absolutely essential in order to avoid interruptions or even damage to the system.

Perfect measuring results in the fruit mixing tank

The hygiene-compliant radar sensor VEGAPULS 6X reports any overshooting or undershooting of the specified maximum and minimum filling levels reliably and promptly. The berries and fruit, and sometimes nuts, that go with the fruit yoghurt are stirred in in the mixing tank. The precise, 80-GHz frequency level measurement keeps the aseptic process at an optimum level and ensures the reproducibility that Savoie Yaourt's customers rely on.

Thanks to the reliably monitored filling quantity in the mixing container, exact volumes of fruit yoghurt are filled into 125-g plastic cups without interruption and sealed directly with sterile lids made of aluminium foil.

Compact and hygienic

When used on the compact fruit mixing tank, the measurement must remain highly accurate even when the measuring distance is less than 200 mm. With its especially small process fittings and short blocking distance, VEGAPULS 6X is particularly suitable for this type of compact vessel. Its compact design also makes installation easier. In hygienically critical dairy applications, it is deployed with a 2" PN16 clamp connection that meets the strict hygienic standards according to FDA and EC 1935/2004. The sensor can be installed by hand without tools. Its extensive functionality also allows optimal inline cleaning at the integrated CIP station.

Roquette launches HORIZONS New platform

NEWS

Roquette has announced the launch of HORIZONS. The new foresight platform has been developed to help companies in the food and nutrition industry identify change at an early stage, explore possible future scenarios, and turn uncertainty into concrete strategies.

Today's food industry operates in an environment shaped by shifting consumer needs, new regulatory requirements, technological disruption, and the growing urgency of sustainability. In order to remain successful, businesses need insights that go beyond short-term trends, as well as a structured approach to preparing for the future. HORIZONS addresses this need by combining advanced AI-driven trend scanning with expert analysis. This enables emerging signals to be

detected early, the most important drivers to be prioritized, and scenarios to be developed that support long-term strategy and innovation.

A structured foresight methodology

The platform follows a four-step process that begins with identifying signals of change. These include societal lifestyle trends, regulatory developments, technologies, market dynamics, and resource management. The signals are visualized in radar formats and prioritized according to their likelihood and potential impact. Roquette experts then develop scenarios that explore how the future may unfold under different conditions. In the final step, these scenarios are translated into tangible resources, such as creative and ideation tools

that provide practical guidance for future-proof strategies. Each signal and scenario is validated by specialists to ensure that the results are credible and actionable. Collaborations with external partners such as the think tank Hello Tomorrow or EDHEC Business School add further scientific rigor to the scanning phase and strengthen the platform's relevance.

By linking macroeconomic drivers with consumer insights, HORIZONS helps users connect long-term forces of change with current market requirements. Manufacturers can anticipate regulatory and societal developments at an early stage, reduce uncertainty by testing strategies across multiple possible futures, and accelerate innovation cycles.

Sustainability in dairy processing

Shaping the future together



Author:
Dhiraj Singh, Vice President, Food & Pharma,
Alfa Laval Middle East, South and East Africa

Sustainability has moved from the margins of corporate responsibility to the very core of strategic decision-making in global food systems. In the dairy sector, this shift is particularly significant. Dairy sits at the intersection of nutrition, economic livelihood, food security, and environmental impact. Today, processors are not simply being asked to reduce emissions; they are being challenged to redefine how value is created in a carbon-constrained world.

Globally, the agrifood system accounts for roughly one-third of total greenhouse gas emissions. Within that, the dairy value chain contributes an estimated 2.7 to 4 percent of total anthropogenic emissions when production, processing, transport, and associated meat outputs are considered. While farm-level activities, such as enteric fermentation and feed production, remain the largest contributors, processing, packaging, refrigeration, and logistics collectively represent a significant and actionable share of emissions. This is precisely where technology, efficiency, and innovation can make an immediate difference.

The pressure to act is no longer driven solely by regulators. Retailers are embedding carbon metrics into procurement criteria. Investors are scrutinizing Scope 1 and 2 emissions and are increasingly focusing on Scope 3 emissions. Consumers are asking for transparency, with some producers now labeling the carbon footprint per liter of milk. Sustainability performance has become a proxy for operational excellence and long-term resilience. In this context, environmental responsibility is inseparable from competitiveness.

Life-cycle assessment

A thorough life-cycle assessment (LCA) enables producers to measure their environmental impact at every phase: from raw

milk collection and processing to packaging, logistics, and waste management. When executed properly, LCA serves as a powerful tool for minimizing CO₂ emissions, optimizing resource usage, and making informed choices about packaging materials. Some innovative producers are even starting to label the carbon footprint of each liter of milk, placing them at the forefront of transparency and sustainability. However, to build credibility, it's crucial that dairy processors adhere to established frameworks like the EU Product Environmental Footprint (PEF) guidelines, which set out standardized methods for calculating emissions. Only certified providers can deliver validated LCA results, which are increasingly important as the sustainability claims of businesses come under close scrutiny.

Now, at the same time, the conversation must move beyond carbon alone. Water stewardship is emerging as an equally critical pillar. Dairy processing is resource-intensive, and in water-stressed regions, efficient cleaning systems, water reuse strategies, and optimized wastewater treatment are becoming strategic imperatives. Plants that integrate advanced cleaning-in-place systems and heat recovery technologies are reporting significant reductions in water and steam consumption, often achieving measurable cost savings within the first year of implementation. These are not marginal gains; they are structural improvements that strengthen profitability while reducing environmental impact.

Energy efficiency

Energy efficiency remains another decisive lever. Heat exchange optimization, waste heat recovery, electrification of processes, and smarter energy management systems can dramatically reduce a plant's carbon intensity. In some advanced dairy markets, facilities integrating renewable energy and anaerobic digestion technologies have demonstrated emission reductions of up to 40 percent at the



farm-processing interface. Digital monitoring tools now allow processors to track energy performance in real time, translating sustainability from a static annual report into a dynamic operational discipline.

Climate change itself is reinforcing the urgency of this transition. Increasing heat stress events are already affecting dairy productivity in several regions, with studies indicating measurable declines in milk yield during extreme heat conditions. The implication is clear: sustainability is not just about reducing impact; it is about safeguarding supply continuity. A resilient dairy sector must be climate-smart at every stage of the value chain.

Sustainability targets

In the Middle East and Africa, this journey is accelerating. Countries such as the UAE, Saudi Arabia, Egypt, Qatar, and Kuwait are embedding sustainability targets into national development strategies. Food security and resource efficiency are tightly interlinked in these markets, where water scarcity and energy intensity present unique challenges. Early adopters among dairy processors are recognizing that proactive investment in efficient technologies positions them ahead of tightening environmental standards and evolving consumer expectations. In India, the world's largest milk producer, national efforts are underway to quantify and reduce carbon intensity across the dairy supply chain, signaling that sustainability will increasingly shape competitiveness in emerging as well as developed markets.

Yet the most significant barrier remains mindset. Too many organizations still perceive sustainability initiatives as discretionary expenditures rather than strategic investments. The evidence consistently proves the opposite. When energy-efficient heat exchangers reduce steam demand, when optimized cleaning systems

lower chemical and water use, when wastewater treatment enables reuse rather than discharge, sustainability translates directly into lower operating costs, improved margins, and enhanced brand value. It becomes a driver of innovation and differentiation.

The dairy industry stands at a defining moment. Global demand for dairy products continues to grow, particularly in emerging economies. Meeting this demand responsibly will require more than incremental improvements. It demands integrated thinking, cross-value-chain collaboration, and leadership willing to invest in long-term resilience over short-term optics. The tools and technologies are already available. What is needed now is decisive commitment and a willingness to treat sustainability as a catalyst for transformation.

Those who act early will not only comply with future regulations; they will shape them. They will build stronger partnerships with retailers and consumers. They will attract investment aligned with environmental, social, and governance principles. Most importantly, they will prove that dairy processing can be both economically robust and environmentally responsible.

Sustainability in dairy processing is no longer a peripheral obligation. It is an opportunity to rethink efficiency, unlock innovation, and future-proof one of the world's most essential food sectors. The companies that recognize this shift today will define the standards of tomorrow.

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Getting more out of whey

Modern strategies for optimizing whey pretreatment



Author: Thomas Veer, Product Manager
Dairy Separation at GEA, Business Unit Separators

Whey is one of the most versatile raw materials in milk processing today. Its high functional value, nutritional benefits and wide range of uses – from infant nutrition to medical nutrition and pharmaceutical applications – make it a key value driver in dairies worldwide. The downstream processes, such as membrane filtration, electro dialysis, thermal concentration and drying, are correspondingly diverse. However, their success depends on an even earlier step: the quality of whey pretreatment.

The foundation of the process chain: solids, fat, and microbiology

At the beginning of every whey line is the question of the quality of the raw product. The content of separable solids is a critical parameter here, as even slight deviations reduce the service life of the membranes and increase cleaning cycles. Classic determinations using Imhoff funnels or laboratory centrifuges provide reliable values here.

A target value of around 0.03 percent by volume of separable solids or 100 ppm of separable solids – based on dry matter – has been established for subsequent processes. Fouling can only be effectively limited below this limit. Mechanical coarse separators such as filters or screens contribute to this, but the required separation accuracy can only be achieved using centrifugal separation technology.

The fat content of the whey is also a decisive factor. Although large dairies now have access to rapid FTIR (Fourier transform infrared spectrometer) measurement methods, the goal remains the same regardless of the analysis: to remove as much fat as possible to minimize downstream fouling processes and ensure stable product quality.

Skimming separators achieve fat contents of around 0.04 percent to 0.05 percent, depending on the measurement method, and thus provide an optimal starting point for most applications. The whey cream

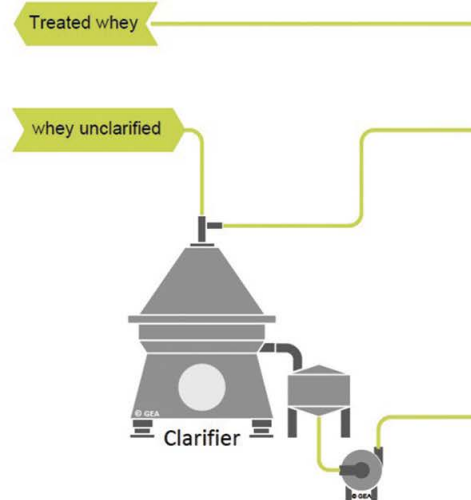


Figure 1:
GEA has developed the IDEAL Whey Line for resource-efficient and safe whey processing. Each step is designed for optimal yield: the flexibly operable clarifier reduces emptying and water consumption thanks to intelligent recipe management, while the skimming separator monitors the skimming quality via sensors, enabling longer emptying intervals. Optional sterilization and pasteurization complement the microbiological quality assurance. The result is whey with a low solids, fat and germ content – ideal for high-quality further processing.

produced in this process forms a valuable by-product that can be returned to cheese, butter, or other product lines, depending on the operating concept.

The invisible challenge: microbiological control in whey pre-treatment

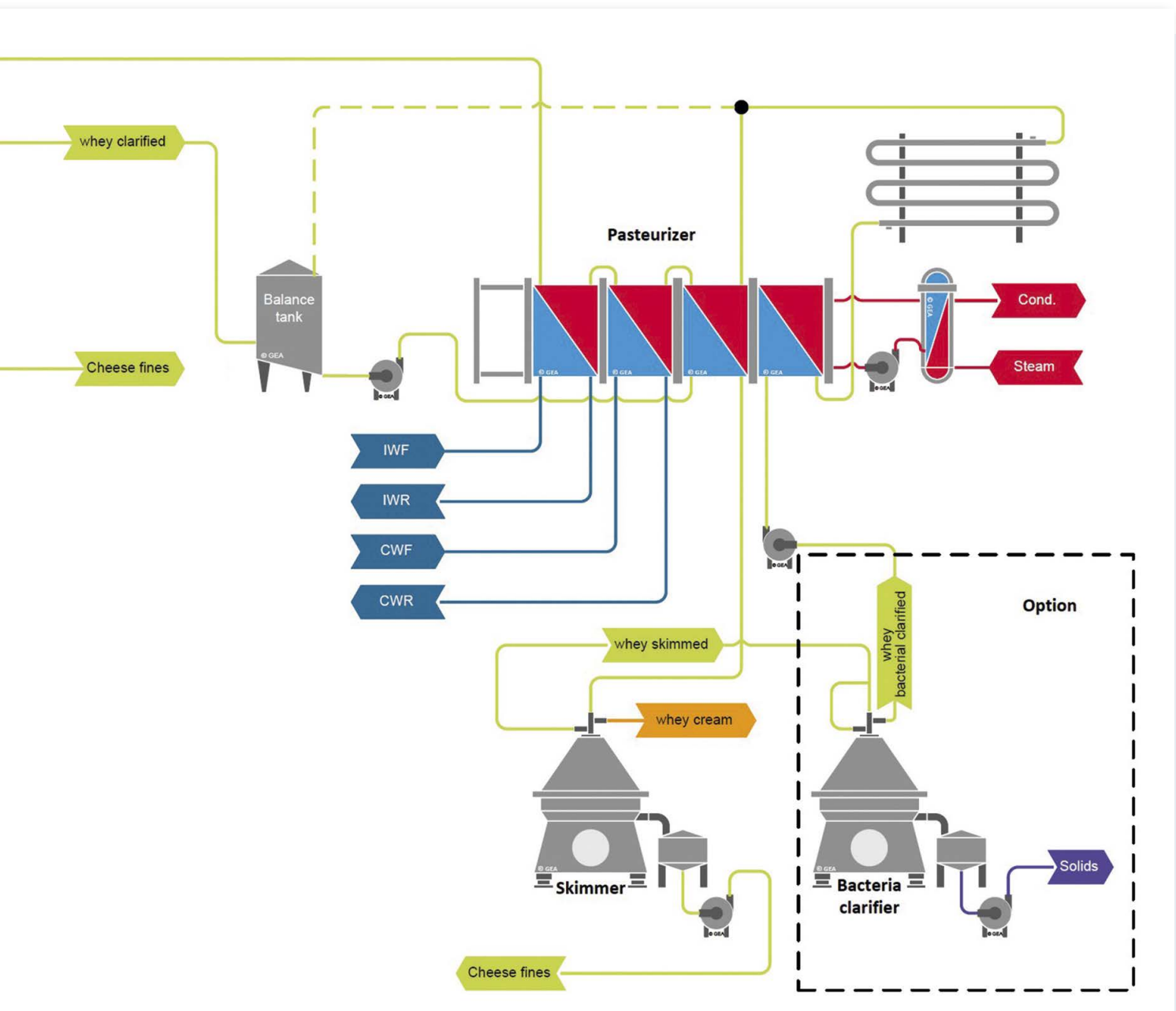
The microbiological composition of whey is often underestimated in practice. The total bacterial count alone allows only limited conclusions to be drawn, as whey – unlike raw milk – already has a specific

microbiological signature due to cheese production. Not only the amount of bacteria, but also their composition, especially with regard to heat-resistant spores, is crucial for process control. Thermal, mechanical and physical processes are available for germ reduction. Pasteurization offers a classic and robust solution, while microfiltration enables particularly high separation rates but is associated with significant resource consumption. Centrifugal bacteria removal processes are gaining in importance because they can efficiently reduce both germs and spores with moderate

energy consumption, especially in combination with downstream pasteurization.

Process combinations in the modern whey line

The appropriate process combination depends on plant capacity, raw material fluctuations and desired product quality. In smaller and medium-sized capacity ranges, screen clarification followed by skimming is common, even though the higher solids content in screen-clarified whey leads to more frequent emptying and thus product



losses. In addition, air introduced during screening can impair fat separation. The final clarification and skimming result may not always provide the optimal basis for further processing.

For higher throughputs, two-stage systems consisting of a clarifier and a skimmer offer advantages: The clarifier removes fine and coarse particles and enables the skimmer to operate with virtually no solids, which supports high fat separation and stable line performance. Nevertheless, emptying intervals and possible whey losses must be considered, as the line planning is designed for the “worst-case scenario” in terms of solids.

Holistic concepts for stable whey lines

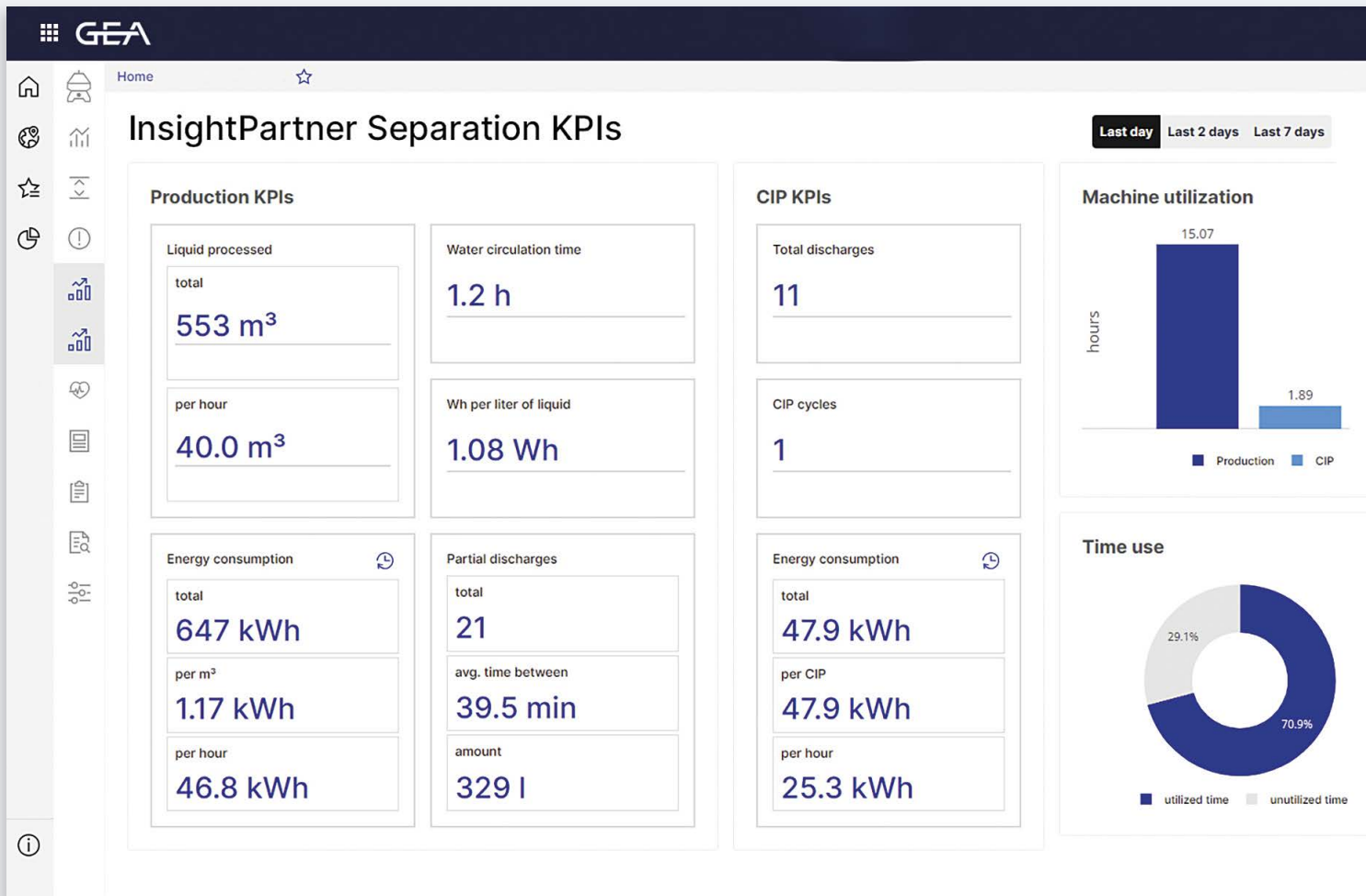
Modern approaches are increasingly focused on embedding individual process modules into an integrated overall system rather than viewing them in isolation. Such an approach typically includes recipe-based control of emptying frequencies based on the actual solids load. This avoids unnecessary emptying and significantly reduces both product and water losses.

The skimming process can also be made more dynamic through inline monitoring of the residual fat content. If the residual fat level remains stable and low, the interval

between two emptying operations can be significantly extended without compromising product quality. Only when the fat content changes noticeably does the system automatically trigger an emptying operation and subsequently verify the process status. The result is a gentle, continuous operation with optimized yield.

If centrifugal bacteria removal is also integrated, the total germ count and spores can be further reduced. Downstream pasteurization has a stabilizing effect and creates a defined microbiological starting point for subsequent membrane processes or thermal concentration.

GEA InsightPartner makes whey processing more transparent and efficient: real-time data, intelligent algorithms, and inline measurement technology help to reduce energy and water consumption, keep processes stable, and conserve resources.



Cheese dust as a resource instead of waste stream

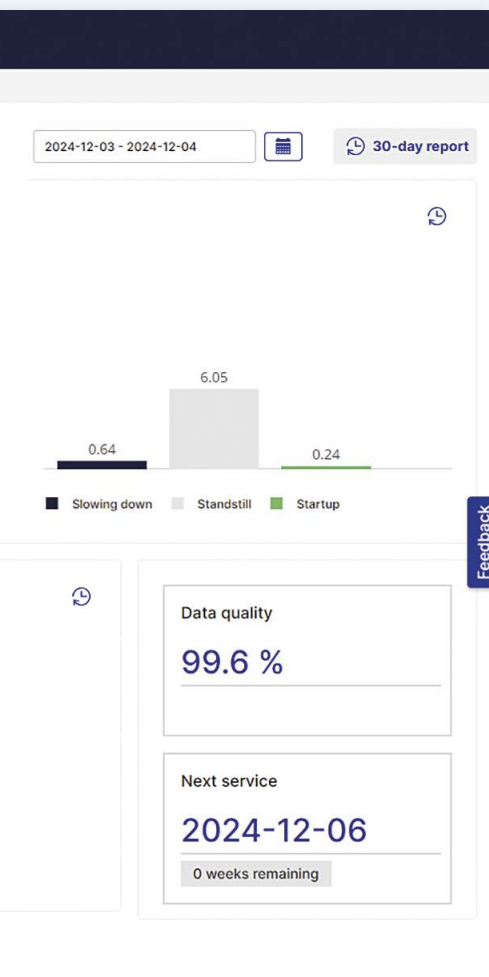
The cheese dust separated during the clarification or degreasing process is no longer a waste product. Further processing using decanter centrifuges yields a concentrate with over 40 percent dry matter, which can be reused to add value. At the same time, clarified whey can be returned to the whey process or used for alternative purposes, provided it meets operational and regulatory standards.

Outlook – Digital process control meets sustainable line optimization

Future whey processing will be strongly influenced by sustainability and digitalization. Energy and water consumption are becoming key performance indicators, while data-based control concepts are making plants more stable and resource-efficient. Inline measurement technology and intelligent evaluation algorithms detect process changes early on, thereby reducing cleaning effort, energy consumption and product losses. Systems such as GEA InsightPartner solutions support this

by making operating data transparent and keeping deviations in the separation process visible.

At the same time, pretreatment remains a decisive lever: the more precise clarification and fat removal are, the lower the effort required in the membrane and drying stages. In the future, separation, analytics and automation will grow closer together and enable adaptive “smart whey lines”. Sustainability and process intelligence reinforce each other and mark the guideline for the next phase of whey fractionation development.



GEA skimming separator from the MSI series: Directly driven high-performance separators with extensive equipment package and 3A-certified design. Particularly water-saving in operation thanks to the GEA Advanced Water Supply optimization concept and therefore awarded the independently validated Add Better Label from GEA.

“Must-have” technology for the leading-edge dairy industry

GRUNWALD at Interpack

With a turnover of 53 million euros in 2025 and year-on-year growth of approximately 20%, the mechanical engineering company GRUNWALD, located in Wangen im Allgäu, continues to expand. The expert for cup and bucket filling machines has supplied more than 100 machines every year, 60% of them to dairies. More than two-thirds of the machines are supplied to existing customers – this is a clear indication for high customer satisfaction and long-term orientation of this family business. “We are growing steadily from our existing customer base” emphasises GRUNWALD Sales Manager Nils Nothhaft.

With an in-house production depth of more than 90% and currently more than 250 employees at its Wangen site GRUNWALD deliberately focuses on a high level of self-competence. Each machine is entirely designed and visualised in 3D. The design engineers often supervise “their” machines up to on-site commissioning. The different machine models and filling systems are organised in specialist teams – this is an approach that pools expertise and facilitates the development of bespoke solutions.

To ensure sustainable growth, the company is investing in its site: At present they are planning a new hall for the temporary

storage of assembly groups and components to make material flows more efficient. “We want to further optimise our processes whilst creating space for further growth”, says Nils Nothhaft.

Innovations at interpack

In Düsseldorf, GRUNWALD showcases itself again with an eye-catching Alpine-inspired stand. The focus is set on ultraclean cup filling machines that are consistently designed for high performance, maximum hygiene standards and flexibility for increasing product diversity.

The highlight at the 180 square metre stand area will be the 8-lane high-performance cup filling machine GRUNWALD-FOODLINER 20.000 UC with a length of 10 metres. This linear machine achieves production outputs of up to 20,000 cups/h with a dosing accuracy of $\leq 0.3\%$. This machine handles all round standard cups with a diameter of 95 mm and filling volumes of up to 500 ml. These cups are either closed with aluminium or PP seal lids. Another feature of this machine is the double advance feed that allows for the future handling of a second cup format. The format changeover is user-friendly and activated at the push of a button. In technical terms this means: two different cup formats can be handled without the need



for complex mechanical modifications; the machine indexes in accordance with the selected configuration.

“Dairies have to respond to the requirements of the retail in a flexible way – smaller packages, promotional formats or new packaging designs. The double advance feed provides the technical basis for this”, says Nils Nothhaft.

The machine shown at the exhibition will be supplied to a Greek dairy afterwards – this is an example of the company’s international focus, with exports accounting for approximately 90% of its business.

Ultraclean hygiene concept to achieve extended shelf life

The GRUNWALD ultraclean hygiene concept, that has been tried and tested, is a

“We are growing steadily from our existing customer base” emphasises GRUNWALD Sales Manager Nils Nothhaft (photos: GRUNWALD)



Aerial photograph of the GRUNWALD premises



**interpack
hall 6 | stand B01**

main topic at the stand. The packaging materials are sterilised with fully integrated pulsed high-energy UV(C) radiators. In collaboration with a specialist, the cassettes and radiators have been further developed according to GRUNWALD specifications, resulting in improved sterilisation results. A sterilisation rate of at least LOG4 is guaranteed – without the use of chemicals.

The design is supplemented by a laminar cabin designed as a hygiene tunnel (clean room class 5 according to EN ISO 14644) as well as a sophisticated air management system. The linear machines are equipped with air-conducting, removable tunnels to ensure defined flow conditions. The dosing system is completely separated from the rest of the production area and dead spaces are avoided. This allows for production runs of up to 72 hours; production can be restarted after a cleaning time of 3 hours.

Further features are the automatic weight control of each individual cup with automatic readjustment of the weight per lane, the discharge of leaky or underweight cups as well as the integration of customised laser coding systems.

Compact rotary machine with integrated fruit mixer

GRUNWALD shows a compact rotary machine GRUNWALD-HITPAC AKH-029S as a counterpart to the high-performance linear machine. On a footprint of less than 2.5 square metres this rotary machine achieves a production output of up to 5,000 cups/h and handles round cups, DUO cups as well as small buckets with filling volumes of up to 1,000 ml. This machine is completely in CIP design, making it particularly suitable for companies that need frequent product changes. The integrated fruit mixer is a

special highlight. It allows for the flexible mixing and filling of liquid, set or stirred yoghurt with fruit layers or added fruit – with minimal product loss. Depending on the design, up to 6 types of fruit can be filled. “Some companies have to make 20 or more product changes, so changeovers must be carried out quickly”, says Nils Nothhaft. The integrated fruit mixer allows for fruit batches to be fed into the hopper one after the other.

After completion of one batch, the next type of fruit is fed to the hopper and production is continued immediately.

The mixer is designed for automatic CIP/SIP, the product feeding pipe is also included in the cleaning process. Especially dairies, that frequently test new recipes or want to produce small batches in a cost-effective way, benefit from the flexible feeding of fruit – either by hand from buckets or bags or automated via containers. Compared to stand-alone mixing units, users benefit from lower investment and operating costs, product losses reduced to a minimum as well as higher process flexibility.

Clear focus on the requirements of dairies

Whether high-performance linear cup filling machine or compact rotary machine, GRUNWALD consistently focuses on filling technology at interpack 2026 that supports dairies in terms of increasing product diversity, growing cost pressure and stringent hygiene requirements.



interpack 2026

7–13 May 2026, Düsseldorf



From 7 to 13 May 2026, the global processing and packaging industry will meet to discuss AI, automation, innovative materials and new skills at interpack.

Around 2,800 exhibitors from 67 countries will be presenting their latest developments in Düsseldorf and providing impetus for the future of a globally networked industry.

A look at the big picture reveals that the framework conditions for the industry are complex. Population growth, urbanisation and changing consumer behaviour are increasing the demand for efficient processing and packaging solutions. At the same time, raw material shortages, regulation, supply chain risks and a shortfall of skilled labour are increasing the pressure on companies.

Against this backdrop, interpack 2026 will focus on specific themes with its Hot Topics Smart Manufacturing, Innovative Materials and Future Skills. Smart Manufacturing is synonymous with data-based, resource-efficient production – from AI to robotics.

Innovative Materials focuses on new packaging materials, functionalities and design-for-recycling concepts. Future Skills examines the changing world of work and the skills required for increasingly digitalised and automated production.

The trade fair will be accompanied by numerous specials. At the interpack Spotlight Forum, experts will discuss current developments and strategic issues in the industry. The Start-up Zone provides a platform for young companies. One special item on the programme is the presentation of the WorldStar Global Packaging Awards on the exhibition grounds.

With its accompanying trade fair components, interpack also focuses on the expertise of the supplier industry. Here, companies present solutions from the fields of drive technology, control systems, sensor technology, robotics, machine parts and industrial software.

Below you will find an overview of the new products being showcased at the trade show.

SYNTEGON: Holistic concept

Syntegon is presenting the Factory of the Future. In this context, the company is showcasing neXt, the next evolutionary stage in its packaging solutions. NeXt is not intended to be a single machine platform, but instead an integrative automation solution that combines machines, seamless operating concepts and AI/data-based decision support in an operational ecosystem.

To mark the launch of neXt, Syntegon is presenting two new modular machine platforms that are fully integrated into the intelligent system architecture: the HFX flow-wrapping platform for primary packaging and the TRX toplevel cartoning platform for secondary packaging.

Both platforms are modular in design and serve as key building blocks within the operational neXt ecosystem. They are retrofit-capable and designed for long-term scalability. New functions, digital features or additional automation modules can also be easily integrated at a later date.



One of neXt's three guiding principles is Seamless Operation (photo: Syntegon)

METTLER-TOLEDO: Inspection and data management solutions

Mettler-Toledo Product Inspection will present inspection and data management solutions under the theme "Inspect. Protect. Comply." The focus is on helping manufacturers meet regulatory requirements, manage contamination risks and maintain product quality. Visitors from the food, pharmaceutical and packaging industries can explore inspection technologies, software and service solutions designed to support quality control across production lines.

A key highlight is the global debut of the M50 R-Series metal detector. The new system offers improved sensitivity and is designed to support productivity and compliance in modern production environments. It builds on the Profile and Profile Advantage platforms.

The company will also present a broad range of inspection technologies covering applications from incoming goods to final packed products.

X-ray inspection will include the first European presentation of the X3 Bulk Series, developed for loose-flowing and bulk products on conveyors. The system supports foreign body detection in bulk handling processes. The X2 and X6 Series for packaged products will also be on display, covering different formats, speeds and application requirements.

For checkweighing, the C35 high-performance checkweigher will be demonstrated for food and pharmaceutical applications. It handles line speeds of up to 800 packs per minute and supports accurate weight control, helping reduce product giveaway and meet weights and measures regulations.

Combination systems integrating metal detection or x-ray inspection with checkweighing will also be shown. CM and CX configurations enable compact system design and simplified line integration. Additional options, such as label inspection, allow multi-function



For the first time in Europe, the X3 Bulk series is being presented (photo: Mettler Toledo)

inspection within a single solution. Together, these systems support contamination detection, weight control and product integrity checks.

Data management

ProdX software connects inspection devices and centralises data collection. It provides real-time monitoring, automated documentation and audit-ready reporting to support compliance and traceability. At the stand, ProdX will be connected to 25 devices, including a continuous loop. Visitors can also explore the software through a VR presentation.

Mettler-Toledo will also present its global service offering, including preventive maintenance, performance verification and technical support. Service experts will be available to discuss lifecycle support and system optimisation

SIDEL: Complete lines and palletising units

At interpack 2026, Sidel will present solutions for the Food, Home Care, Personal Care and Beverage markets. The focus is on complete lines and high-efficiency equipment designed to address increasing packaging and production complexity.

The company will introduce the Cermex RoboSELEX robotic collating system for case packers, with live demonstrations at the booth. The system is designed for flexible, accumulation-free operation and handles lightweight bottles in various shapes and batch configurations at speeds of up to 320 products per minute.

RoboSELEX enables format and collation changes in short time frames – from around one minute for collation changes and approximately two minutes for bottle format changes. Its simplified mechanical design reduces the number of parts and supports faster introduction of new formats.

Sidel will also present the RoboAccess_Pal S palletising unit. The version shown at the booth includes an elevating column, allowing pallet heights of up to 2,200 mm. The system operates at up to 11 cycles per minute with a payload of up to 25 kg.

The compact footprint (less than 12 m² for two stations and 8 m² for a single station) supports integration into existing production environments. The PalDesigner tool, accessible via the machine HMI, enables operators to create and modify pallet patterns directly.

In addition, Sidel will showcase aseptic solutions such as the Aseptic Predis X4 as part of complete aseptic line concepts. The EvoBLOW Laser blowing system will also be presented, focusing on performance and sustainability in PET bottle production.



Sidel will show the RoboAccess_Pal S palletising unit (photo: Sidel)

SEALPAC: Focus on reducing packaging costs

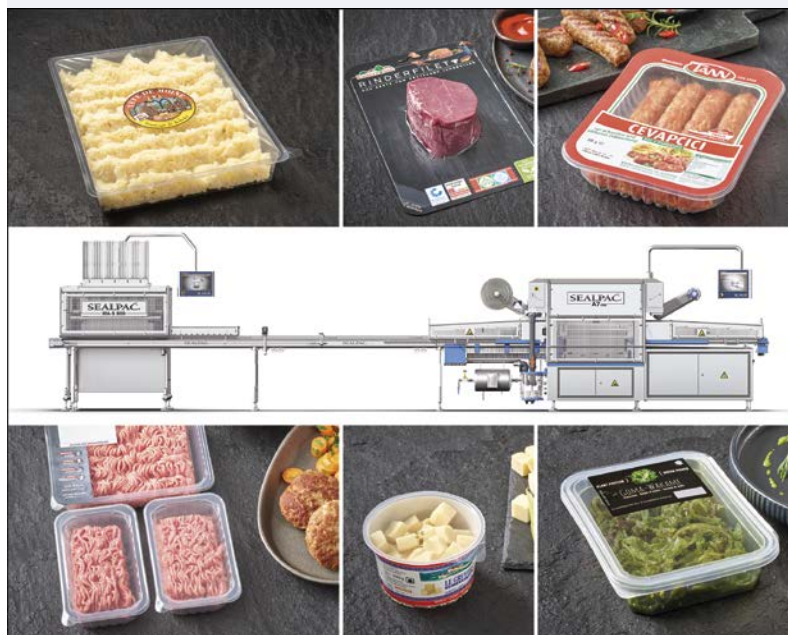
At Interpack SEALPAC will present solutions aimed at reducing total cost of ownership (TCO). The company focuses on long-term cost factors such as energy consumption, material usage, uptime, maintenance and flexibility, including compliance with the European PPWR regulation. Three machine solutions will be presented.

The A7max traysealer is designed for high line efficiency and reduced downtime. It processes different tray formats and materials, including mono- and lightweight solutions. Fast tool changes support frequent product changeovers. The A7max will be shown in a double-lane configuration combined with the MA-S 800 denester. The system enables synchronized denesting and packaging. The denester requires only an electrical connection. The line will run a mono-PET tray from Bliston Packaging with a patented sealing edge, enabling hermetic sealing with thin top films.

The F-series thermoformer is designed for high availability. Features such as automatic film alignment, chain tension correction and process monitoring aim to reduce manual intervention and unplanned downtime. Quick-change systems for film and tools support faster changeovers. Energy and compressed air consumption are optimized to lower operating costs, particularly in high-volume production.

The semi-automatic M-Flex traysealer addresses smaller production volumes and limited space requirements. Short start-up times and simple operation help reduce downtime. The machine supports various packaging concepts, including FlatSkin applications.

At its stand, SEALPAC will also present a “Supermarket of Innovations” featuring current packaging concepts from international markets, with a focus on practical applications and cost efficiency.



SEALPAC will present solutions aimed at reducing total cost of ownership (TCO) (photo: SEALPAC)

HAVER & BOECKER: Packaging and filling technologies

HAVER & BOECKER will present its latest packaging and filling technologies. The exhibit will include live demonstrations of automated empty bag logistics combining the ROTO-PACKER with the RADIMAT-PATHFINDER system. In this setup, the AMICUS DEPAL robot depalletizes empty bags and feeds them to the applicator, while the PATHFINDER transports them through the plant. A prototype of the AMICUSSEAL robot for automated bag sealing will also be shown. Visitors can discuss retrofit projects, line planning and service concepts with product specialists.

Digital tools will be presented at the QUAT2RO Mission Control area. QUAT2RO Connect provides a cloud-based dashboard displaying machine performance, downtime and bottlenecks. AI-based systems such as BAGcheck, VALVEcheck, MATEXcheck and SEALcheck monitor bag type, valve positioning, material leakage and seal quality in real time, supporting continuous quality control along the packing line.

BEHN + BATES will introduce the INTEGRA IVx packing machine for food applications, including the ADAMS CARELINE version for airtight PE bags in hygiene-sensitive environments. Feige FILLING will present the semi-automatic ELEMENTRA 26 pallet filling machine for highly viscous products, including a mobile version.

AVENTUS will display the TOPAS M FFS machine with QUAT2RO Connect for live analysis and remote maintenance. Information on the TOPAS XL, L and M models, with capacities up to 2,600 bags per hour, will also be available. NEWTEC Bag will demonstrate the AURUM palletizer for 5–50 kg bags. The system supports FFS, open-mouth and valve bags and is available in three performance levels up to 2,800 bags per hour. A new motor concept enables energy recovery, and the machine includes safety and maintenance features such as presence detection and a touch-screen interface.



The Machinery Division will present AI-based solutions from HAVER & BOECKER (photo: HAVER & BOECKER)

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Schäfer & Flottmann, will present the latest generation of its wrap-around packer SFS 414 (photo: Schäfer & Flottmann)



SCHÄFER & FLOTTMANN: Wrap-around packer

Schäfer & Flottmann will present the latest generation of its wrap-around packer SFS 414 at Interpack. The machine features a four-lane product infeed and two corner transfer conveyors. It processes up to 60 product layers or 30 shelf-ready cases per minute from flat blanks in various configurations.

The SFS 414 handles different secondary packaging formats, including open trays, display cases, wrap-around cases and trays with roof flaps. Format changes can be carried out manually via spindles or automatically using servomotors, supported by digital format management. In addition to wrap-around packers, the company's

modular portfolio includes carton and tray erectors, robotic wrapping systems and palletizing solutions. Systems are configured according to project-specific requirements, with a focus on performance, reproducibility and user-oriented operation.

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

For the first time, Ampack will have a stand-alone booth at interpack. The company's exhibit will focus on a new dosing technology for aseptic bottle filling that enables particularly low-foam dosing of liquid foods. This addition to Ampack's filling station portfolio sets new standards in efficiency and product protection, complementing the proven dosing units for cup filling available at all hygiene levels from clean to aseptic. These units will be on display at the booth alongside other innovative technologies, such as a multi-sealing head.

Liquid foods such as clinical nutrition, baby food or drinkable meals present unique challenges to filling technology. During bottling, these products tend to foam heavily, which can impair filling accuracy, line performance, and process stability. Ampack's solution

is an innovative dosing process designed specifically for aseptic bottle filling.

The piston fully plunges into the bottle and guides the product along the inner wall through openings on the sides. This gentle product flow significantly reduces foaming and offers maximum product protection – and, depending on the format, achieves a line output of up to 36,000 bottles per hour.

The new dosing technology is part of the FBL linear bottle filling machine, which was launched in 2024. It is designed for filling pre-formed HDPE, PP, and PET bottles and is ideally suited for aseptic applications such as baby food, clinical nutrition, drinkable meals, and special liquid products that do not require refrigeration.

In addition to dosing technology, Ampack will be presenting its newly established after-sales service with a new service portfolio at interpack. This includes customizable service agreements ranging from spare parts supply and maintenance to wear parts management and preventive maintenance, offering customers maximum planning reliability and minimal downtime. Upon request, Ampack also carries out maintenance on entire filling lines.



The piston of Ampack's new dosing technology plunges into the bottle and guides the product precisely along the inner wall through side openings to minimise foaming (photo: Ampack)



KHS: Line concepts and packaging solutions

KHS will present line concepts and packaging systems designed to improve availability, process stability and resource efficiency. The focus is on coordinated turnkey solutions that integrate packaging, machinery and digital services.

A central exhibit is the Innopack Kisters TSP Advanced packaging machine. The system processes PET and glass bottles as well as cans, packing them on trays, in film, or in combined tray-and-film formats. KHS will also present established systems such as the Nature MultiPack, which uses adhesive dots to bundle cans or PET bottles.

In the PET segment, KHS will showcase two bottle developments. KHS SUPREME combines PET with an internal silicon oxide barrier layer (Plasmax technology) to protect oxygen-sensitive beverages. KHS Premium LITE, developed with Husky Technologies, is a lightweight 0.25-liter PET bottle weighing 6.2 grams and designed for high-speed filling.

In addition to machinery and packaging, KHS will highlight digital tools and services aimed at improving line performance and reducing total cost of ownership. The updated KHS ConnectApp Guide will include integrated bills of materials and maintenance tasks based on operating hours. Other digital offerings include the KHS Connect portal, In-noline Basic Line Monitoring, 3D line design, remote diagnostics (ReDiS) and augmented reality-based service support.

A central exhibit is the Innopack Kisters TSP Advanced packaging machine (photo: KHS)

SOMIC: Two new machine series

Somic will introduce two new machine series, expanding its portfolio of end-of-line packaging solutions. The new systems are designed for different performance ranges and application requirements.

In addition, Somic will present technical developments aimed at further automating processes and simplifying machine operation. These include optimized changeover procedures, improved accessibility for format changes and maintenance, as well as enhanced connectivity for digital services.

The machine portfolio covers a broad range of formats and output levels. The systems focus on efficiency, availability, and short changeover times. New material feeding functions and assistance systems are intended to support stable and reliable operation.

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Poly-clip System will present clip-based packaging solutions (photo: Poly-clip)

POLY-CLIP SYSTEM: Clip-based packaging solutions

Poly-clip System will present clip-based packaging solutions. The company focuses on applications across different industries, including meat and sausage products, dairy, convenience food, fruit and vegetables, pet food, as well as industrial products such as adhesives and sealants.

According to an independent assessment by the Circular Analytics Institute (Vienna), clip packaging can significantly reduce material consumption compared to cans, thermoformed trays or cartridges. In many applications, packaging accounts for around 1–2% of the total product weight. Depending on the scenario, CO₂ emissions can be reduced by up to 90%. The study is based on production and disposal conditions in Germany.

At Interpack, Poly-clip System will showcase examples from the food and non-food sectors. While clip closures are well established in meat processing, further potential exists in other segments. Compared to conventional packaging formats, clip solutions can reduce weight, resource use and transport volume. Visitors can see solutions ranging from the compact SCH 600 for smaller operations to the PDC-A 700 and the FCA 160 XL for higher output and automated production. The portfolio is designed to enable step-by-step expansion of automation levels.

VEMAG: Automated food processing and packaging

VEMAG Maschinenbau will present solutions for automated food processing and packaging in Düsseldorf. The company will demonstrate how portioning, forming and precise placement in packaging can be combined in continuous processes. Four live production lines will illustrate applications for both industrial and small-scale operations.

The focus is on weight-accurate portioning, reproducible processes and reduced raw material loss. Automated handling and hygienic machine design support consistent product quality and low staffing requirements. VEMAG's modular system of vacuum filling machines and attachments allows different products and formats to be processed on the same platform. Machines can operate as stand-alone units or be integrated into existing lines, for example upstream of tray sealers or thermoformers.

Among the systems on display is the FKL609 filling system. It is designed for cans, jars and cups and can process pasty and liquid products. Format changes require only a short time, and filling heads can be exchanged depending on the application. A multi-lane solution with filling flow divider demonstrates parallel portioning into trays with consistent weight accuracy and precise positioning. The SL309 loading line with integrated tray denester places products automatically and without contact into different tray formats and supports various placement patterns.

In addition to machinery, VEMAG provides customized adaptations and digital support through its SmartLink software for production monitoring and process optimization, including remote service if required.

MENGIBAR: Billing accuracy

Mengibar will present Enhanced Accuracy, a technology designed to monitor external process variables and compensate for deviations during filling. The aim is to reduce product giveaway and improve repeatability under variable conditions. This approach is part of the SmartFlow concept, which integrates magnetic and mass flowmeter technology to support process control in demanding applications.

VEMAG Maschinenbau will present solutions for automated food processing and packaging (photo: VEMAG)



MULTIVAC: Smart Packaging

MULTIVAC Group will present its Smart Packaging approach, which links packaging design, material use and digital solutions. The focus is on the requirements of the Packaging and Packaging Waste Regulation (PPWR), the circular economy, CO₂ reduction and lower material consumption. At the trade fair, the company will show packaging solutions for different production requirements – from trays and flowpacks to film pouches and thermoformed packs.

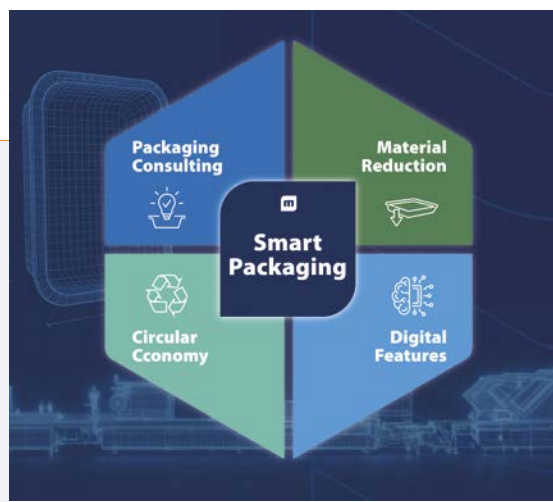
The fully automatic T 305 traysealer is designed for small and medium-sized batches. Servo drives ensure reliable processing of rigid trays at high output. Its modular design allows flexible die layouts and facilitates product change, cleaning and servicing. A T 305 MF model for MultiFresh vacuum skin packs will be exhibited.

The W 500 horizontal flowpacker is suitable for demanding environments and delicate products. Its accessible design simplifies changeover and cleaning. A servo-controlled box-motion sealing system enables hermetically sealed packs. The machine is built according to MULTIVAC Hygienic Design standards.

The B 625 chamber belt machine is designed for high-output pouch packaging. The “Single Wire Seam Seal” system ensures consistent sealing quality, including with thinner films or contaminated sealing areas, and operates without water cooling.

The R 085 e-concept thermoforming packaging machine is an entry-level solution for small batches. It processes flexible, rigid and sustainable films, requires little space and operates electrically without compressed air or cooling water.

In addition, MULTIVAC will present the RX Ultimate thermoforming packaging machine. Equipped with multi-sensor control and online connectivity, it supports stable pack quality and high output. Technologies such as pixelHEAT and pixelSEAL contribute to reliable processing of thin and sustainable films.



MULTIVAC Group will present its Smart Packaging approach (photo: MULTIVAC)

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KARL SCHNELL: Production solutions for dairy products and plant-based alternatives

The global market for dairy products and plant-based alternatives is evolving rapidly. Increasing demands for variety, sustainability, and product quality require flexible, cost-efficient, and reliable production processes. Manufacturers must deliver both small batches with fast changeovers and

high-volume production – all while ensuring consistently high quality.

KARL SCHNELL provides tailored process lines for the production of dairy products such as cream cheese, yogurt, and desserts, as well as plant-based alternatives made from soy, oat, or nuts. With a high level of

in-house manufacturing expertise, the company supplies nearly all components from a single source.

The process line begins with precise preparation and standardization of raw materials. Advanced mixing systems ensure homogeneous recipes, supported by automated dosing of liquids and powders. High-performance fine processing systems deliver the desired texture – from creamy to firm.

Buffer systems maintain a continuous production flow before innovative filling solutions efficiently complete the process. Even for demanding formulations or specific textures, KARL SCHNELL offers flexible plant concepts.

In addition to complete lines, modular standalone machines are available – ideal for specialized applications or limited production space.



KARL SCHNELL provides tailored process lines for the production of dairy products as well as plant-based alternatives (photo: KARL SCHNELL)

LEIBINGER: Coding and marking

LEIBINGER will showcase its current developments in coding and marking based on continuous inkjet (CIJ) technology. The systems enable reliable in-line printing on a wide range of substrates and are used in industries such as food and beverage, cosmetics, and pharmaceuticals.

A key topic in the packaging industry is the transition from 1D barcodes to GS1 2D codes as part of the GS1 Sunrise 2027 initiative. Printing scannable, data-rich 2D codes directly on the production line increases demands on precision, contrast, and process stability. Substrate properties such as reflectivity, surface texture, and ink adhesion can affect readability. LEIBINGER supports users

in integrating suitable coding solutions into existing lines.

The printers are based on an automatic nozzle sealing system combined with continuous ink circulation in a closed loop. A dual-chamber pressure tank system stabilizes viscosity and pressure, contributing to consistent print quality and long component life. The IQJET model, for example, is designed to operate for up to five years without scheduled maintenance. Unlike systems that use wear-prone gear pumps, this design reduces the need for frequent part

replacement. In addition, an automated agitator in the ink tank keeps the ink in motion, which is particularly relevant for pigmented inks. This helps reduce sedimentation and maintain consistent print contrast over time.

At the trade show, visitors can also see how coding systems can be integrated into digital production environments. The new LEIBINGER PrintDesigner will be demonstrated live, including mobile job creation and connection to a platform for monitoring printer fleets.



LEIBINGER showcases new ways to create measurable customer value (photo: Paul Leibinger)

BERICAP: Closure developments

BERICAP will present its latest closure developments. The company will focus on safety, sustainability, and functionality. Its portfolio includes tamper-evident and lightweight closure systems as well as solutions incorporating post-consumer recycled (PCR) materials for non-food applications. Digital features are also being expanded. The company's anti-counterfeiting platform

combines physical and digital elements, such as lenticular structures and integrated QR codes, to support product authentication and traceability along the supply chain.

In the beverage segment, BERICAP will showcase its RefPET range designed for refillable systems and evolving EU requirements. The closures are lightweight and available with different liner and branding options. The company will also present

mono-material HDPE sport caps for one-handed use and high flow rates.

For food applications, BERICAP continues to focus on weight reduction, recyclability, and user convenience. In carton packaging, the tethered Clean Cap 23 and Clip Cap 23 closures are established solutions, complemented by the larger Clean Cap 27 and Clip Cap 27 versions for increased pouring performance.



BERICAP will show its latest closure developments

The Variopac Pro will demonstrate the live production of LitePac Top Strap and an autonomous material supply at interpack 2026 (photo: Krones)

KRONES: Sustainable and fully automated packaging solutions

The centrepiece of Krones' exhibition is the Variopac Pro. This 17 metre packaging machine for non returnable containers will demonstrate how sustainable packaging concepts can be implemented using proven machine technology. With LitePac Top Strap, Krones will present a pack example in which six 1.5 litre PET bottles are held together solely by a cardboard clip and a strap banderole.

Krones will also showcase how fully automated material supply could look in the future. As part of the Ingeniq autonomous material handling concept, an Automated Guided Vehicle (AGV) from the Italian subsidiary System Logistics will deliver and load packaging material directly to the machine. This demonstrates how routine tasks in filling and packaging lines can be automated to reduce operator workload. For gentle yet highly flexible container distribution, Krones will present the new Robobox SynFlow sorting system, which can be positioned upstream of the Variopac Pro. A parallel kinematics robot distributes single lane and dual lane container flows precisely into three to nine lanes.

In addition to Krones, three subsidiaries will exhibit in Düsseldorf: Kosme will present its Fletra labeller for small and medium output ranges, while Ampco Pumps and Perfinox will showcase their process technology solutions.



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Cibus Tec 2026

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Cibus Tec 2026 – Fiere di Parma, October 27–30 – is returning to Parma stronger than ever. The 2023 edition hosted over 1,200 exhibitors from 30 countries and around 40,000 professional visitors from more than 120 countries. For 2026, further growth is already evident: compared with the same period in 2023, the number of exhibitors has increased by 20% and the total exhibition space by 30%. The international component is particularly strong, with 48% more foreign exhibitors and 38% more space dedicated to international participants.

Visitors and Top Buyers Program

This development suggests a professional visitor turnout of over 40,000. The Top Buyers Program will be further expanded for 2026. Organized in collaboration with the Agenzia ICE – Italian Trade & Investment Agency and the Emilia-Romagna Region, it targets strategic supply chains and new markets. In 2023, over 3,000 international top buyers from more than 80 countries participated.

Beverage? Yes, we tec!

Beverage? Yes, we tec! covers the entire technological chain from production through bottling to end-of-line solutions. Key themes include new formats, ready-to-drink products, better-for-you products, sustainability, industrial performance,



equipment reliability, energy efficiency, and packaging. Confirmed participants include A DUE, Comac, Galdi, Krones, Matrix, Prismatech, Promec, Serac, SIG, Sipa, and Tetra Pak.

Supply chains and technologies

In addition to the two sector-specific formats, Cibus Tec 2026 provides solutions for major food supply chains: fruit, vegetables, sauces, dairy, meat, fish, ready meals, coffee, chocolate, and snacks. Cross-cutting technologies include packaging and end-of-line, intralogistics and traceability,

automation and robotics, digitalization and data, hygiene and food safety, energy efficiency, and sustainability.

Labotec in parallel

The second edition of Labotec will run concurrently with Cibus Tec, focusing on laboratory, research, and analysis technologies for all manufacturing sectors, including food & beverage. The joint organization highlights an integrated view of industrial competitiveness, where production and laboratory interact synergistically on quality, safety, traceability, and innovation.

How hygienic & sanitary design powers efficiency on the line



Author:
Holger Schmidt, Global Industry Manager Food & Beverage, Mettler-Toledo Product Inspection

It starts with something small. A single droplet of water left to pool inside a crevice. A crack too fine for the naked eye, but just wide enough to trap organic residue. One cleaning step skipped in a rush to get back online.

Then come the consequences: a contamination alert. A product recall. A line shut-down. And suddenly, what looked like a minor design oversight becomes a multi-million-pound mistake.

In food, beverage and pharmaceutical production, there's no room for shortcuts – yet many manufacturers still rely on equipment that's difficult to clean, prone to microbial build-up and costly to maintain. That's where hygienic design comes in. And while it's often framed as a compliance requirement, its real power lies in something far more valuable: operational efficiency.

This article examines how well-designed product inspection equipment can not only support public health and legal obligations,

but also unlock smarter, leaner more resilient manufacturing.

Meeting standards without losingsSpeed

Today's manufacturers are navigating a global tangle of standards. From Global Food Safety Initiative (GFSI)-benchmarked schemes like the BRCGS and Food Safety System Certification 22000 (FSSC 22000), to the US FDA's (Food & Drug Administration) Good Manufacturing Practice (GMP) rules and the European Hygienic Engineering & Design Group (EHEDG) guidelines, hygienic design is no longer a niche requirement – it's central to how compliance is measured. Hygienic design goes beyond surface-level standards; FDA 21CFR177 and EN 1935/2004 plus GB 4806 are regulations about the type of materials used that are intended for contact with food. Ingress Protection (IP) ratings such as IP65 or IP66 signify how well the equipment is protected against solids (i.e. dust) and liquids (i.e. water).

The true cost of hygienic design

Hygienic design should also play a foundational role in developing a site's Hazard Analysis and Critical Control Points (HACCP) programme. It needs to be clear that using hygienically designed equipment is not simply about satisfying auditors; it is about producing safe, high-quality products as efficiently as possible. Production line equipment must be constantly cleaned and sterilised however costs increase in line with the more time, energy, water and detergents that are used.

Product inspection equipment sits at the heart of this approach. Systems must support proper hygiene, traceability and contamination control – and they are often scrutinised during audits to confirm cleanability down to a microbiological level. But when equipment is designed for easy, consistent cleaning, meeting compliance requirements becomes less of a burden and more of a competitive advantage. It protects the consumer against potentially

harmful product, streamlines operations, upholds product integrity and ultimately strengthens the bottom line.

Clean faster, run smarter

Time spent cleaning is time lost in production and impacts the bottom line – but with the right design, cleaning becomes faster, more predictable and less resource-intensive, ultimately improving the Return on Investment (ROI). That's where hygienic design delivers operational wins far beyond compliance.

Whether a site uses Clean-in-Place (CIP) systems – where cleaning solutions circulate automatically through equipment – or Cleaning Out of Place (COP) methods that involve disassembly, or manual sanitisation, effective cleaning is fundamental. Equipment must allow for thorough sanitisation between runs to prevent cross-contamination and minimise downtime.

Ease of access is a cornerstone of hygienic design. Surfaces, components and joints must either be fully closed to prevent gaps or made large and open enough to be cleaned easily and effectively. Equipment that can be cleaned without extensive dismantling, or where parts can be quickly and intuitively removed, dramatically reduces cleaning time and improves reliability.

This has a direct impact on uptime. Less time spent on cleaning and validation means more time producing – especially important in facilities running multiple product SKUs or batches. Cleaning routines become more repeatable, less prone to error and easier to document. All of this is critical under GMP and other regulatory regimes, such as the GFSI guidelines or defined within a site's own HACCP strategy.

In pharmaceutical settings, where manual cleaning is standard, design features like smooth welds, minimal crevices and angled surfaces can significantly cut operator workload and improve consistency. In food production, faster washdowns and quicker changeovers give teams the flexibility to run smaller, more frequent batches – improving throughput without increasing risk.

Well-designed systems also reduce reliance on chemical detergents and high-water volumes, contributing to sustainability goals and lowering operating costs.

Ultimately, hygienic design supports a leaner, cleaner process – where less time scrubbing means more time producing.

When crisis forces change

History shows that some of the biggest leaps in hygienic standards were made in the wake of outbreaks. In 2009, the United States faced a major Salmonella incident linked to peanuts¹. Just two years later, a deadly Listeria outbreak from cantaloupes dominated headlines². In both cases, the equipment in use wasn't up to the task – hard to clean, poorly maintained and structurally flawed. Similar issues have affected

the dairy industry too. In 2025, frozen supplemental shakes were linked to a deadly Listeria outbreak across 21 states. An FDA investigation found the outbreak strain inside the facility, confirming biological contamination was likely due to problems within the processing environment rather than the raw ingredients³.

Meanwhile in the pharmaceutical world, contamination inside injectable drugs has led to patient exposure, regulatory shut-downs and serious public scrutiny. These aren't isolated events – they're reminders that poor hygienic practices can slip through the cracks, sometimes literally. This is where safety concerns and the fear of biological contamination take over. Poor system design often means that cleaning must be done with extreme measures – using high temperatures, long cycle times,



The hygienic design of the Mettler-Toledo C35 checkweigher focuses on making cleaning faster and easier by eliminating features that could trap residue

Inspection systems that incorporate hygienic design principles help manufacturers reduce contamination risks



aggressive concentrations and harsh cleaning media – effectively sterilising the system to death. Not only does this require enormous effort, but it also puts additional strain on both equipment and resources.

And the cost isn't just reputational. According to the Grocery Manufacturers Association, some companies hit by recalls have reported financial impacts of \$99 million or more. Others never fully recover⁴.

So, it's no surprise that regulators have tightened their grip. In the U.S., the Food Safety Modernization Act (FSMA) mandates proactive food safety planning. The FDA recognised the problem very early on and founded the organisation 3A in 1929, whose guidelines and their implementation are mandatory for the dairy industry. In Europe, EHEDG plays a key role in guiding hygienic best practice from factory layout to machine geometry.

What hygienic design really means

Hygienic design isn't about overengineering or adding expense – it's about

removing friction. Friction in cleaning, in maintenance, in downtime. It's about choosing equipment that's built to be cleaned thoroughly, quickly and repeatedly without damage or degradation.

That translates into smooth, rounded surfaces instead of corners where debris can collect. It means no unnecessary seams, screws or inaccessible parts. And it calls for corrosion-resistant materials that won't break down under pressure – literally. Because in many facilities, equipment must withstand high-pressure, high-temperature cleaning with aggressive detergents multiple times per shift. Surfaces should also be large and wide to allow for effective self-draining, preventing the build-up of moisture that could harbour contaminants. Further, wherever components join, they must either be welded or sealed with a gasket to accommodate temperature variations and maintain a reliable hygienic seal over time.

Systems like checkweighers, metal detection systems and x-ray inspection machines may not process food or pharmaceuticals directly, but they sit at key points in the

production flow, usually very close to the packaging machines and, therefore, share the same hygienic environment. If those systems harbour bacterial contamination or are too complex to sanitise properly between product runs, the risks ripple outward, such as by these systems' own contaminants making their way into the final product.

Where inspection equipment comes under pressure

Product inspection systems often operate at Critical Control Points (CCPs) – handling raw materials and unpackaged goods, transitioning between hygiene zones or sitting directly in the product path. These locations are some of the most vulnerable within a manufacturing environment, yet inspection equipment is sometimes an afterthought in hygienic design planning.

Dr Jürgen Hofmann, a leading expert in hygienic engineering, notes that design flaws are frequently missed until cleaning starts. "Sometimes it's just enough to watch someone clean a system to

see where the weak points are. Cavities, dead spaces and seams all add to cleaning time and increase risk. On top of that, the natural tendency for cleaning personnel – who are often not the same team that operates the machine – is to look for shortcuts when the effort required is too high. The greater the effort needed for cleaning, the more likely it is that quality will suffer," he says.

In high-moisture, high-protein, or high-sugar environments – or any combination of these – bacteria find the perfect conditions to thrive. They favour areas where water can pool, where organic material can accumulate, and where surfaces are rough, cracked or inaccessible. If left unchecked, these environments allow microbes to colonise and spread, making contamination not just possible but likely. To combat this, equipment must do more than resist corrosion and dust or water ingress – it must actively repel contaminants through smart, hygienic design. Rounded frames eliminate pooling. Welded seams prevent bacterial harbourage. Fully enclosed tubing stops unseen

moisture seepage. Thoughtful placement of components is equally vital: electrical boxes should be sealed and elevated; sensors kept out of the product contact zone; and cables routed for easy cleaning and inspection. Every design detail must work to reduce cleaning effort and minimise potential failure points.

Crucially, hygiene under pressure demands more than mechanical durability. It demands design that works with cleaning teams – not against them – by making surfaces accessible and cleaning straightforward. Material selection plays a key role here: materials must withstand both production and repeated high-intensity cleaning without becoming hard, brittle or compromised over time. Only by aligning material choice, construction and cleanability can facilities maintain true hygienic design standards.

From cost centre to efficiency driver

Too often, hygienic design is seen as an up-front cost rather than a long-term

SACMI acquires majority stake in Groupe Emballage Technologies

Portfolio expansion via acquisition

SACMI has gained a majority stake in the French Groupe Emballage Technologies, which includes Etpack, Sermatec and Pactisoud. The transaction grants SACMI a 65% shareholding. The acquisition was carried out through the subsidiary SACMI Packaging & Chocolate SpA, the SACMI Group business unit operating in the food packaging sector.

SACMI has been working with Etpack since 2019 through its Poland-based subsidiary. The basis for this transaction, which is of significant commercial and industrial importance, is the close relationship between the two industrial groups and their shared strategic vision.

With this acquisition, SACMI Packaging & Chocolate expands and completes its portfolio of secondary packaging solutions by integrating specific technologies. The resulting expansion of the offering enables the company to access additional industries and market segments. This



SACMI has been working with Etpack since 2019 through its Poland-based subsidiary (photo: SACMI)

synergy also extends to the construction and assembly of flowpack lines as well as low- and medium-speed vertical packaging machines, which are designed by SACMI and assembled at Sermatec.

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investment. But every extra minute spent cleaning, every damaged belt, every unplanned repair adds up. Multiply those over weeks, months, years – and the total cost of ownership tells a very different story.

Well-designed systems reduce chemical and water usage. They cut back on wear and tear. They improve changeover times and reduce the risk of cross-contamination between SKUs. And they help teams get more done with fewer slowdowns and less rework. For instance, checkweighers with open-frame stainless steel construction allow for faster washdowns. X-ray inspection and metal detection systems with sloped surfaces prevent pooling. Belt

systems designed for tool-free removal cut minutes from maintenance routines. Every small design choice adds up to meaningful operational gain.

Building hygiene into the blueprint

In a landscape shaped by consumer and cost pressure, stricter rules and razor-thin margins, manufacturers need every advantage they can get. Hygienic design offers a way to not only protect product integrity, but to run cleaner, leaner and smarter.

But not all “washdown-ready” systems are equal. Some are designed with hygiene at

the core. Others are adapted to meet the minimum standard. Many systems advertise washdown capabilities with IP65 or IP66 ratings, indicating protection against dust and high-pressure water jets. However, these ratings alone don’t guarantee hygienic design or easy cleanability. So, the next time a company evaluates product inspection equipment, it should not rely solely on the IP protection class. Questions to ask would be:

- » Can it be cleaned quickly and thoroughly?
- » Are all parts accessible without tools?
- » Has it been designed to support our cleaning protocols – or just survive them?

1 www.cdc.gov/salmonella/typhimurium/update.html

2 www.cdc.gov/listeria/outbreaks/cantaloupes-jensen-farms/120811/index.html.

3 https://www.fda.gov/food/outbreaks-foodborne-illness/outbreak-investigation-listeria-monocytogenes-frozen-supplemental-shakes-february-2025?utm_source=chatgpt.com

4 <https://fortune.com/longform/food-contamination/>

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From smart sensors to predictive maintenance

Anuga FoodTec shows the entire bandwidth of modern technologies for dairy production



Dairy products are on a growth course worldwide. New product concepts, increasing quality requirements and the pressure for more efficient production processes are advancing technological progress in the industry. Anuga FoodTec, from 23 to 26 February 2027 in Cologne, picks up on these developments and presents corresponding solutions – from digitalised production systems to new biotechnological processes.

According to Innova Market Insights, the number of product launches increased in the past five years by around 2.6%. Developing especially dynamically are categories like yogurt and cheese. Thus, not only the product spectrum in the dairy case is expanding, so are the requirements for process technology. A development that is also reflected at Anuga FoodTec. Under the key theme of “Navigate Complexity. Smart. Safe. Sustainable.”, the trade fair

shows how innovations, product safety and sustainable production processes can be combined with one another.

New dairy products are changing process technology

While classic dairy products are mostly based on standardised recipes, plant-based or functionally enriched products in some cases involve highly differing viscosities and stability requirements. These changes have a direct impact on the process management. The need for flexibly applicable systems and robust process solutions increases accordingly. At the same time, the importance of digital solutions is increasing.

Networked sensors, automated process control and data-based analyses thus become central elements of modern dairy processing. Playing a key role in this is the industrial Internet of Things (IIoT). Roland

Thiemann, Director Anuga FoodTec, sees great digitalisation potential especially in the core processes of production: “In many companies there are historically developed system structures with differing automation systems and sometimes still analogue measurement and control technologies. Even smaller steps can achieve clear effects here.”

How digitalisation makes dairies more efficient

Networked sensors are used, for example, on filling systems for aseptic cardboard packaging. They monitor the consumption of compressed air, steam, water and energy in real time. Even the slightest leaks in compressed air systems can be identified – losses can amount to up to 30% here. IIoT also offers new possibilities for pasteurisation. Sensors and automated valves record process data continually and

transfer them to central systems or mobile applications. Deviations involving critical parameters like temperature or flow rate can be detected early, before entire batches become unusable.

“The technological changes in milk processing are enormous – and this is exactly where the expert program of Anuga FoodTec comes in,” emphasizes Carola K. Herbst, Deputy Managing Director of the Center for Agriculture and Food at DLG (German Agricultural Society), which serves as both a technical and conceptual partner of the leading global trade fair.

Another field of application for digital technologies is energy management. Processes like pasteurisation, refrigeration

or the manufacture of milk powder are among the most energy-intensive steps. “With energy monitoring systems, these processes can be controlled with clearly improved transparency today”, according to Thiemann. Sensors record the energy consumption of individual systems in real time and transfer the data to central analysis platforms. There, energy flows are visualised, load peaks identified and deviations automatically recognised. Heat pumps, refrigeration systems and other energy-intensive processes can thus be better coordinated with one another. Energy flows between heating and refrigeration processes can be optimised and CO₂ emissions reduced. Thiemann: “In combination with data-based analysis processes, a foundation for predictive energy management is

laid that makes efficiency potential visible and designs production processes to conserve resources.”

Greater system availability thanks to predictive maintenance

Smart sensors are equipped with integrated diagnostic functions that permanently monitor measurement precision and sensor state. One sensor element records the process value, the second serves as a reference for plausibility testing. Drift or ageing effects can thus be recognised at an early date. Edge-based IIoT solutions process process data directly on the production line. This makes it possible to recognise the need for maintenance on systems like separators or homogenisers early on.

A central approach is condition monitoring in combination with predictive maintenance. Sensors record parameters like pressure, vibrations or conductivity of critical components. From this, analysis algorithms recognise wear conditions and forecast maintenance needs. The goal of these approaches is maximum system availability, as every unplanned idle minute in dairies results in considerable costs. Predictive maintenance recognises malfunctions early and makes the planning of service deployments easier. This increasingly makes process monitoring in dairies a component of networked production systems.

Global trends as drivers of transformation in the dairy industry

A look at international markets shows that the drivers of transformation are similar worldwide. At Anuga FoodTec India Dairy (22–24 April 2026, New Delhi), the focus is particularly on the growing importance of value-added dairy products as well as efficiency gains through automation and digitalization.

The associated requirements for flexible processes, stable production conditions and high equipment availability reflect key challenges that also shape dairy technology in Europe – and that will be further advanced at Anuga FoodTec 2027 in Cologne.



Technologies for efficient milk processing are one of the key focuses of Anuga FoodTec 2027 (photos: Koelnmesse GmbH, Oliver Wachenfeld)

On the way to next-level yogurt: Better texture, milder taste and Clean Label

YoFlex Premium from Novonesis

Consumer expectations for modern foods have continuously increased in recent years. People today are looking for products that not only taste good but also offer health benefits and consist of simple, understandable ingredients. This trend is especially visible in the Fresh Dairy segment: 38% of consumers worldwide increased their yogurt consumption during the past year¹. At the same time, demand is rising for natural, nutrient-rich products without unwanted additives – more than 80% of consumers now check product ingredient lists².

For the dairy industry, this trend means two things: growing demand on one hand, and rising expectations on the other. YoFlex® Premium from Novonesis meets these needs. This new generation of cultures enables manufacturers to create yogurts with optimal texture, mild taste, and clean-label characteristics.

Innovative fermentation for natural texture and Clean Label

One of the standout features of the YoFlex Premium series is its ability to create creamy texture with high mouth thickness

purely through fermentation. This allows manufacturers to reduce or even completely eliminate additives such as milk protein powders, stabilizers, and other unwanted ingredients. The result is a yogurt with a naturally appealing consistency and a clean, simple ingredient list – an important advantage for health-conscious consumers.

The advantages include: creamy consistency and good texture without additives, achieved through natural fermentation, simplified formulations and transparent ingredient list.

At the same time, the cultures provide a mild, well-balanced flavour profile with low post-acidification that remains stable throughout shelf life. YoFlex Premium combines natural texture, simple formulation, and high-quality sensory characteristics.

Mild in taste

Alongside texture, taste remains the most important factor in purchasing decisions. YoFlex Premium stands out with its mild, balanced flavour profile – an essential advantage in markets where overly sour

yogurt is seen as negative. The cultures ensure that the yogurt stays consistently mild throughout its entire shelf life, without increasing in acidity.

The advantages include: Pleasant, well-balanced flavour profile, stability throughout the entire storage period and flexibility for a wide variety of yogurt types, from plain to flavoured.

Thanks to these properties, YoFlex Premium not only convinces consumers but also makes it easier for manufacturers to develop new, market-oriented recipes – wherever a mild taste is required.

Robust cultures for efficient, reliable production

Beyond the final product, reliable and disruption-free production is crucial for dairies. YoFlex Premium cultures are designed to be highly resistant to phage-related production issues, ensuring dependable and efficient processing. In addition, the series' broad portfolio offers various culture options tailored to specific process requirements.



The advantages include: High process stability through phage-resistant cultures, Increased profit margins and fewer production interruptions and technical support for smooth implementation.

Application success: from classic to Premium

The new YoFlex Premium culture generation has proven successful in both set yogurts and stirred yogurts:

- » Set yogurts benefit from compact, high gel firmness, improving transport stability and maintaining product quality throughout shelf life.
- » Stirred yogurts gain viscosity and creaminess – properties previously often achieved only through additional ingredients.

This versatility offers manufacturers numerous opportunities to expand their portfolio



– from classic natural yogurts to premium, high-protein, or clean label concepts. In many markets, clean-label products are becoming the standard. YoFlex Premium enables manufacturers to meet this demand without compromising on quality or consistency.

The cultures support formulations that are free from unnecessary additives and yet still deliver the highest sensory quality.

- 1 Novonesis Consumer Study: Fresh Dairy (2025)
- 2 Novonesis Label Study 2025

Rethinking growth in ice cream

How premiumization, functionality, and new formats drive value creation



Author: Antonia Krüger, Global Market Segment Manager for Ice Cream at Döhler

Hardly any other indulgence category combines innovation, emotion and economic pressure as strongly as ice cream. At the same time, however, the category is undergoing a structural shift: growth is driven less by increased volume and more by differentiated concepts that create higher value. Consequently, sensory variation, innovative formats, new consumption occasions and nutritional added value are coming into focus. Manufacturers are also facing increasing economic pressure due to volatile raw material prices and rising expectations regarding recipe quality and nutritional profiles.

For producers, this development marks a structural shift. Ice cream is evolving into a strategically managed category in which innovation, efficiency and differentiation determine market success.

From seasonal product to innovation platform

The development of the category can also be traced historically. For many years, the ice cream market was primarily shaped by classic flavours and strong seasonality. Vanilla, chocolate and strawberry dominated assortments, while innovation typically came in the form of limited-edition flavour variants and growth was mainly driven by distribution and volume.

As the market matured, the focus shifted towards premiumisation and experience-driven concepts with an emphasis on

higher-quality ingredients, more sophisticated texture design and emotionally driven branding. In a next step, new consumption occasions, smaller formats and functional added value gained importance.

The current phase is characterised by a stronger differentiation along clearly defined roles: core products secure volume and repeat purchase, while innovation lines enable higher price points and differentiation. Thus, ice cream is evolving from a seasonal impulse product into a strategically managed category with a clearly defined role within the overall portfolio. For ice cream manufacturers, clear differentiation is therefore key. Value creation is increasingly based on sensory quality, format innovation and clearly defined positioning.

Premiumisation through innovative formats and sensory experiences

As the category evolves, differentiation shifts from flavour variations to format-driven innovation. Increasing perceived value and the ability to justify higher price points require more diverse textures, visible inclusions and multi-layered product structures, as well as transparent, easy-to-understand and shorter ingredient lists. Classic flavours such as vanilla, chocolate and strawberry remain the volume backbone of the category. However, additional value creation is increasingly driven by differentiated concepts with



clearly defined experience profiles, for example through targeted texture contrasts or visual elements. Flavours inspired by global cuisines, particularly those influenced by Asian cuisine, such as ube, matcha or black sesame, serve as a key lever to expand portfolios and address new target groups.

Therefore, premiumisation is not a short-term trend, but an expression of the category's structural evolution: value is created through perceived quality, experience and sensory differentiation.

Raw materials, costs and efficiency: The economic tension

However, this value-driven differentiation strategy is increasingly challenged by volatile costs. Premium concepts in particular are highly dependent on raw materials and are therefore sensitive to price fluctuations. The prices of ingredients such as cocoa, coffee, pistachios and hazelnuts are subject to significant volatility, influenced by climate risks, crop failures, geopolitical developments and unstable supply chains.

This creates pressure for manufacturers: premium concepts are expected to generate additional value, while input costs in these segments rise disproportionately. High-quality ingredients define a product's value proposition and therefore its price positioning at shelf. At the same time, increasing raw material costs can only be passed on to a limited extent without destabilising existing price structures.

Recipe flexibility therefore becomes a strategic tool. Adjusted dosages, alternative flavour strategies or modular product concepts

help manufacturers mitigate cost risks without significantly compromising sensory perception. Efficiency is achieved by balancing raw material intensity, flavour profile and perceived value.

Consumer expectations between indulgence, health and functionality

Manufacturers face a central challenge: ice cream must deliver on indulgence and emotional appeal while meeting increasing expectations regarding nutrition, functionality and shorter ingredient lists. As a result, products with "less sugar" and "lower calories" as well as concepts with added functional value such as protein or fibre enrichment are gaining relevance.

From a technical perspective, implementation is complex, as key components in ice cream fulfil multiple functions simultaneously. This is particularly evident in the case of sugar, which affects not only sweetness but also texture, freezing point and mouthfeel. Reducing sugar therefore alters the overall sensory profile and increases the risk of noticeable quality losses, for example in creaminess, flavour balance or melting behaviour.

Therefore, reducing sugar and calories is not just a labelling issue, but a balancing act involving formulation, processes and sensory performance. At the same time, advanced solution approaches now enable meaningful reductions in sugar and calories without compromising characteristic taste or mouthfeel.

Beyond reduction, functional ingredients are gaining importance, particularly proteins. This trend is also reflected in European market data: while expected sales volume for protein-rich ice

Category	2025 Market Value [€]	2025 Sales Volume [tonnes]	CAGR 2026 – 2029F Market Value [%]	CAGR 2026 – 2029F Sales Volume [%]
Dairy-based	25.1 bn	2.6 m	4.8	2.1
Plant-based	568 million	31,500	8.8	5.5
High-protein	117.6 million	8,300	2.6	-1.9
Sugar-reduced	67.8 million	4,200	7.0	1.6

cream concepts shows a slight decline between 2026 and 2029 (CAGR –1.9% at 8,300 tonnes in 2025), market value is expected to grow (CAGR 2.6%). This indicates increasing value creation through functional and higher-value products.

For manufacturers, this creates a structural advantage, as milk protein enables functional positioning while maintaining appealing texture. Additional functional value is provided by fibre-enriched concepts. The combination of these approaches with moderate sugar reduction defines a new segment between indulgence and conscious nutrition.

New consumption occasions: Off-season and format logic

Consumption occasions are also shifting. Snacking is becoming an integral part of daily life, with around 80% of consumers snacking every day. At the same time, off-season ice cream consumption has increased by around 17% in recent years.

For manufacturers, this is more than just a temporary shift in demand. Growing off-season consumption extends sales windows,

affects production planning and reduces dependency on peak summer demand. Ice cream is becoming increasingly popular as a snack to enjoy on the go, between meals or as an indulgent treat.

Small formats, such as bites, are becoming more common and are increasingly being used as a commercial tool. They allow for different price points, increase the value per kilogram and support the year-round promotion of the category.

Plant-based: Expanding the portfolio architecture

Alongside premiumisation, functional concepts and snackification, the category is increasingly expanding into alternative bases. The plant-based ice cream market continues to grow dynamically. In Europe, for example, the retail value reached around €568 million in 2025, with a sales volume of approximately 31,500 tonnes. Further growth is expected between 2026 and 2029, with a CAGR of 8.8% in value and 5.5% in volume.

For ice cream manufacturers, expanding plant-based assortments represents a strategic extension of existing portfolios. Plant-based bases, alternative protein sources and adapted fat structures



require dedicated formulation and processing expertise, increasing complexity in development, sourcing and quality management. At the same time, modern formulation strategies and technological solutions enable manufacturers to address these requirements and target new consumer groups effectively. This opens up additional positioning opportunities, particularly in the premium and health-oriented segment.

While dairy-based products remain the volume backbone of the category, plant-based products act as a complementary extension. Manufacturers are therefore required to manage both worlds in parallel, with clearly defined roles within the portfolio.

The future of the category lies in the overall package

Growth is increasingly driven not by availability alone but by integrated quality. In a dynamic market, brands that combine sensory excellence, robust nutritional concepts, efficient raw material strategies, value-driven formats and clear strategic differentiation are best positioned to succeed.

Consequently, ice cream is no longer just a seasonal indulgence product. For manufacturers, it is evolving into a strategic lever for growth, innovation, differentiation and stable value creation.

OTERRA'S Color Trends 2026

Emotion, wellness, and natural colour

Consumers increasingly expect food and beverages to deliver both purpose and emotion and natural colours play a critical role in bringing these expectations to life, according to Oterra's Color Trends 2026. Based on a global survey of 2,600 consumers across 13 countries, the trends report explores how people emotionally connect food, colour, and functional benefits, revealing that colour is no longer just seen, but experienced.

Said Stella Munhoz, Marketing Manager, Oterra: "The message from consumers is clear. Colour is no longer just seen; it is also felt. Colour has become part of the experience, signalling feelings of wellbeing and trust." Functional foods made with recognisable, natural ingredients and naturally vibrant colours are leading a shift from fixing what's wrong, to strengthening what's right.

Continued Munhoz: "Consumers are embracing a 'maxxing' mindset, choosing foods that deliver maximum benefit with minimal compromise prioritising protein, fibre, and vitamins, while reducing sugar, artificial ingredients, and unnecessary complexity.

The survey found that 70% of consumers were very interested in functional benefits such as supporting immunity, heart health, digestion, mental wellbeing, sleep, and healthy aging. When asked what they expect from food and beverage colours in 2026, natural ingredients ranked highest, cited by 43% of consumers, ahead of specific functional benefits such as improved immunity (40%), better sleep (39%), heart health (39%), and digestive health (38%). Colour associations strongly reinforce these expectations. Warm, reassuring tones like orange are instinctively linked to vitality and overall wellbeing, the survey found. Blue tones (including turquoise) are linked with relaxation and mental health, while red is



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photo: Oterra

strongly associated with heart health and vitality. Food is also increasingly viewed as a form of emotional self-care. Consumers are looking for comfort, joy, balance, and small moments of uplift, with colour acting as a powerful emotional cue. Globally, 61% of consumers say they are very interested or interested in emotional experiences through food and beverages, rising to 74% among Generation Z and Millennials.

The research highlights strong emotional associations with specific colours. Green is linked to health, naturalness, and positive mood, while yellow is associated with fun and playfulness, reinforcing its role as an energizing and uplifting colour.

Mood-boosting food and drinks really shine when emotion meets unexpected colour. Among adventurous consumers, interest climbs to 50%. Pink remains underexplored despite its strong potential and broad acceptance in food and beverages. It is closely linked to fun, inspiration, and creativity. The shift toward emotion-led, functional products also brings clear implications for manufacturers and brands. The survey shows that 66% of consumers globally actively avoid artificial colours, making natural colour solutions a baseline expectation rather than a differentiator.

Top Trends 2026

Growth drivers in the food & beverage market

What do consumers want, and what foods and beverages drive growth? Market research gives us some answers. The current 2026 Top Ten Trends from Innova Market Insights once again show that foods and beverages that promote physical and mental wellness are very much in demand from consumers – especially if they offer the perfect taste. Foods adapted to the individual requirements of consumers are popular, as are affordable or sustainable offerings. With new ideas for high-sales food & drink concepts, Hydrosol helps manufacturers of meat, dairy, and deli products address the trends of tomorrow.

High protein remains the top Trend

“Powerhouse Protein” for overall wellbeing is the most important trend for this year, according to Innova Market Insights. Consumers are looking for protein-rich products, ideally enriched with vitamins and minerals, that support mental fitness as well as gut health and the immune system. Healthy aging, weight management, and athletic performance are further important criteria. Hydrosol has developed multiple concepts to meet these expectations, including a stabilizing system for meal replacement drinks. The system ensures stable emulsions with creamy mouthfeel

and high satiation effect. The final product features high protein content and can also be declared as a source of fiber.

Wide range of delights

The many facets of indulgence are at the focus of the second Innova Top Trend: “Layers of Delight.” It is based on four pillars: comforting moments, mood enhancing, rich sensory enjoyment, healthier enjoyment. Familiar flavors are in demand as are new creations, and Hydrosol offers the right inspirations for both. For example, with one of the stabilizing systems from the Stabisol series dairies can make a trendy matcha latte. The system provides high stability and a pleasant mouthfeel. It can be combined with plant proteins and offered in a range of flavors. Another advantage is that there is no sedimentation during storage. Another Hydrosol stabilizing system also promises special indulgence through the simple production of mayo sauces and of bread spreads featuring smooth texture and good spreadability.

Individual moments

Convenience is a common denominator in the expectations of different target groups that Innova addresses together in the Top Trend “Made for Moments”. Whether small portions for single households or



With one of the stabilizing systems from the Stabisol series dairies can make a trendy matcha latte (photos: Stockmaterial)

family packs, consumers are looking for varied formats in snacks, fresh meals, and individual portions. The choice of new flavor sensations should be at least as varied. DIY ice cream in pouches is one example. The product is easy to make on a UHT line with the help of a new Stabimuls series compound. After filling into pouches it can be sold in stores in liquid form, or deep-frozen just before consumption, for example at a kiosk. Creative compositions in various flavors can be made to meet customer demand. Thus, these DIY ice creams give dairies access to a new category.

Affordable products

With increasing economic pressure, value for money remains an important criterion for consumers at the point of sale. “Worth Every Bite” is the Top Trend for this. Store brands are growing in popularity among all age groups, and Hydrosol offers the right solutions for many categories. One of



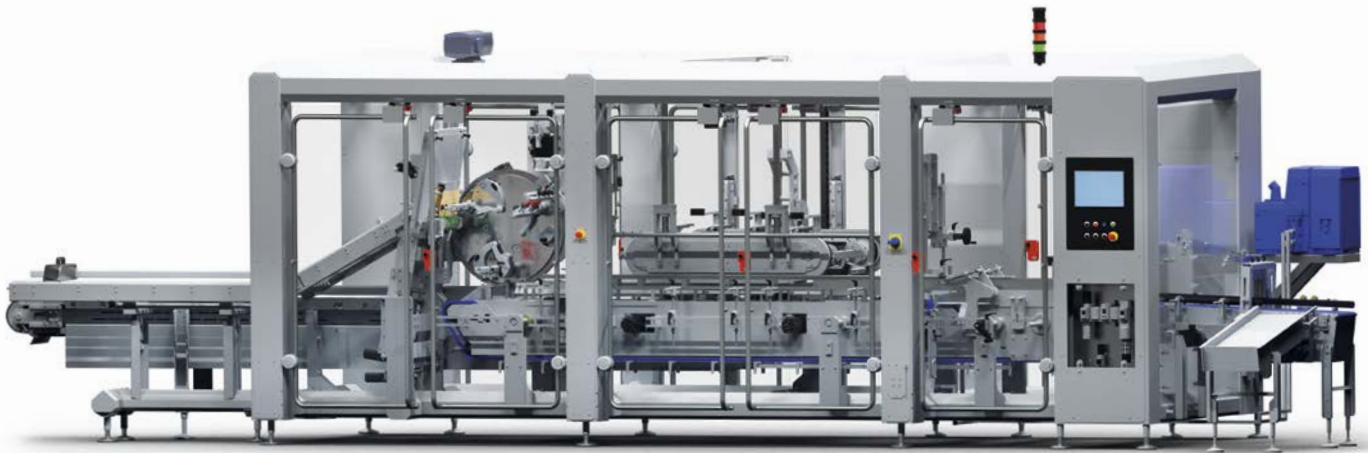
these is its functional system for vegetable fat cream featuring extended shelf life, a firm and stable foam structure, and higher whipping volume. The fat content can be adjusted between 12 and 28 percent. This vegetable fat cream can be made in freeze-thaw stable or plant-based alternative versions as well.

Sustainable concepts

Sustainability is a key reason to buy in the premium category. Consumers will accept higher prices for sustainable products when brands credibly and transparently communicate that they either support local farmers and communities, contribute to the environment, use sustainable packaging, or offer better product quality or better taste. Innova Market Insights calls this ongoing Top Ten trend “Justified Choices”. Hydrosol’s answer is hybrid products. These combine the best of animal and plant-based ingredients without sacrificing taste and texture.



Meal replacement drink



The optimum mix of knowledge and technology delivers packaging perfection

Don't miss Cama Group's class-leading solutions at interpack 2026 – 7th to 13 May, Messe Düsseldorf

At this year's interpack event, global packaging specialist Cama Group will be showcasing the technology, solutions and multi-industry expertise that have made it a world leader in highly robotised secondary and tertiary packaging.

With three state-of-the-art machines forming a focal point in hall 13, visitors to stand A33 will be left in no doubt as to what can be achieved in terms of speed, flexibility, repeatability and OEE when Cama Group takes on even the most demanding packaging applications. What is more, they are all built to Cama's demanding breakthrough generation (BTG) principles, which guarantee optimised flexibility, accessibility and hygiene.

With access to a broad array of packaging solutions and in-machine technologies, Cama Group can adapt its highly modular portfolio to precisely match its customers' needs, not just through technology, but also using its knowledge and experiences from decades of problem solving across all major industries and packaging applications.

In one corner of stand A33, visitors will see a brand-new model of Cama's popular CL169 continuous motion sideload cartoner. This latest machine evolution – developed to address market challenges – employs a new approach to cartoning that delivers enhanced repeatability and simpler operation. Ergonomics is also improved, resulting in easier loading, while more intuitive toolless changeovers support maximised uptime.

The machines at the show use control solutions from Rockwell Automation, with the CL169 showcasing Cama's deployment of the new FactoryTalk Optix HMI solution. Cama's machines can also use servo-driven conveyor solutions, which use independently driven product-conveying platforms, for ever greater flexibility and agility.

In the next corner visitors will find the MTL (monobloc top loader). Highlighting Cama's capabilities in non-food applications, the monobloc machine demonstrates carton erection, product grouping, carton filling, and carton closing, all within a single machine envelope. Improved ergonomics for operation, changeover



CALL TO ACTION:

To book a personalised tour of the Cama stand, please visit Cama booth at Hall 13 – A33 and contact the team at interpack@camagroup.com

and maintenance are visible here, too, with easier machine access, greater visibility and lowered carton magazines for easier loading.

The machine is one of the company's flagship technologies, showcasing Cama's in-house-developed robotic technologies – with no less than six RB002 and the new carbon fibre RB003 robot in action, where they will demonstrate a ballet of precision movement and perfect choreography.

The final machine is the company's FW748 wraparound case packer, one of Cama's most popular machines with multiple orders per year. As well as highly effective case packing, this machine showcases semi-automated changeover capabilities, where the press of a button on the HMI will result in automated adjustments to machine dynamics and motion profiles, to adapt it to a different batch format or packaging recipe.

The FW748 also demonstrates core elements of Cama Group's cobot-based MEP – Machine-Enhancement Programme. The automated carton loader (ACL) and automated case palletiser (ACP) on show are designed to remove human limitations and fatigue-induced slowdowns from pre- and post-packaging operations. The ACL and ACP systems integrate seamlessly with CAMA's machine portfolio, but they can also be purchased separately and couple with any third-party packaging machine, removing operator repetition, burden and fatigue. Autonomous mobile robots (AMR) are a core element of the MEP portfolio, too.

Completing the event showcase is digital access to the wider Cama portfolio. In addition to even more machine styles and formats, this also includes complementary technologies and add-ons, such as advanced vision systems that leverage artificial intelligence and machine learning. All of these additions will only be suggested by Cama following in-depth studies of the applications, and only if they add tangible value.

Finally, visitors will see how efficient mechanical design, contemporary automation solutions, maximised uptime, optimised throughput, advanced packaging design and minimised waste all contribute to more sustainable packaging solutions.

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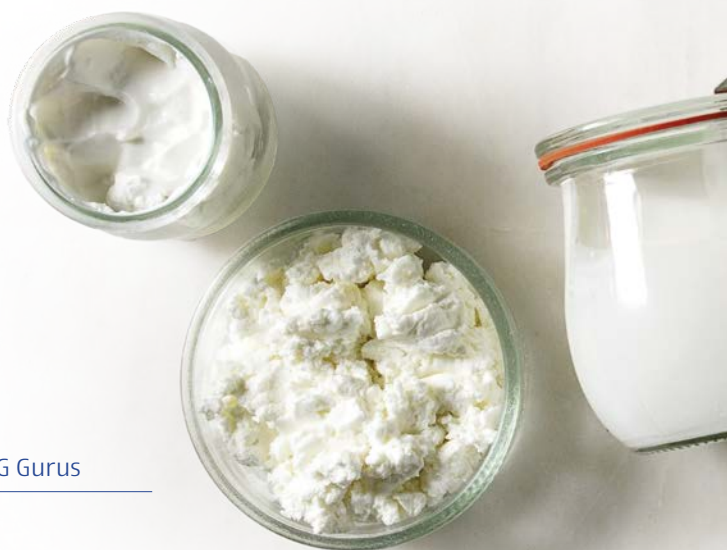
interpack
Hall 13 - Booth A33

The dairy frontier

Navigating the Intersection of functionality and transparency



Author:
Kate Kehoe, Marketing Manager at FMCG Gurus



In an era of heightened health consciousness, the dairy sector is undergoing a structural transformation. Consumers are no longer viewing dairy simply as a refrigerator staple; instead, they are looking for functional solutions that align with their evolving lifestyle goals. At FMCG Gurus, the research indicates that 55% of global consumers have looked to improve their diets over the last two years, creating a significant window of opportunity for dairy brands to innovate through fortification and transparent labeling.

Capitalizing on the “protein gold rush” one of the primary drivers of this shift is the “protein gold rush.” Protein has migrated from the specialist sports nutrition aisle into everyday grocery items, with 48% of global consumers now expressing a desire to increase their intake. Dairy is uniquely positioned to capitalize on this, as it is already synonymous with health and balance. Currently, 34% of consumers state that protein content is a key factor when choosing which dairy products to purchase.

The rise of the discerning active nutrition consumer

However, high protein claims alone are no longer enough to win over the increasingly skeptical active nutrition shopper. Consumers are becoming more discerning about the nutritional density and purity of their food. In the plant-based and dairy-alternative space, 50% of shoppers now check labels “most or all of the time” to ensure products are free from what they perceive as “dietary evils”, namely synthetic ingredients and excessive processing. This sentiment extends to traditional dairy as well, where 70% of global consumers say it is important that their food and drink is 100% natural.

Balancing functionality, sustainability, and taste

The challenge for the industry lies in balancing these functional demands with the growing importance of sustainability and sensory



Consumer Experts, Insight Driven



appeal. While 72% of consumers believe brands should do more to protect the planet, they are rarely willing to sacrifice taste or pay an excessive premium for environmental claims alone.

Success in 2026 will belong to brands that can bridge the gap between “better-for-me” and “better-for-the-planet” by offering clean-label, protein-enriched products, such as yogurts or milk drinks, that deliver on performance without compromising the authentic, indulgent experience consumers expect from dairy. As the market becomes more crowded, clear communication regarding ingredient provenance and substantiated health benefits will be the ultimate differentiator.

Reports used for this article:

- » FMCG Gurus: Protein Fortification within the Dairy Sector – Trend Report 2025
- » FMCG Gurus: Meat & Plant-Based Protein Trends – Global Report 2025
- » FMCG Gurus: The Clean Label Shift – Global Report 2025
- » FMCG Gurus: The Sustainability Shift – Global Report 2026
- » FMCG Gurus: The Protein Shift – Navigating the New Era of Functional Demand 2026

HERZA

Organic chocolate pieces with matcha and date sweetening

NEWS

HERZA presented new organic chocolate pieces at BIOFACH 2026 that reflect the growing trend toward health and wellness. The focus was on the “Magic Matcha” and “Date Edition” series, which offer a variety of shapes and flavours for use in snacks, muesli, and ice cream.

The Magic Matcha products combine organic white chocolate with matcha powder and are partly refined with fruit powders, spices, or caramel. Matcha is considered a superfood and is known for its relaxing and antioxidant properties.

With the Date Edition, HERZA responds to the demand for clean eating: instead of refined sugar, the products use the natural sweetness of dates. The new pieces are available in several variants, for example with sea salt, coconut, orange, rice crispies, or hazelnut paste.

Irregularly cut pieces give the products a handmade character and make them especially suitable for crunchy applications and decorative effects.



The Magic Matcha products combine organic white chocolate with matcha powder and are partly refined with fruit powders, spices, or caramel (photo: HERZA)

Changing demand

An opportunity for a dairy sector in transition



Author:
Fiona Liebehenz, Vice President Key Components,
Plant Solutions & Channel Management at Tetra Pak



Consumer lifestyles are shifting, and so too are their preferences. Demand for dairy isn't disappearing, it's evolving, and it's driving continued revenue growth in the global market.

Revenue for the global dairy market is expected to reach \$1,505.8 billion by 2033¹, signalling a growth rate of 4.75% from 2025 to 2033. This is fuelled by population growth, rising incomes and a growing trend of consumers seeking products that align with their health, wellness and convenience priorities.

While categories such as white milk are plateauing in some markets, functional, fortified, nutritionally enriched and ready-to-drink dairy formats are growing in popularity². Indeed, fortified drinks, as part of the wider food supplements and nutrition market, are projected to reach around \$758.99 billion by 2034, expanding at a CAGR of 7%³. For dairy producers, this shift should not be viewed as a threat to established business models, rather it's a chance for fresh thinking: new product ideas, novel ingredients and the adoption of technologies that increase the efficiency, flexibility and speed of operations.

The evolving market is creating space for innovation in value-added products, functional beverages, and dairy-based solutions that meet changing consumer needs. Producers that are agile, data driven and forward-thinking will be best placed to capture this growth, adapt to the changing demand, and in turn, strengthen their future pipeline.

Fortunately, innovative ideas don't have to come with expensive changes to equipment and product lines. Practical examples from projects involving Tetra Pak illustrate that appropriate processing

technologies can help expand product portfolios, reduce costs and advance sustainability goals.

Membrane filtration expands the dairy portfolio

Advanced processing technologies offer dairy producers the chance to release more value from milk and whey. Getting more from these high-value ingredients opens new categories in this changing market.

Membrane filtration is a key technology for separating milk or whey into its main components, including water, fat and protein. These resulting ingredients can then be used to create new products, such as protein-enriched milk, or sold as valuable inputs for other manufacturers. Filtration is also increasingly useful for developing products made from plant-based proteins.

A good example comes from Mammen Dairies in Denmark, which worked with Tetra Pak to introduce a reverse osmosis unit for whey concentration. Whey contains water and proteins, and the filtration unit removes approximately 75% of the water⁴. The concentrated whey protein is then sold to producers of ingredients for sports nutrition drinks – a product category that has seen increased consumer demand and appeal in recent years as part of the wider appetite for functional food and beverage products⁵. As a result, this filtration unit has made a significant difference to Mammen Dairies' bottom line⁶.

Membrane filtration can take the process even further by fractionating the proteins to produce a wide spectrum of ingredients. For example, in white milk processing, microfiltration can separate



the protein component into casein and whey proteins. The casein can then be further processed to extract calcium phosphate⁷. This ingredient can be used to boost the micronutrient content of plant-based drinks to levels closer to what consumers have come to expect from traditional dairy milk⁸. Ingredient separation of this kind helps producers broaden portfolios and tap into new markets, often with attractive margins.

Take Arna, a small dairy in Iceland, for example. After studying consumer trends, Arna saw a niche in the market for plant-based products and started producing oat-based skyr. The leap was feasible because the company already had an ultrafiltration unit in place, which was used in the production of lactose-free skyr and yoghurt. Tetra Pak then helped Arna find the right filtration equipment and membrane for oat filtration, which ended up with the company renting three pilot plants and developing six flavours of oat-based skyr, including strawberry, blueberry and lime-coconut⁹.

Adapting to new processes brings other benefits on top of new product opportunities. At Mammen Dairies, the water removed from the whey is purified in a built-in reverse osmosis polisher, then used to clean the equipment. By recovering the demineralised process water, the dairy reduced its water intake by 143 tons per day. This increased efficiency delivered both cost savings and measurable progress towards sustainability targets.

Facing the future of dairy

Emerging product categories present both a challenge and an opportunity for the dairy industry. By taking advantage of advanced processing technologies, dairy producers can adapt and take advantage of shifting demand. Novel ingredients and products can be valuable additions to traditional ranges, helping the top and bottom line in a fast-changing global market.

- 1 <https://www.imarcgroup.com/dairy-market-statistics>
- 2 https://agriculture.ec.europa.eu/system/files/2024-01/agricultural-outlook-2023-report_en_0.pdf
- 3 <https://www.precedenceresearch.com/nutritional-supplements-market>
- 4 <https://www.tetrapak.com/en-gb/insights/cases-articles/whey-filtration-Mammen-Dairies>
- 5 <https://www.mintel.com/insights/food-and-drink/growth-opportunities-in-sports-nutrition/>
- 6 <https://www.tetrapak.com/en-gb/insights/cases-articles/whey-filtration-Mammen-Dairies>
- 7 <https://www.tetrapak.com/en-gb/insights/cases-articles/optimizing-fractionation-of-milk-proteins>
- 8 <https://pmc.ncbi.nlm.nih.gov/articles/PMC10504201/>
- 9 <https://indd.adobe.com/view/2bf97b21-323a-468c-8bf6-83fbcdf76104>

More flexibility and process reliability for milk processing

Evoguard implements state of the art aseptic valve manifold at Mittelland Molkerei in Suhr



Author: Peter Kagerer, Product Manager Valves, Sales and Product Management, EVOGUARD GmbH

Mittelland Molkerei in Suhr, Switzerland, produces a wide range of high-quality dairy products – from milk and cream to dairy-based drinks, milk alternatives and butter. To meet steadily increasing demand while ensuring the highest hygiene standards, the existing infrastructure has now been expanded with a state-of-the-art aseptic valve manifold realised with innovative Evoguard valve technology.

With its successful commissioning, Evoguard is setting new benchmarks in hygienic and process-safe equipment for sensitive production areas in the food industry.

Compact solution for maximum flexibility

“By integrating the new aseptic – or sterile – manifold, we are increasing the flexibility of our plant and creating the foundation for expanding our production capacities,” explains Sascha Baumann, Deputy Operations Manager at the dairy.

Despite limited space, the new manifold was seamlessly installed on a platform above the filling lines.

“The restricted spatial conditions were a particular challenge – all components, including the piping, had to be integrated in the tightest space above the filling lines,” says Dominik Kober, the project manager responsible at Mittelland Molkerei. A compact design and well-coordinated planning by all participating companies were crucial for the successful implementation.

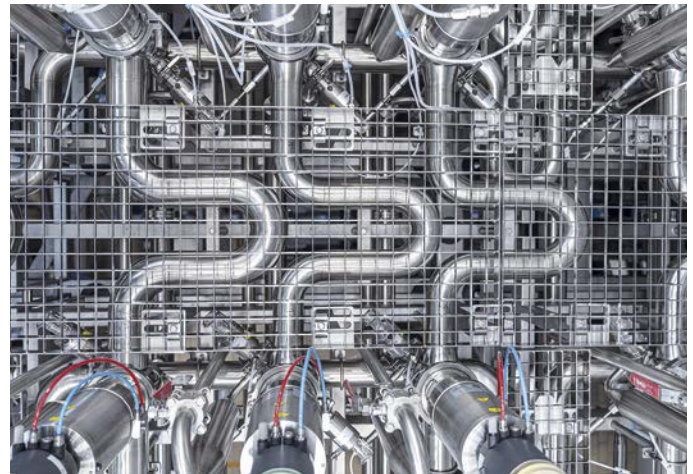
Technology that sets new standards

The new valve manifold was specifically engineered to meet the high hygienic requirements of milk processing. Various components from the Evoguard portfolio are used – including around 70 aseptic double-seat valves, single-seat valves, steam traps and intelligent EvoConnect control tops.

A particular highlight is the digital control of the entire manifold via IO-Link technology. This enables the seamless integration of different components such as valve control tops, flowmeters and temperature transmitters into a unified system. IO-Link offers significant advantages in transparency, diagnostics, and maintenance efficiency, contributing to overall production reliability.



EvoConnect control tops and measurement devices are fully integrated into the digital control system via IO-Link.



Omega bends allow stress free piping without flange connections

Durable design and smart engineering

Longevity was also a central focus in the planning process: An FEM simulation of the sterile manifold revealed where specially developed Omega bends were required to compensate for thermal expansion. The entire product path within the valve manifold features a flange-free, fatigue-resistant, robust design.

“It was particularly important to me that the new installation has a fatigue-resistant design and that the entire system — consisting of valve housings and Omega bends for expansion compensation — is built for long-term durability,” says Dominik Kober.

Energy efficiency through innovative steam utilisation

Another highlight is the sustainable design of the steam system. A newly developed Evoguard steam trap replaces the previously common changeover valve. The compact, self-cleaning unit combines the principle of a nozzle-type steam trap with a single-seat valve – delivering maximum process reliability with reduced maintenance and improved energy efficiency.

Following successful commissioning, the valve manifold is now in regular operation. The close cooperation between Evoguard and Emmi demonstrates how practical innovation and technical expertise work hand in hand.



The new sterile manifold connects the tank farm with the filling lines – space-saving installation on an elevated platform



The steam trap at the leakage outlet is integrated into a closed drain piping system – efficient and hygienic. (photos: Evoguard)

Specialist for hygienic powder products

Swiss Can AG presents can filling and seaming machines at Interpack

Within 13 years Swiss Can AG (SC) has succeeded in positioning itself internationally as a leading specialist in manufacturing machines and complete lines to fill and close cans and jars with powder or dry products. Until 2023 known as Swiss Can Machinery AG and then shortening its name only for simplifying reasons, the change had no effects concerning operational business and the management, consisting of Michael and Marc Grabher. While Bsc. ME Michael Grabher, who successfully studied production and process technology, leads the commercial sector as CEO, his brother Marc, a graduated engineer, is responsible for the technical side as CTO.

The homogeneous as well as modular production program shows some special features respectively unique selling propositions. In strict distinction to competitors, there is a general focus on lower running machines. So Swiss Can might have a leading market position concerning can filling and seaming facilities within a capacity range up to 100 pieces per minute. In this segment the series V-Matic is offered, allowing processing under modified atmosphere. The type name indicates the additional function of evacuating. It should be another USP of the Swiss company that with the help of its innovative gassing system, cans with less than 0.5 per cent residual oxygen are produced.



The Swiss Can site in Berneck/St. Gallen

The machines allow not only the processing of metal cans. Moreover such made of cardboard can be handled, even sealing cardboard bottoms. Beyond that, a range of semi-automatic machines is built.

Progressive digital services

SC places particular emphasis on modern operating and control options of the machines. Recently they were equipped with enlarged, clearly arranged panels. In addition, a new control unit including the possibility of remote maintenance was

integrated. Last year, the section Digital Services has been enlarged by an internet platform, developed in close collaboration with a Berlin start-up company. Usable within a one-year subscription, it enables direct access to all machine-related data. 2026 cloud-based Swiss Can Data Analyzer will be available, giving information about the efficiency of a machine.

To fulfill high hygienic standards the machines possess all necessary permits and are certified according to FDA and EHEDG regulations. Often the facilities are



The two managing directors of Swiss Can AG: CEO Michael Grabher (right) and his brother Marc as CTO



View into the final assembly hall (photos: Kimberly Wittlieb)

installed in clean rooms, because the most important customer group are producers of milk powder respectively baby food. Other clients come out of the dietary supplements, sweets, snacks, pharmaceutical and coffee industry.

The Swiss company has a high export rate of more than 90 per cent. Worldwide there are about 20 representations. 50 per cent of the machines are sold to EU-area. Concerning the other ones there is a focus in Southeast-Asia and Japan. India also shows success promising prospects.

Current large-scale projects provide a good example of how diverse the orders are. Among other things, two milk powder machines for Dutch companies are planned for 2026. At the time of reporting in early February, a complete line for a renowned Turkish coffee and cacao processor was finalized. And the fact that the domestic market is not being neglected is demonstrated by an order from a major brand manufacturer, which will use a SC configuration to fill and seal spice shakers in Switzerland.

Exhibition highlights

In Dusseldorf a twin version of best selling V-matic 127-3 will be demonstrated. This new development of turret servo-driven machine achieves an output of up to 35 cans per minute. According to its type the machine allows maximum diameters of 127 mm and is compatible with different heights and diameters.

Moreover, two other Swiss Can machines will be shown at Interpack: the first one is semi-automatic model V 127, also suitable for evacuating and seaming cans under modified atmosphere. The other one is a semi-automatic machine, too. Its designation is K 99 compact, that is especially built for sealing cardboard cans with cardboard bottoms. The single-track machine handles can diameters of max. 99 mm.

As another highlight of the booth, the company will visualize a complete can filling and seaming line as 3D event with the help of a so-called holowall. On this occasion the further production program such as cap-pers or spoon dispensers will be presented

Under hygienic points of view, UV- or pulsed light sterilisation systems and cleaning systems, using ionized compressed air and rotating nozzles, are meaningful supplements of the lines. To increase product safety, laser marking systems and camera systems to control and serialize products can be integrated. Complementary peripheral components are several conveyors. (Bernd Neumann)

Flexible robotic solutions for end-of-line automation

Automated palletizing and handling systems

KOCH Robotersysteme, based in Dernbach, develops and implements robotic systems for packaging, palletizing, order picking, and handling. The owner-managed company with 120 employees was founded in 1978. Currently, more than 3,000 m² of production and office space is available in Dernbach. A further new building is planned for the coming years; a corresponding plot of land has already been secured. The comparatively low level of vertical integration is part of the concept: "At our core, we see ourselves as a plant manufacturer with a focus on engineering, programming, and customized solutions from a single source," says Thomas Theis, Head of Sales and Project Planning. Mechanical components and robots – predominantly from ABB and KUKA – are sourced externally, while integration, software, and special gripper systems are developed in-house.

Engineering in focus

The range of services extends from planning to implementation and service. During the planning phase, customer inquiries are recorded and – particularly in the case of more complex conversions or new builds – elaborated in detail. This includes feasibility studies, simulations, and virtual commissioning including VR inspections. The aim is to clarify interfaces at an early stage and shorten real commissioning times.

In the implementation phase, integrable individual systems or turnkey complete systems are created. Approximately 900 robotic systems have been implemented to date. The systems are designed, programmed, and pre-assembled in Dernbach before being installed and commissioned on site at the customer's premises.



Thomas Theis, Head of Sales and Project Planning, in conversation with a colleague

The company operates mainly in Europe, but also successful worldwide, has regional representatives including in Turkey and Austria, and operates across industries – an aspect that Theis describes as a stabilizing factor: "Our broad portfolio makes us less susceptible to economic fluctuations in individual industries."

An important component of the business is service. Fifteen employees are responsible for maintenance, repairs, system safety, and troubleshooting.



In the implementation phase, integrable individual systems or turnkey complete systems are created

Palletizing solutions for different requirements

In the dairy industry, the focus is on end-of-line applications. The system handle bags of milk powder, cartons, trays and other formats. In addition to standard components, in-house developed grippers are used – particularly for non-standard formats or specific requirements. In addition, the company offers its own software solutions such as “KOCH EasyPallet” as well as “KOCHnectivity” for system control and networking.


An extensive project was implemented for Arla. There, the company installed around 20 robots for palletizing. A key feature of the system is its high flexibility in layer formation. Different tray formats and pallet sizes can be processed without mechanical changeover. “Changeover times in the traditional sense do not occur, as the adjustments are made via programming,” says Theis. The pallets are fed in and out fully automatically.

In further projects, the focus was on palletizing milk powder bags. A double fork gripper is used, and scanners handle product detection. The robot supplies several lines simultaneously. The scope of supply also included pallet conveyor technology, labeling, safety fencing, as well as functions for the provision and removal of empty and full pallets. A hood stretcher for load securing was also integrated.

Characteristic of the projects is the combination of purchased robotic hardware and the company’s own integration and programming services. The low level of vertical integration allows resources to be concentrated on engineering and customized solutions.


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EDA Dairy Policy Conference 2026

Competitive, Resilient and Sustainable

EDA President Albert de Groot positioned the European dairy sector as a strategic pillar of European policy in an increasingly unstable world (photos: IDM)



At the EDA Dairy Policy Conference on 25 March in Brussels, EDA President Albert de Groot positioned the European dairy sector as a strategic pillar of European policy in an increasingly unstable world. This reliability, he argued, strengthens the EU's international standing. His appeal to policymakers was clear: international trade negotiations must ensure a level playing field and recognise the dairy sector's contribution to global food security.

Another key focus was the contractual framework and price formation. De Groot stressed the importance of stable relationships between dairies and suppliers, while cautioning against excessive regulation. The EU-wide mandatory buyer–supplier contracts agreed in the trilogue (Articles 148 and 149 CMO) could, he warned, weaken the resilience of the dairy sector. In a global market, prices are volatile and complex and should not be constrained by rigid formulas. “We must ensure fairness along the value chain while preserving the flexibility and market orientation that are essential for a competitive and resilient European dairy sector. This fairness cannot be achieved by rigid calculation models. It must be grounded in economic reality” de Groot stated.

Paradigm shift for European agriculture & dairy?

The first part of the conference addressed the evolving political landscape and its implications for EU agriculture and the dairy sector, particularly with regard to Europe's competitiveness. Marion Picot,

Secretary General of CEJA (the European Council of Young Farmers), underlined the importance of supporting a new generation in agriculture. She called for strong and coordinated engagement by the EU, Member States, regions and local authorities, as well as a dedicated national budget within the CAP to support young farmers.

Pierre Bascou, Deputy Director-General of DG AGRI, highlighted the global repercussions of the conflict in the Middle East. Energy and fertiliser prices have risen significantly, and maritime transport has been disrupted. For agriculture, this has resulted in high inflationary costs and impaired trade flows. Key markets, including those for the dairy sector, have been affected. The political framework must therefore be further developed and strengthened, beginning with the consolidation of the Common Agricultural Policy (CAP) in the next Multiannual Financial Framework (MFF). The national strategic plans regulation provides an opportunity to make the CAP more targeted and effective after 2027. Trade policy must also be reinforced and trade relations diversified. Recent trade agreements, including those with Mexico, Chile and Indonesia, form part of this effort.

Damien Flynn, Member of the Special Committee on Agriculture, outlined the priorities of Ireland's forthcoming presidency. From July onwards, Ireland intends to place a strong focus in the Agriculture Council on negotiations concerning the post-2027 MFF and the CAP. The objective is to secure the CAP budget, ensure a



Pierre Bascou, Deputy Director-General, DG AGRI, Damien Flynn, Member of the Special Committee on Agriculture, Marion Picot, Secretary General of CEJA and George Morrison, Director of Public Affairs, Arla Foods



The second part of the conference focused on the state of global trade, the future of European dairy exports and the new trade strategies the sector should pursue: Songkhla Chulakasian, Royal Thai Embassy in Brussels, Catherine Combette, DG AGRI, Lisa Andreasen Høyer, Danish Dairy Board, Brussels, Maria Angela Esquivel, FrieslandCampina and Winarti Halim, Embassy of the Republic of Indonesia in Brussels

stable policy framework and strengthen the competitiveness of the agricultural sector. Investments along the entire value chain are to be facilitated in order to achieve sustainability goals. Further priorities include promoting generational renewal, simplifying EU regulations to enhance competitiveness and supporting the bioeconomy.

Global trade – what else to expect in 2026?

The second part of the conference focused on the state of global trade, the future of European dairy exports and the new trade strategies the sector should pursue.

Catherine Combette, Head of Unit at DG AGRI, identified key developments for the dairy sector in 2026. Exporters will increasingly need to differentiate themselves through quality rather than volume. She outlined the state of negotiations on trade agreements with several countries, including the EU–Australia Free Trade Agreement, and emphasised that only through close cooperation and strategic market openings can trade remain a driver of growth, resilience and export strength. The EU must therefore defend and strengthen the rules-based trading system.

Songkhla Chulakasian, Minister Counsellor at the Royal Thai Embassy in Brussels, provided insights into the Thai market. He emphasised that Thailand is already a significant market for EU dairy products. The country imports food products worth approximately €1.5 billion annually from the EU, of which around 12.4%

are dairy products. “The EU is a high-quality supplier and a leader in innovation and standards in the dairy sector. This creates the potential for a complementary relationship between Thailand and the EU,” Chulakasian stated. For Thailand, the Free Trade Agreement (FTA) forms part of broader efforts to strengthen trade relations with the EU.

Winarti Halim, Agricultural Attaché at the Embassy of the Republic of Indonesia in Brussels, reported on developments in Indonesia. While the country has achieved self-sufficiency in rice and made progress in meat production, milk remains the greatest challenge. In 2025, production stood at only 0.68 million t, with a deficit of around 85%. High import dependency, logistical hurdles across the archipelago and structural weaknesses in small-holder production characterise the sector. Indonesia’s dairy policy is therefore a strategic decision concerning domestic production, trade and partnerships—particularly with the EU as a complementary trading partner.

Maria Angela Esquivel, Director of Asia Corporate Affairs at Royal FrieslandCampina (FC), concluded the session with an overview of her company’s activities in Southeast Asia. FC aims to build long-term partnerships in the region, invest, and implement food standards similar to those in the EU. “Southeast Asia is one of the most interesting regions for the future. Trade with the EU will continue to grow,” said Esquivel. Ultimately, however, the EU must take the initiative and become actively involved in the region.

Cheese Cutting Machines



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IMCD Group

Newly integrated headquarters and laboratory center

The IMCD Group has opened a newly integrated headquarters and laboratory center in Kuala Lumpur, Malaysia. The modernized site brings together all IMCD Malaysia headquarters and laboratory facilities under one roof.

The new location is designed to support the customers and suppliers of the Beauty & Personal Care, Food & Nutrition, and Home Care I&I Business Groups. The Kuala Lumpur center unites technical and commercial teams that previously operated across different locations. Customers and suppliers can now access multiple end-market experts, laboratories, and application capabilities in one place. Digital tools, logistics expertise, and local market knowledge complement the technical capabilities.

IMCD Food & Nutrition Applications Laboratory in Kuala Lumpur, Malaysia (Photo: IMCD)



NEWS



photo: Sidel

Sidel delivers Britannia's first-ever aseptic PET packaging
Packaging



photo: iStock-1368016179-2D

Preparing dairy production for Sunrise 2027
Technology/IT



photo: Eberle

Revolutionizing cheese production with AI and machine vision
Technology/IT



photo: Tetra Pak

What the cottage cheese buzz means for dairy producers
Technology/IT

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