Innovations In food processing & packaging



A specialist in the food and beverage industry

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steam consumption by 75% at its new infant formula plant

t Nestle's plant in Nunspeet, the Netherlands. GEA is to equip a milk powder line for hypoallergenic infant formula with the latest process and heat pump technology. Using an innovative heat recovery from the spray dryer and further processes, the plant will use 75% less energy for steam and massively reduce carbon emissions. In this way, GEA is supporting Nestlé on its path to net zero by making the energy supply to Nestlé production facilities emission-free by 2050.

In response to increased demand for its Althera and Alfare infant formula brands, Nestlé is currently doubling production capacity at the Nunspeet plant with an additional processing line. For the first time, Nestlé will be using a GEA heat recovery system that is fed by exhaust air from the spray drying plant and, in turn, provides 80°C hot water for its operation. As part of the project, GEA will also equip the complete wet processing technology, which supplies the Nestlé spray drying line with the prepared milk. Installation of the process technology and heat supply system is planned for next year. The plant will go into operation in 2025.

Recovering waste heat from spray dryer to reduce energy consumption

Nestle's aim with the investment project is not only to increase capacity, but also to advance its sustainability agenda by reducing carbon emissions, dust emissions and water demand. Exploiting renewable heat energy is a focus of the company's climate strategy.

"The new plant in Nunspeet will also serve as a Group-wide demonstrator for futureoriented solutions to minimize energy consumption and greenhouse gas emissions in milk powder production. We are already familiar with heat pumps in various production processes. But using them with spray dryers, the most energyintensive part of the process, is something new for us. The GEA system enables us to reduce the plant's steam consumption by 75%," explains Gerben Koopmans, Engineering Manager at Nestlé. For these reasons, the project is executed with subsidy of the Ministry of Economic Affairs and Climate.

Integrating process and heating/cooling technology

"Our integrated solutions combining process technology with heating and cooling technology set a new benchmark in milk powder production, because fusing the two disciplines in production planning and design implementation significantly reduces the plant's energy consumption and carbon footprint," says Ronald Hofland, GEA Sales Manager.

In addition to the ammonia heat pump for the spray dryer, GEA is providing a second heat pump that supplies hot water at 85°C to heat the entire production line and run the various dehydration processes, as well as cold water at 1.5°C to air-condition the factory. GEA's process technology for the wet line includes state-of-theart evaporators, inline formula mixers, a homogenizer, high-pressure and high-shear pumps, heat exchangers, valves, as well as all other connecting components and pipework. The heat pump system will provide this process technology with hot and cold water for maximum energy efficiency

www.gea.com

GEA helps Nestlé cut PACE Steel Belt Systems secures order for PACEMatic Auto Belt Tracking System with flat bread manufacturer in UK for delivery into new production facility in Poland

ACE Steel Belt Systems, a leader in convevor belt solutions, has announced the successful acquisition of its first order for the PACEMatic Auto Belt Tracking System with this new customer. This exciting deal solidifies our commitment to cuttingedge technology and operational excellence, as we partner with a major flat bread manufacturer based in UK who is expanding into Poland.

The PACEMatic Auto Belt Tracking System, renowned for its advanced tracking capabilities, will be seamlessly integrated into the manufacturing processes of our esteemed client. This collaboration underscores PACE Steel Belt Systems' dedication to providing state-of-the-art solutions that enhance precision and efficiency in the food industry.

"We are excited to celebrate this significant milestone with the successful acquisition of our first order for the PACEMatic Auto Belt Tracking System with this new client," said Paul Lawson, Managing Director at PACE Steel Belt Systems. "This collaboration highlights our focus on delivering innovative solutions that optimise



production processes and ensure the highest standards of performance for our clients.'

The PACEMatic Auto Belt Tracking System is designed to enhance belt alignment, reduce maintenance downtime, and improve overall operational efficiency. PACE Steel Belt Systems is proud to contribute to the success of our client's flat bread manufacturing operations and looks forward to further collaborations within the dynamic Polish market.

www.pace-berndorf.co.uk

New OMRON V460-H Intelligent DPM reader with advanced Ethernet connectivity

MRON, a global leader in industrial automation has launched the new V460-H Intelligent Direct-Part Mark (DPM) Industrial Reader. This rugged handheld reader delivers advanced decoding performance while offering Ethernet network connectivity to meet the needs of today's dynamic manufacturing and logistics sectors.

The new V460-H is one of the five OMRON products that won this year's Good Design Award, an annual global design award with the objective of enhancing the quality of life and addressing societal challenges through design. It embodies OMRON commitment to practical yet technologically advanced solutions.

Tailored for the automobile industry's manual processes for example on production lines for engines and powertrains, the V460-H handheld code reader excels in traceability processes. Its ergonomic design minimizes wrist strain, while its feedback system - with beeps, vibrations, and a bright indicator light - makes checking the reading results easy.

The V460-H DPM reader offers quick and easy setup, thanks to the WebLink configuration. The liquid lens autofocus optics and Time-of-Flight (ToF) sensor ensures fast and versatile imaging, a key requirement in applications involving intricate machinery parts, serialized components, and electronic assemblies.

The V460-H's offers extended reading range from direct contact up to an expansive 254 mm [10"]. With its alternate multi-color lighting configurations, it is ideally suited for environments with varying light conditions. The combination of audible, haptic/vibration, and multi-directional visual indicators ensures immediate and intuitive feedback, while reducing potential operational

Built with resilience in mind, the V460-H is IP65-rated. It meets the IEC-60068-2-31 standards for drop-and-tumble and the



ISO-16750-5 for chemical resistance. Modern connectivity features, such as full Power over Ethernet (PoE) and support for Ethernet TCP/IP, EtherNet/IP, and PROFINET, reinforce its relevance for industries emphasizing smart and connected operations.

OMRON is thrilled with the jury evaluation of the V460-H at the recent 2023 Good Design Awards. The members of the jury applauded the deep analysis that has gone into examining the factors that hinder efficiency and increase the workload in manual tasks. Its design elements bridge the gap between tools and human sensory experiences and are seamlessly incorporated within a unique octagonal frame. This results in a product that is not only functional but also aesthetically appealing

www.industrial.omron.eu

PAYPER's updated open-mouth bagging range with outstanding production rates

PAYPER's newest range of open-mouth baggers renews the concept of bulk good packaging by combining precision, efficiency, and versatility. With six fully automatic models achieving speeds of up to 1,800 bags per hour, this upgrade offers solutions to bag filling ranging from 5 to 25 kg. Backed by 50 years of expertise, PAYPER continues to lead, delivering cutting-edge technology that increases precision and production and reduces downtime in modern bulk good manufacturing industries.

In a market where precision and efficiency are principal, PAYPER introduces its upgraded open-mouth bagging range.

This improved series comprises six fully automatic models capable of reaching speeds of up to 1,800 bags per hour. They adapt to a diverse range of dry bulk materials, whether free-flowing or non-free-flowing. These modernized machines are compatible with various types of pre-made open-mouth bags, weighing between 5 to 25 kg, crafted from an array of materials such as paper, PE, PP, Aluminium, or combined PE and paper. The quick and easy change between bag sizes is managed in a quick and easy way, making this range of bagging machines even more user-friendly.

The new CSA open-mouth bagging line is meticulously redesigned and optimized to reduce energy consumption while elevating production speeds. A newly introduced patented bag presentation system plays an important role in the improvement of this range, enabling production speeds at an impressive rate of 1,800 bags per hour.

Robustness is part of the design of PAYPER's high-performance bag-filling machines, which together with easy access for cleaning and maintenance, ensure the maximum operational uptime.

A distinguishing feature of all open-mouth baggers in the CSA range is PAYPER's cutting-edge dosing and weighing systems. The MSX dynamic weight controller, tailor-made for the bag-filling process, guarantees unparalleled weighing accuracy at high bagging speeds.

These versatile bagging machines, seamlessly integrate into diverse industries including mining, building, petrochemicals, chemicals, fertilizers, and seeds together with the feed and pet food sectors. Collaborating closely with clients, PAYPER customizes configurations, offering options for handling even the most challenging products, be they corrosive, abrasive, or ATEX-rated.



Agroloop commissions Bühler to provide proven insect rearing technology

ungarian insect producer Agroloop has chosen Bühler's sophisticated insect growth system for its industrial black soldier fly plant. The facility will produce up to 4,000 tonnes of animal feed ingredients per year and will be built in Üllő, Hungary. Swiss technology group Bühler will deliver its proven crate-based nursery and rearing technology, which will enable a quick ramp-up of the plant for commercial production. By the end of 2024, Agroloop plans to launch its first products, contributing to a more sustainable animal feed value chain.

Following its foundation in 2017 and the successful operation of a pilot facility, Agroloop got the green light for the implementation of an industrial insect plant in Hungary in 2022. Now they have selected all execution partners and are working at full speed to construct the plant and get it operational. The insect facility will be realized in an existing building of the Aerozone Park in Üllő, which is located next to the Budapest Ferenc Liszt International Airport. In the new plant Agroloop – supported by Bühler insect technology expertise – will produce more than 25,000 tonnes of black soldier fly larvae that will be turned into sustainable feed ingredients for the pet food, aquaculture, and livestock sector.

The plant is only the first step in Agroloop's strategy to make insect feed ingredients available for the Central and Eastern European (CEE) agribusiness. "The abundance of food processing by-products presents a unique opportunity for Agroloop's multi-plant rollout strategy in the CEE region. Leveraging our strategic partnership with the leading regional feed producer UBM Group, we improve feed quality and sustainability creating future-proof feed formulas. This enables Agroloop to focus on rapid expansion and solidifies our position as a key player in the region," says István Nagy, co-founder and CEO of Agroloop.

Andreas Baumann, Head of Market Segment Insect Technology at Bühler, added: "We are very proud to be part of this pioneering project for the CEE region and delighted to see that our solutions will contribute to more sustainable feed supply chains."

Sustainable protein

In the pursuit of sustainable and environmentally friendly practices, the CEE region is increasingly turning to alternative sources for feed ingredients. By incorporating insects into the feed supply chain, the region can address environmental concerns, reduce dependence on imported protein sources, and contribute to a circular economy approach. In addition, innovative feed formulations containing insects can optimize animal health and growth, thus leading to more efficient livestock production systems.

Insects can be reared on agricultural and food processing by-products, transforming these materials into high-quality protein. This approach not only reduces the environmental impact of this value chain but also creates a closed-loop system where resources are reused and recycled. The European Union has historically been dependent on imported protein sources for animal feed, contributing to issues such as deforestation and habitat destruction in other parts of the world. By embracing the commercialization of insect-based livestock feed, the region can increase feed efficiency, reduce reliance on external sources, and contribute to local and regional food security.

Andreas Baumann says: "The incorporation of insect ingredients in animal feed presents a compelling solution to the challenges faced by the livestock inclustry. Besides providing nutritious and sustainable protein source, insects also empower local economies to become self-sufficient. That is why insect protein is seen as a key component for a more sustainable and resilient food system."

LOBO Systems revolutionises sortation super hub efficiency with innovative conveyor system application

OBO Systems, a leader with its evolved scaffolding system, has recently partnered with one of the leading users of automation in the

This collaboration aims to address a critical operational challenge in sortation plants; accessing and maintaining motors beneath the conveyor systems.

The global company has a requirement to access and maintain the motors underneath each conveyor system within its hubs and super-hubs. These motors drive the automated system, ensuring the efficient operation of sites. A breakdown in any of these motors could result in significant downtime and require a substantial allocation of resources to resolve the issue, typically involving the hiring of scaffolders.

Admittedly, the usage of a scaffolding company would also resolve the issue faced however, this would result in a major increase in downtime for staff onsite, not to mention the cost implications of hiring in.

The benefit of the LOBO System is that any staff member can be certified, providing they attend a LOBO certification course and pass an examination. This not only minimises downtime

but also presents a comprehensive and costeffective solution to the company. Having members of staff ready to go onsite, once an issue arises, ensures they can be resolved at maximum efficiency.

In the first instance, LOBO delivered an online product demonstration to showcase the system, to highlight its unique safety aspects and discuss potential requirements. After a successful meeting, the LOBO Sales Team created technical drawings to bring the ideas to life (see images).

"LOBO is thrilled to work closely with such a key-player within the sortation and automation industry" Shares Robert Bokros, CEO of LOBO Systems. "This collaboration underscores the team's capabilities and speaks volumes about our access platform system." Rob adds.

Send your news to terryprior@innovationsfood.com

LOMA®'s Training Academy celebrates first year success

ollowing the launch of its Training Academy last year, 'check & detect' specialist, Loma Systems®, has announced that the initiative has been a remarkable success, delivering a fresh and innovative approach to training, while enhancing performance and productivity across various industries.

Offering specialised content tailored to individual business needs and compliance with retailer Codes of Practice (COP), the courses are delivered by highly skilled Loma Product Trainers to ensure that all participants have a rich and meaningful learning experience. Having trained 664 delegates over 166 courses this year, Loma's commitment to excellence in training is evident, marking a significant milestone for the academy.

Investing in courses through Loma's Training Academy is not merely a choice to enhance skills, but it is also an investment in a business's future. Since opening earlier this year, the academy has received exceptional reviews. Impressively, 9 out of 10 delegates have rated their training experience as "Very Satisfied".

James O'Brien, British Bakels' area reliability engineer, attests to the effectiveness of the training: "The training our operatives have received from Loma has already paid off and has reduced the workload on our engineering team. We have seen a reduction in false rejects and will be arranging more training with Loma next year."

James adds: "My thanks goes to Loma for the training; not only has it given the engineers a lot more knowledge on the machinery that they were all unfamiliar with, but it has also helped the operators have a very good understanding of the machine as well. They are now confident in operating the machinery, and also understand the principles of metal detection and checkweighing."

Carl Wilkinson, Loma's aftermarket service manager, said: "We are thrilled to see the impact our Training Academy is having in the industry. If you are looking to improve your performance, productivity and increase revenue by reducing unnecessary product rejects (wastage) then our courses can help with this. The positive feedback and success stories from our clients like British Bakels motivate us to keep improving and expanding our courses."

Contact Loma for more information at training.academy@loma.com



INNOVATIONS IN FOOD (& BEV) PROCESSING & PACKAGING

FEB / MAR 2024 ISSUE

Copy deadline is March 11 for next issue



Key Technology introduces RemoteMD® 2.0 for optical sorters

key Technology, a member of Duravant's Food Sorting and Handling Solutions group, introduces RemoteMD® 2.0 remote support service for their optical sorting systems. RemoteMD enables Key service technicians to securely connect to a customer's sorter for real-time remote monitoring as well as technical support. Now with 24/7 call center support and delivery of quarterly status reports, RemoteMD 2.0 helps optimize equipment performance to protect food safety and ensure product quality while increasing machine uptime and reducing service costs.

"The worldwide labor shortage has made technology experts difficult for food processors to hire and retain. With fewer skilled employees at our customers' facilities, we've identified ways we can help fill the gaps. Leveraging RemoteMD, we can take many machine maintenance tasks off the customer's plate and improve their ROI by minimizing repair time and costs and reducing the chance of product recalls," said Jack Lee, Duravant Group President - Food Sorting and Handling Solutions. "When a food processor chooses a Key sorting system, we aren't just providing them with a machine – we're building a partnership that lasts the life of the system."

Establishing a secure two-way remote connection, RemoteMD provides a Key service technician with detailed information about the system's health and operating condition. The technician reviews the status of hardware and software and identifies potential improvements that can help the customer improve their system performance and uptime. When needed, RemoteMD

facilitates the delivery and installation of software updates and patches.

If a customer needs technical support, RemoteMD reduces the likelihood an on-site service technician is required, since many issues can be diagnosed and corrected remotely by Key. If an in-person service visit is necessary, a remote system audit can speed resolution by providing information about the system's health and identifying parts needed prior to the technician's arrival. 24/7 call center support is available for troubleshooting urgent issues, while non-urgent issues are handled during regular business hours.

RemoteMD is available as a standalone service or as part of more comprehensive service packages. Customers who are operating their equipment only a few months of the year can choose a seasonal RemoteMD plan that's active for the specific period. When customers bring new workers on board or want to deepen the skill set of current operators, RemoteMD enables interactive remote training courses on the sorting system.

RemoteMD is compatible with Key's VERYX®, COMPASS®, OCULUS, Manta®, Optyx® and Tegra® optical sorting systems as well as the ADR® and ADR EXOS® automatic defect removal systems. It can be installed on new systems and retrofitted on equipment in the field. RemoteMD is compatible with multiple best-in-class connectivity solutions.

For more information on Key's optical sorting systems, visit https://www.key.net/en/our-products/sorting/

New Pan Dryer adds to the range of testing capabilities offered by De Dietrich Process Systems

In the dynamic world of pharmaceutical production, innovation remains at the heart of product efficiency, safety and quality. It is with great pride that De Dietrich Process Systems presents its latest piece of equipment in its Tech Lab: the Pan Dryer. This vertical dryer, designed for development or pilot production applications, extends the Tech Lab's offering in terms of testing and scale-up of drying and filtration/drying processes. With its advanced performance, the Pan Dryer is an invaluable asset for all those involved in the production of Active Pharmaceutical Ingredients (APIs) and all manufacturers using solid-liquid separation equipment.



Norwegian Institute of Food, Fisheries and Aquaculture Research elevates Aquaculture Practices with Nuvonic UV technology

orwegian Institute of Food, Fisheries and Aquaculture Research (Nofima), a renowned food science research institute in Norway, partnered with Øwre-Johnsen, a leading supplier of water quality solutions, to integrate Nuvonic UV solutions into its water treatment system, placing the UV units on pipelines supplying seawater to crucial departments.

Using medium-pressure UVC lamps, Nuvonic's UV systems are compact and energy-efficient. They can be customized to target specific microorganisms and precise dosages. The integration ensures optimal water treatment, aligning with Norway's regulations mandating effective disinfection for seawater intake.

NIVA conducted an NVI (Norwegian Veterinary Institute) test to validate the efficacy of Nuvonic's UV technology in water treatment at Nofima. The test focused on documenting and approving the system's efficiency, with a specific emphasis on inactivating vibrio bacteria. The conclusive findings validate the reliability, efficiency, and biosecurity improvements offered by Nuvonic's UV water treatment systems, setting a new standard for aquaculture businesses worldwide

Said Per Brunsvik, Research Station Manager at Nofima, "Nofima sees UV technology as standard equipment within the aquaculture sector. Such technologies can provide better control of the production process, making it possible to reduce problems related to pathogens."

Øwre-Johnsen sees UV technology as a transformative force in the wider aquaculture landscape. Said Tove Stoen, Master of Science and Chief Sales Officer, Øwre-Johnsen, "These systems offer enhanced control over the production process, addressing challenges linked to mortality rates and fish lice. As UV gains recognition as a water treatment standard in Norwegian facilities, Nofima's adoption of Nuvonic UV solutions not only sets a new efficiency benchmark but also establishes a milestone in sustainable aquaculture practices."

Said Ken Kershner, Global Commercial Director, Nuvonic, "Nuvonic is proud to contribute to Nofima's initiatives to advance efficiency and sustainability in aquaculture. Our UV technology, designed to meet the highest standards, not only provides a reliable and efficient solution but also eliminates the need for harmful chemicals in the industry."

www.nuvonicuv.com

PPMA re-brand puts automation at the heart of UK manufacturing

ne PPMA (Processing & Packaging Machinery Association) Group of Associations is re-branding and is changing its name to Automate UK to better represent the needs of its membership and their end user customers in the ever-changing manufacturing landscape.

The forward-looking move was announced at the trade associations annual chairman's lunch in London on 1 December and follows the publication of a Manifesto for Automation earlier in the year. This Manifesto set out the organisation's goals and commitment to be the facilitators for change to make UK PLC more productive. It also set out the central role that automation has to play in the UK manufacturing sectors continuing success.

The PPMA was founded in 1987 and was joined by BARA (British Automation and Robot Association) and UK Industrial Vision Association (UKIVA) in 2009 which broadened the range of automation equipment and services represented. As the association matures, the leadership team feels that the time is right for the overall offer to members, and their customers, to benefit from a widening of its already extensive range of services.

As the leading trade association for automation suppliers and end users of technology across processing, packaging, robotics and machine vision, it believes it can make great strides in this crucial area of the UK economy. The three very successful associations – the PPMA, BARA and UKIVA – will continue to operate, but going forward they will come under the Automate UK umbrella.

"This is way more than just a name change," says Automate UK's CEO Peter Williamson. "It is a fundamental shift in how our three trade associations can impact the manufacturing arena in a positive and meaningful way.

"By driving industry progress, supporting growth of our members and helping users make more informed technology decisions, we are the go-to partner to help members and their clients thrive," he continues. "And also increase productivity through investments in automation, in the increasingly competitive marketplace."

The main purpose of the modernised trade body is to:

- Drive the progress and adoption of automation technologies
- Identify future talent and help upskill existing employees to minimise impact of skills and labour shortages
- Support the growth of its member companies
- Help the members and end users to make better technology decisions

"We plan to take an active part in tackling the issues facing all manufacturers today,

such as the workforce challenge including skills shortages and recruitment difficulties. We will also aim to empower SMEs through clear scaling up strategies and we want to bust the misconception that robots take jobs," said Williamson.

Automate UK will be offering a raft of practical support across the pinch points in manufacturing including grants to help reduce the skills shortages, promoting career progression through its charitable organisation PPMA BEST, along with technical support and expertise. Key to this technical support is the current recruitment of a chief technical officer who will lead the discussion on opportunities, challenges, regulations, skills and more.

The association will continue with its successful range of training, both in-house and on-line, with its export support, it's respected magazine for end users Machinery Update, and the organisation and development of its world class exhibitions – the PPMA Show, Machine Vision Conference and Automation UK.

New for the organisation is the aim to become a recognised lobbying organisation to put forward key industry issues to government and to represent its members best interests. "There is a clear role for government to play in the drive to a more automated manufacturing sector in the UK," says Williamson. "We estimate that our members represent a $\mathfrak{L}7$ bn turnover, which is why our sector should be heard in this critical area."

The trade body wants an industrial strategy that has automation at its heart; it wants a government backed scheme to support finance for automation and it wants a tax system to provide incentives for companies investing in automation. It also believes that the apprenticeship levy should be reviewed, STEM should be promoted more in schools and also wants more support for exporters.

"We want a call to action on automation, and along with our members and their customers, the Government has a key role to play in this," says Williamson. " As an organisation, we are committed to making Automate UK do exactly what it says on the tin."

Automate UK's chairman James Causebrook believes that the re-branded trade body will succeed because of the PPMA, BARA and UKIVA legacy that has been built up over many years.

"We have years of experience and industry know how that provides the credibility in everything we do," he says. "Knowledge and technical expertise are our key traits which gives us access to, and influence in the right circles," he continues. "This is why I believe our focus on pushing the industry forward will reward our members, and their customers in equal measure."



Key Technology Promotes Harry van de Wiel to Vice President and General Manager – NL for EMEA and Asia

Key Technology, a member of Duravant's Food Sorting and Handling Solutions group, has announced the promotion of Harry van de Wiel to Vice President and General Manager – NL.



Based in the Netherlands (NL), van de Wiel is responsible for developing and leading strategies that bring Key's high-performance optical sorting, conveying and other process automation systems, as well as world-class service, to food processors throughout Europe, the Middle East and Africa (EMEA) in addition to China, India and Southeast Asia.

Dr Sammer to succeed Claus Langgartner

Claus Langgartner, Executive Vice President Sales & Marketing and Speaker of the Management Board (CEO), retired on 31 December 2023 after 25 successful years. During Claus Langgartner's leadership, Klüber Lubrication has achieved remarkable milestones, consolidated its market leadership and, through significant successes, especially in the areas of sustainability and energy efficiency, prepared itself for the future. Dr Wolfgang Sammer took over his duties on 1 January 2024.

"Dr Wolfgang Sammer brings a wealth of experience, innovative thinking and strategic vision as well as leadership qualities to the company, which make him the perfect person to lead Klüber into the next phase of growth and development. I wish him every success for the future," says Claus Langgartner about his successor.

Return to KHS: Tobias Wetzel named as new managerial head of Sales and Service

Tobias Wetzel will become the new managerial head of Sales and Service at KHS. This has now been confirmed by the company's supervisory board. The 50-year-old switches from



the Mannesmann Stainless Tubes group, one of the world's leading manufacturers of seamless stainless steel and nickel-based alloy tubes and pipes, to the systems provider. Between 2011 and 2020 Wetzel already held various managerial positions at KHS, most recently as head of the Service Division. He joins Kai Acker (CEO), Martin Resch (CFO Finance, Procurement and IT) and Beate Schäfer (CHRO) to complete the KHS Executive Management Board.

Marion's new agitator design for horizontal mixers reduces lead times

arion Process Solutions, an Advanced Material Processing (AMP) brand, has introduced a groundbreaking agitator design for its 30-inch diameter and smaller horizontal mixers. The release provides customers with not only a significant 2-week reduction in lead times but also up to 10% savings on the purchase price.

The new plated paddle agitators are manufactured with the paddle and arm sections cut from a single piece of stainless steel, reducing welding requirements and offering operators low-maintenance cleanability. Due to the integrated placement hole design, additional arms are attached, which means that the length of the paddles is shortened to offer improved mixing efficiency.

Tailored specifically for shear-sensitive materials and challenging-to-mix substances with diverse densities, these horizontal mixers armed with the new plated paddle agitators are a perfect fit for a wide spectrum of industries. Key sectors set to benefit include food processing, pharmaceuticals, chemicals and cosmetics.



"Businesses in industrial processing rely on innovation and efficiency to stay competitive," said Tom Finnegan, director of sales, AMP/AHS. "Our new paddle design makes it easier for our customers to accelerate the development cycle and swiftly refine their process so they can bring high-quality products to market faster and maintain their edge in an ever-evolving landscape."

To find out more about the AHS and AMP's market-leading material handling and processing solutions visit https://amp-ahs.com/

New BITZER ammonia system dramatically reduces energy use and carbon at Pilgrim UK

emeva Refrigeration Limited has installed a high efficiency, state-of-theart BITZER ammonia refrigeration system at Pilgrim UK's meat processing facility at Bromborough, Wirral, dramatically reducing the company's energy costs and carbon emissions.

Energy costs for the previous cooling system were £146,000 a year, compared with an estimated £61,000 for the new BITZER ACP pack, saving over £80,000 a year in running costs – a reduction of nearly 60% – and delivering substantial savings in carbon emissions.

The project is part of a site-wide energy efficiency programme designed to reduce power consumption and carbon emissions.

Demeva Refrigeration Limited, based in Formby, Merseyside, specified a 707kW BITZER Ammonia Compressor Pack (ACP), powered by high performance screw compressors, to replace an end-of-life ammonia system by another manufacturer that had been in service for 20 years.

The existing ammonia charge was retained for use in the new system, further supporting the economic case for the upgrade.

The new BITZER ACP system provides primary cooling at an evaporating temperature of -9°C for the site's secondary glycol circuit, serving cold stores at 2°C and air handling units at 8°C within the processing facility.

LM always more flexible: from food field to general transport

M, leader company for almost 50 years in the connection supply system between packaging and processing machineries, has recently celebrated a commercial success which testify its excellence in the food industry.

The first one is related to a distribution equipment for a leader wafer Turkey company: the equipment was composed by a series of "smalt belt conveyors" that need to handle the wafer in raw and redirect them to the flowpack machineries. This sale represent an exception for the Group which focus is to deal with distributors of packaging machineries: in this particular case the relationship was established directly with the

end customer, already familiar with LM application thanks to a previous vertical accumulator supply.

The customer request was to create a series of conveyors that would handle the products (wafer and chocolate bars) from the process unit until the two packaging machines previosly installed and already present on site. A deep design analysis and different customization actions have been issued, some of our technician was on site in order to take all the necessary measures for customize the line. Thanks to this tailor-madesolution, the customer has increased the production without affecting the quality of the product, maintaining the wafer properties and internal schedule.

Foodmate acquires Barth Industrial Automation

codmate B.V., a leading global designer and manufacturer of poultry processing equipment and a member of the Duravant family of operating companies, has acquired Barth Industrial Automation ("BIA") enhancing its technology offerings and expanding its services for integrated production line solutions. The acquisition further strengthens Foodmate's deep design and development capabilities for their core product portfolio, which spans weighing, grading, cutting and deboning technologies.

Headquartered in 's-Gravendeel, The Netherlands, BIA has established itself as a leading provider of engineering, vision, robotics and automation solutions to OEM partners in the food industry. Specializing in hardware and software engineering services, their expertise resides in their ability to deploy solutions for complete production lines.

"Foodmate and BIA have been strategic partners for over 15 years, and we're excited to bring together BIA's team of engineers, technicians and automation specialists with Foodmate's poultry processing experts," said

David Wilson, Group President of Foodmate. "Together, we will be able to offer an even broader set of integrated solutions for our customers that will ensure product quality, production efficiency and maximum yield for their poultry processing lines."

BIA's expertise in industrial automation will complement Foodmate's R&D activities and accelerate new product development initiatives for the company. "Foodmate has a culture of continuous innovation and has had tremendous success introducing new products to the market," said Lisa de Wit-Barth, Operations Manager from BIA, who will now lead Human Resources at Foodmate. "The BIA team shares Foodmate's passion for helping customers configure custom solutions that advance their production capabilities and ensure they operate safely, efficiently and profitably."

Bühler's Flavor Creation Center is operating at full power for customers

The Flavor Creation Center, which is part of Bühler's recently expanded food innovation hub in Uzwil, Switzerland, is now functioning at full speed. The center combines Bühler's proven expertise in roasting and grinding cocoa and coffee beans and processing malt and nuts to create innovative flavors and future-fit products. With cutting-edge infrastructure and an integrated network of Application & Training Centers, customers can develop new recipes and test new processes under one roof.

The Flavor Creation Center, which has been processing coffee since 2013 and cocoa and nuts since 2022, has been upgraded and refurbished, and is now up and running as part of Bühler's innovation hub in Uzwil, Switzerland. The opening of four Application & Training Centers (ATCs) – Flavor Creation Center, Food Creation Center, Protein Application Center, and Energy Recovery Center – complementing the existing ATCs, such as the Extrusion Application Center, is a milestone in Bühler's journey to support customers and partners to create a more sustainable food system.

The center showcases Bühler's proven expertise in product innovation, technology and process validation, process optimization, and training and education. In partnership with the

other Application and Training Centers, customers have the unique opportunity to consider new and different technologies along the value chain to find the best possible solution for their application, from the raw material to the finished product.

"The Flavor Creation Center is the perfect place to process cocoa beans to cocoa mass, cocoa powder, and butter; to roast coffee to perfect flavor; and to process nuts to pastes," says Skeljzen Nesimi, Head of Product Management and MarCom, Chocolate and Coffee at Bühler. The processing, roasting, and grinding of cocoa beans, nuts, and coffee is now combined in one location to create innovative flavors and high-quality products. The technological solutions available for cocoa include cleaning, de-shelling, alkalizing, and roasting (batch and continuous roasting), and result in high-quality cocoa mass, cocoa butter, and cocoa powder.

For coffee processing, customers have access to diverse roasting technologies such as tangential roasters and drum roasters. These solutions support their search for the best flavor profile, processing time, and color. Attuned to healthy food trends, the Flavor Creation Center also offers a new grinding technology, the Pulsar mill, which has been designed to grind nuts and seeds into smooth and tasty pastes.

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Microtrac and Mark & Wedell partner to offer integrated online particle size analysis solutions

icrotrac MRB, a provider of particle size and shape analysis instruments, and Mark & Wedell, a global supplier of automated representative sampling systems and project management services, have announced that they have entered a partnership to distribute Microtrac's Camsizer Online products worldwide as part of Mark & Wedell's JAWO Sampling business unit.

The partnership will enable customers in various industries, such as chemistry and food, to benefit from the combined expertise and experience of both companies in delivering reliable, accurate, and cost-effective online particle size analysis solutions. The Camsizer Online products are based on Microtrac's patented 3D digital image processing technology and offer a wide measurement range, high resolution, and robust performance in harsh environments. By integrating the Camsizer Online products into Mark & Wedell's representative sampling systems, customers will be able to optimize their processes, improve product quality, and reduce energy and material consumption.

"We are very excited to partner with Mark & Wedell, a company with a strong reputation and a long history in providing innovative and customized sampling solutions to various industries," said Markus Pauli, CEO of Microtrac MRB. "This partnership will enhance our global presence and enable us to offer our customers a complete solution for their online particle size analysis needs."

"We are delighted to join forces with Microtrac, a company with a proven track record and a leading position in the online particle size analysis market," said Bjarke Palsson, Co-CEO/Owner of Mark & Wedell. "This partnership will strengthen our JAWO Sampling business unit and allow us to leverage Microtrac's cuttingedge technology and know-how to provide our customers with the best possible representative online particle size analysis solutions."

Anritsu launches new vision inspection machine

ood inspection technology experts at Anritsu Infivis, have launched a vision inspection machine specifically designed with the ability to withstand high-intensity pressure washing.

The IP69K sanitary x-ray, based on the company's ever-popular XR75 platform has been built to meet and exceed high-pressure washing and sanitary requirements for meat or wet products in the Americas and Europe. Ideal for positioning within the processing area of a production line – as opposed to the packaging area - the IP69K combines reliability, ease of use and low cost of ownership in a robust and compact footprint.

The machine's detection of low-density particles such as fish and poultry bones is unmatched, thanks to its DualX+ technology, with direct signal conversion that makes the X-ray image sharper and dramatically reduces the product effect, making it possible to detect the smallest levels of foreign material in products.

Strengthening food safety together

Protecting consumers from unsafe food processing practices is a shared responsibility. Partnerships help to foster greater innovation, more robust safeguards and streamline processes. Which in turn can reduce food waste, increase efficiency and improve customer satisfaction

or over 15 years, Fortress Technology and AIB International (AIBI) have pooled their respective food safety, contaminant detection and GMP inspection expertise and shared cross-sectoral insight and intelligence. This partnership of food safety minds and perspectives has assisted multiple UK and global food processors, including a multi-national fast food chain, to develop robust GMP standards.

Pulling in expertise when a project requires it, both businesses have worked collaboratively together to resolve specific production challenges and boost standards on food processing lines. They have also coached front line staff in both businesses, as well as manufacturers, on common hygiene, culture, production, documentation and food safety shortcuts to watch for

Promoting best practice

Food safety can be a moving target. Workforce patterns change. Seasonal products (and staff) come and go. Packaging materials

are replaced with new substrates and labels. Inspection codes of practice evolve. Critical control points and food defence plans need to be regularly reassessed. And when it comes to hygiene and health and safety standards, food processors cannot take their eye off the ball.

As a machinery manufacturer, Fortress Technology is constantly refining its inspection and contaminant detection features and integrating these onto food production lines. Founded over a century ago, AIBI meanwhile is on the ground in food factories performing GMP inspections, training, & GFSI certifications and helping processors to identify and address gaps in their food safety plans.

Individually, the two companies have clearly-defined business strategies. With food safety the overlapping theme.

To support Fortress with machine R&D, AIBI meets regularly with the team to relay common production challenges and issues that could jeopardise food safety. This information helps Fortress to review and refine machinery, hygiene and communication

features, issue new software updates, and develop documentation tools that cannot be performed retrospectively. Protecting workers and mitigating against the risk of the most prevalent contaminant, data and COP risks that might compromise food safety.

To assist AIBI, Fortress delivers coaching, sharing how equipment supports processes, productivity and supply chain transparency. Building this collective knowledge can help AIBI Food Safety Professionals to recognise data, documentation and reporting vulnerabilities and ensure innovative features on inspection plant and equipment are being utilised properly, without compromising food or workforce safety.

Practical support

The two companies have also come together to consult on a number of flagship food safety projects. This includes advising several of the top food companies directly on what they should include in Codes of Practice documentation, audit templates and continu-



ous improvement programs.

Advancing food safety throughout the supply chain and addressing the emerging issues requires an open, joined-up and collaborative mindset. The partnership between AIBI and Fortress is testament that it doesn't need to have a profiteering agenda. Something that Fortress European Commercial Manager Jodie Curry is eager to highlight: "This partnership has one single mission. To bring industry peers and stakeholders together to protect brands, people and consumers from unsafe food, unethical business practices and catching potential compliance issues before they spiral beyond control."

To help stay ahead of what's coming next, several Fortress experts are attending AIBI's Food Safety Technical Conference this December to deliver in-person training on X-Ray machine features.

Jeff Wilson, Global Vice President, Operations at AIBI comments on the value on this munificent partnership: "Drawing on people's diverse skills and sharing knowledge ultimately drives better food safety decisions. To validate that the processes of continuous improvements are working, systems need to be tested - be that in an internal inspection, audit, a traceability test, during product changeovers etc."

Phil Brown, Managing Director, Fortress Technology Europe adds: "Incorporating diverse experiences creates a powerful flow of valuable ideas and concepts that ultimately improve process efficiencies and engage workforces. Having these different perspectives



To assist AIBI, the Fortress team delivers coaching, sharing how equipment supports processes, productivity and supply chain transparency

creates an even stronger food safety culture where everyone understands the implications of every decision and recognises the contribution that every colleague makes."

In 2023, Fortress, with significant input from AIBI, published an authoritative Whitepaper for Food Safety Magazine, aligning food safe cultures to the FDA's New Era of Smarter Food Safety Rules



www.fortresstechnology.com

Global cheesemaker invests in clever combi system

family cheeseburger and dairy giant is benefitting from a game-changing food safety inspection solution custom-engineered by Fortress Technology.

Combining metal detection and check-weighing into a streamlined twin-lane configuration, this space-saving inspection system is assisting a household cheese favourite to maintain its authenticity and consumer food safety promise. At the same time, the small-footprint machine is helping to optimise resources, reduce dairy waste and maintain the cheese-makers premium global brand integrity.

Processing approximately 11-billion litres of dairy liquids annually and supplying fresh products to over 60 countries, size hasn't deterred this cheese processor from staying true to their underlying values. Tasting, approving and signing every cheese batch to accompany these internal quality controls, several of their flagship processing plants now deploy the latest inspection and checkweighing technology from Fortress. Helping to ensure products are delivered to consumers and food service enterprises free of contaminants, as well as adhering to the latest international Weights and Measures

regulations.

Being premium products, the ability to isolate each contamination event and reduce good product wastage was an attractive feature. Currently, five customised twin-lane Raptor 'Combination' systems are located between the upstream packaging area and the secondary case loading section in two of the company's cheese processing plants. The innovative design has solved the immediate challenge of inspecting cheese products tightly spaced together.

Receiving sliced, blocked, shredded and soft cheeses directly from the upstream dual-head bagger and flow wrapping packaging machines, the integrated Fortress system starts with a cleverly engineered and compact curving conveyor. Designed to ensure optimal spacing between lanes, the conveyor also helps to avoid congestion by spacing product lanes out evenly as they are fed into the individual, lane-specific metal detector aperture and checkweighing belt.

"One of the greatest challenges when checkweighing in fast-paced packing lines is making sure there is sufficient pitch from one pack to the next so that only one pack is

present on the weigh conveyor at a time. This will ensure that packages are not rejected as unstable weight readings," explains Fortress Technology Europe's checkweighing specialist Dan Shail.

Constructed to the highest food grade standards, the metal detector and checkweigher conveyor decks and belts are all designed to be easily removed from the machine for rapid deep sanitation and maintenance. In seconds, and without using tools, plant operators can unclip and disconnect the conveyor motor, sanitise it, and instantly restore tracking once the conveyor is clipped back into place.

Double inspection capacity ... half the waste

The inspection machine consolidates a single metal detector uniquely divided into two compact apertures, plus two independent weight verification checkweighers. Each technology and lane have individual air blast reject mechanisms to isolate metal contaminants and weight rejects. This helps to reduce and minimise quality cheese products being wasted by over 50%.



As each lane, metal detector aperture, checkweigher and reject is programmed to run independently, interruptions are minimised during product switchovers or maintenance. Additionally, it is possible to run two different product lines, pack sizes or SKUs simultaneously on the adjacent conveyors.

Putting into context the significance of aperture size when inspecting cheese for metal contaminations, Dan expands: "Reducing aperture size is one of the most effective ways to increase metal detector sensitivity. The reason for this is sensitivity is measured at the geometric centre of the aperture. Making the ratio of the aperture to the size of the product an essential consideration."

Metrological compliance

After inspecting the cheese packs for metal contaminants, good cheese packs – at

140 ppm per line – are fed into the Raptor digital checkweighing system. To comply with global Weights and Measures Regulations, in just milliseconds the in-motion, three-belt checkweigher weighs, analyses, captures and reports data simultaneously.

Replicating the reject motion of the metal detectors, air nozzles blast out-of-tolerance products off the line into lockable bins, requiring minimal intervention from operators. Sophisticated software adds full transparency, with an average weight mode making instant reject decisions and combining the batch statistical data from across both lanes.

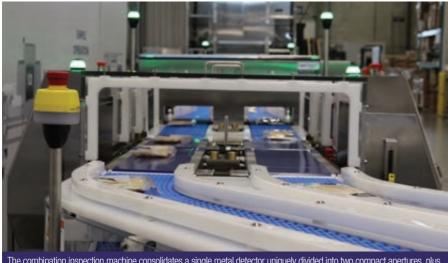
Products that pass both inspection tests then move onto a merging conveyor, aligning and presenting the packs to an automated downstream case packing system.

Holding food safety to the highest standard

For a GFSI-certified business with a continuous-improvement mindset, best practice robustness is of utmost importance to this dairy firm. The processing plant is equally dependent on automated and intelligent machinery to extract data for traceability and to support immediate quality control decision-making and production improvements.

Both the metal detector and check-weigher assist on all levels by capturing easy-to-read live OEE data. "By gathering live production information from each lane independently, a fast-paced food facility can establish the operational parameters and extract statistics that are most valuable to them," notes Dan. Analysed data can include volume, weight, inspection rates, rejects and downtime.

For optimal reporting efficiency and to assist with transparency, the combi system features data logging and can also be connected to Fortress Technology's Contact 4.0 software. Auditor-friendly, data reports can be exported as either PDF or Excel files covering a specific production line and/or time period. "Rather than monitoring machine performance manually, this level of cohesive reporting on a dual-lane system provides valuable OEE data to help boost operational efficiencies," ends Dan.



The combination inspection machine consolidates a single metal detector uniquely divided into two compact apertures, plus two independent weight verification checkweighers



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Weigher flexibility maximises packing potential for various prepared potatoes

20-head multihead weigher from Ishida Europe has played a key role in the automation of the packing operation for a variety of ready to cook potato products from leading Slovakian producer Liptovskà.

A family business established in 2000 as a supplier of raw potatoes, Liptovskà Potravinàřskà first started to produce peeled potatoes in 2007.

The Liptovskà factory features a special steam peeling system for the potatoes, one of the first to be installed in central Europe, and also has the ability to handle unpeeled potatoes. Once the potatoes have been prepared, weighed and packed, they are transferred to an autoclave for sterilisation, giving them an extended shelf life while maintaining their quality and freshness. They are then ready to cook in minutes in a saucepan, oven or microwave.

The company introduced its autoclave system in 2019 and its success led to the establishment of the Ishida packing operation in order to be able to maximise throughput and meet demand. Liptovskà has now also launched a retail line under its Pan Zemiak (Mr Potato) brand.

Liptovskà Potravinàřskà decided to invest in a weighing and packing line that could fulfil the demand from both retail and foodservice customers and after speaking with





Ishida's CEE team, the decision was made to invest in a 20-head Ishida multihead weigher as the key component of the new line.

The flexibility of the Ishida CCW-RV-220WB-1D-30-WP enables it to handle both 450g retail pack sizes and larger 3kg and 5kg packs for the foodservice sector, with a top speed of 120 packs per minute for the 450g, and 40 and 20 packs per minute for the 3kg and 5kg sizes.

The 3 litre hoppers are capable of weighing whole, sliced or diced potatoes. In order to deliver the required speeds for the larger pack sizes, the weigher is divided into four sections. Each section acts as a separate weigher at a lower target weight and these individual weights are then combined and placed into a customised distribution system, which comprises a twin swing chute with dipping funnel that transfers the potatoes into thermoformed trays.

For a 5kg pack, the weigher produces four individual weights of 1250g which are placed into the tray one after the other; for the 3kg size, it is two weights of 1500g; for the 450g retail packs, the potatoes are despatched in a single weighment.

The 20-head Ishida multihead is from the company's top of the range RV series. This features Ishida's unique triple combination calculation software that can calculate optimal weight combinations, double check them and then select the one nearest to the target weight, all in a single cycle. In particular, this ensures that accuracy is maintained when the weigher operates in the split mode for the larger size packs.

The Ishida weigher is in operation for 12 hours each day, and as well as the cooked potato varieties is also handling raw potatoes. Special anti-floor vibration removes background vibration from the load cell output

signal, improving signal stability and machine accuracy for consistently reliable operation. Its waterproof construction allows fast and easy cleaning. The Ishida installation also included an elevator to transfer potatoes to the top of the multihead weigher. An Ishida DACS-G-S060 checkweigher provides a consistent final weight check.

"We have been very pleased with the performance of the Ishida multihead weigher," commented Liptovska Potravinarska's Executive Director Michal Hajden. "It is both accurate and reliable, as well as being easy to set up and operate – and Ishida provided us with initial training to ensure we were familiar with all the features of the machine."

In addition to its domestic market, the company is also investigating export opportunities for its new retail range.

"We see great potential for our Pan Zemiak range alongside our existing foodservice business," explained Michal Hajden. "Thanks to the capabilities of our Ishida multihead weigher, we are well placed to maximise our opportunities."



www.ishidaeurope.com

In-line hyperspectral seal inspection enables end-of-line automation for packaging snack trays



ince 1949, one of the most popular party snacks has been produced in Austria: the thin, salty pretzel sticks from the brand Soletti. Meanwhile Soletti became part of Kelly Snacks, and the successful product is exported to more than 40 countries. A key element for these salty snacks is to preserve the crispiness, so seal integrity is critical. That's why Kelly also integrated HyperScope® systems into two new production lines, for 100% in-line seal inspection of the single- and multicompartment trays with transparent as well as printed films.

Challenges with crispy snacks

Snacks are packaged in different variations for many occasions: small personal treats, movie portions or bigger sized servings for families and parties. This requires different packaging formats such as flow-packs, VFFS (gusseted) bags, cups or thermoform trays with multiple compartments. To guarantee best-before dates and offer an appealing product, seal inspection

is essential to avoid leaking packages or visible product particles in the sealing area. As the demand for snacks in trays is growing, Kelly decided to expand/upgrade their production capacity with new fully automated lines for packaging single trays, dual trays, or even quadruple trays with a mixed variety of snacks.

As seal integrity is equally important for these types of trays, Kelly was looking for a solution to inspect in-line 100% of the seals and automatically remove faulty packages, overall reducing manual labor for inspection and sorting. Defective packages lead to internal and external quality problems and high sorting costs, which of course need to be avoided.

There are different challenges with this type of product and its packaging. As the salted product is crispy there are crumbles that might get stuck in the sealing area. When these particles are small, they have a limited effect on seal integrity. But larger parts can result in a seal breach.

As the top film of the packages is

often printed, contamination cannot be "seen" by a human eye or standard vision inspection systems. Inspecting with a camera from the bottom is also not a solution as the crumbles are hardly visible as there is typically a low contrast between the crumbles and the pale underside of the film, and certainly not when the tray is opaque.

Also, at a high production rate, manual inspection is simply not feasible. Finally, with multi-compartment trays there are often issues with product particles in the bridge. Also in this case, viewing or inspecting from below is difficult as the steep walls of the trays easily block the view of camera. So ideally, Kelly was looking for a solution that was: 1) capable of detecting contamination through printed top film; 2) usable for multi-trays; 3) capable of handling high production speeds and; 4) automatically rejecting faulty packages.

Enters HyperScope®, Engilico's new solution for hyperspectral-based seal inspection of rigid trays and thermoforms.









Multi-compartment tray with assortment of snacks

Seeing more with hyperspectral imaging and Al

HyperScope® uses hyperspectral imaging to detect seal contamination with high contrast, even with printed film. The inspection system features GPU-accelerated artificial intelligence (Al), which enables real-time, high-precision seal area detection, regardless of the package orientation, packaging material, layout and size. The system includes a conveyor belt that can be completed with an integrated reject unit.

Hyperspectral cameras capture information from a larger part of the electromagnetic spectrum including infrared wavelengths that penetrate through thin plastic or paper top films. Hyperspectral imaging, therefore, unlocks new inspection possibilities where classic imaging often falls short, e.g., on printed film packages which are often used in the range of premium products with luxury packaging, on packaging with opaque backings or in applications where the seal contamination is difficult to detect due to limited contrast. The system can inspect up to 160 packages per minute, a speed that is well aligned with most food production lines.

Since contamination only needs to be detected in the sealing area, it is particularly important to detect this region with high accuracy. HyperScope® relies on artificial intelligence for this task: the sealing area is automatically determined, regardless of package orientation, degree of deformation and number of tray compartments.

The detected sealing area is then further analyzed in several post-processing steps to detect e.g. seal breaches, contamination inclusions in the seal, etc. Finally, based on configurable decision criteria, the package is accepted or rejected.

"It is very important for us that 100% of our production is inspected and packages with seal contamination can be removed from the packaging line.", says the IWS Manager Mr. Matthias Stoessl, "Seal defects can have an impact on the freshness of the product. Also for aesthetic purposes, product inclusion in the sealing area is not acceptable."

Smooth installation and deployment

As the tray packaging lines were newly configured, the installation was relatively straightforward, teaming with the professionals from Kelly as well as with an external third-party line integrator.

HyperScope® is capable of processing different products and variations, which is important as the packaging lines are producing for different brands. In total, more than 16 different product models were created and extensively validated. All daily inspection information for the different products is saved in a database that can be exported to many reporting formats.

"We are very pleased with the installation and deployment of the HyperScope® systems. This is a very innovative inspection technology that is particularly suited for our multi-compartment packages with printed top film.",

concludes Mr. Stoessl, "The new fully automated packaging line that features metal detector, HyperScope® seal inspection and checkweigher, positions us at the forefront of production and inspection capabilities."

Being a center of excellence, other companies from the Intersnack Group are obviously very interested in following these latest innovations at the Feldbach production site.



Contact Engilico Renaat Van Cauter Email: info@engilico.com Tel: +32 16 49 81 30 www.engilico.com

Ideas become reality at Bühler's Food Creation Center



Stefanie Hardtmann Head of Food Creation Center & Consumer Food Technology Bühler Group

n November, the Swiss technology group Bühler opened its expanded innovation center for food in Uzwil. The new Food Creation Center is a central part of this hub. It offers an integrated perspective on product and process development for a wide variety of foods. Bühler teams support customers all the way from the idea phase through rapid prototyping and implementation in the industrial process, to validation and scale-up.

Whether it be fruit, protein, muesli and nut bars, wafers, cookies, chocolate, baked products, spreads or snacks, Bühler's Food Creation Center in Uzwil is a state-of-the-art facility for product testing, production trials, training, and education. Customers will find the ideal environment and the expertise to create different foods with new raw materials, flavors, and textures. The Food Creation Center receives ingredients and processed raw materials such as flour, chocolate mass, nuts, oats, sugar, alternative proteins, and fruit – some of which also come from the other application and training centers – for processing.

Helping to shape trends

The global food megatrends such as premiumization, health, sustainability, affordable nutrition and on-the-go snacks that appeal to consumers provide opportunities for our customers to adapt their portfolios and marketing strategies. To help unlock these opportunities is precisely why Bühler has invested into this new center for food innovation in Uzwil. "In concrete terms, this means that we're developing products for and with customers that correspond to these megatrends. For example, we



Biscuits and wafers, with or without chocolate, with or without fillings, the variety the Food Creation Center offers is huge



Whether it is snack bars, wafers, biscuits, crackers, or any kind of chocolate confectioneries, the new Food Creation Center supports customers through the entire innovation and industrialization process



The second floor of the Food Creation Center is home to an industrial bar line with an output of 400-800 kg/hour.

created sugar-free protein bars made from pea protein," says Stefanie Hardtmann, Head of Food Creation Center & Consumer Food Technology. The exchange with Bühler's experts does not end in Uzwil but extends across the entire network in Europe and beyond. In the Food Creation Center in Uzwil, customers from the traditional bakery sector will find a fully equipped bakery with an auditorium for courses, sufficient space for training and bakery equipment for testing in various batch sizes.

Making Food Sensations a reality

Bühler's knowledge of current trends, its expertise in implementing them, and its global network of Food experts are the best prerequisites for implementing food sensations. With the help of Bühler, edible cups were developed that can hold hot contents for 45 minutes without leaking. "Through new combinations of process steps, we achieve results that deserve to be called sensations," says Stefanie Hardtmann. "Another vivid example is the savory filled wafer pillow with a tomato and cheese filling. We were able to develop these together with the wafer team from Leobendorf, Austria. The pillows are a good size for snacking; they're lightweight, low in fat and calories and have an intense, natural tomato and cheese flavor." In the cracker range, potato and chia seed potato chips were created, offering a gluten-free, vegan, low-fat crispy snack. There is a particularly wide variety for those with a sweet tooth, as many bar or wafer products are coated in chocolate. The Food Creation Center also produces chocolates with unusual fillings, including a vegan, gluten-free

chocolate praline with a peanut-free peanut filling. The possibilities offered to customers by the center are as creative as they are varied.

Services from A to Z

Covering an area of 850 square meters, the Food Creation Center combines cuttingedge technology, analytical services, product, and process development, as well as workshops and training courses for Bühler's customer experts. Stefanie Hardtmann and her team know their customers and the trends. "Thanks to our market knowledge, gained from our businesses from field to consumer, we're able to support our customers throughout the entire innovation process along their value chains, from the raw material to the finished consumer product. We also help with the detailed development of business cases, capital expenditure analyses, and return-oninvestment estimates all the way through to the first sample production or the first finished product prototype.

"In Uzwil, we have the smallest scale industrial production line. This means we can not only offer our customers the opportunity to test small batch sizes of a product, assess process performance and scale up to higher production scales with confidence," explains Stefanie Hardtmann. "Product quality and process stability are two decisive criteria here," adds Stefanie Hardtmann.

More than snacks and chocolate bars

The comprehensive range of applications, possibilities, and network benefits offered



lan Roberts CTO Bühler Group

by Bühler's center for food innovation at a single location is unique. Bühler is committed to supporting its customers in the food industry in feeding the world's growing population in a sustainable and healthy way. "The opening of the four new application and training centers is an important milestone in our efforts to support our customers and partners in developing a more sustainable food system," says lan Roberts, CTO of Bühler. "In these centers, our customers have access to a unique combination of technology and expertise."

Webpage of the Food Creation Center: https://www.buhlergroup.com/global/en/locations/Switzerland-Uzwil-Our-Worldwide-Headquarters/food-creation-center.html



www.buhlergroup.com

Ishida versatility and value ideal for new raw vegetable range

n Ishida multihead weigher, specifically designed to handle fresh, sticky produce with speed, accuracy and efficiency, has proved the ideal solution for a new range of products from French canned food company André Laurent, which specialises in cabbage and sauerkraut.

The company's Veg'and Bio Probiotics brand offers a variety of fermented raw vegetable mixes. Available in three different recipes in 180g pouches, the products are manufactured on a small scale to serve the organic groceries sector. Originally the mixes were weighed using a circular weigher, but this proved unsuitable as the strips of grated vegetables were not easy to separate and became tangled together, which made them impossible to weigh accurately. This resulted in André Laurent having to carry out much of the production process by hand, leading to excessive product giveaway.

The company therefore sought an alternative weigher that would avoid damaging or cutting the strips of grated vegetables and guarantee accurate weighing, while at the same time ensuring the same quality of the vegetable mix and keeping within their investment budget.

The solution from Ishida was the CCW-R2-106-WB Fresh Food Weigher, a semi-automatic model that is able to cope with sticky and difficult-to-handle and delicate products, such as raw vegetables. The linear design receives product from a conveyor belt to the top of the weigher, where one or two operators evenly distribute it via belt feeders to the weigh hoppers. This helps to optimise the speed and efficiency of the weighing process.

For André Laurent, the weigher has

proved to be extremely effective in terms of accuracy, particularly given the small pack weights. The ergonomic inline layout makes it easy to spread out the products on the feeder table and the belt feeders facilitate a precise and consistent product feed to the weigh hoppers to retain the full quality of the vegetable mixes. Features such as scraper hopper gates, ribbed surfaces and scraper gates on the collection belt conveyors minimise product sticking.

Thanks to the installation of the weigher, André Laurent has cut its product giveaway tenfold, and reduced the number of packaging operators required for this range of products by the same amount.

The Ishida CCW-R2 is currently guaranteeing André Laurent a production capacity of 1500 pouches per hour. Set up and changeovers can be carried out simply and quickly. Ease of cleaning is another key benefit, with fast removal and replacement of the hoppers.

"We can change recipes in five minutes," confirmed Anne Prieur, Quality Manager at André Laurent.

Thanks to all these benefits, the company is now planning to develop more formats for its vegetable mixes.

François Laurent, André Laurent's General Manager said the new weigher has provided a value for money solution for this innovative new range:

"For five generations, our company has stood out due to its desire to develop product ranges that meet both market expectations and consumer trends. We already had the concept (fermented mixes of grated vegetables), we already had the packaging, and we already had



the customer base. What we didn't have was suitable equipment.

"We knew we had made the right choice after the very first test runs with the Ishida linear multihead weigher. We never thought that a company of our size, with our sometimes tight investment budget, would be able to own this kind of equipment. Ishida was able to prove that it could meet any need we have, while remaining within our budget."

Based in Blignicourt in north-eastern France, André Laurent was founded more than 110 years ago. In order to ensure a proud future for its craftsmanship and expertise, the company has kept the business in the family for five generations, while at the same time maintaining a perfect balance between resolute respect for tradition and a firm focus on innovation and new trends.

www.ishidaeurope.com

Increase efficiency and ensure product quality with innovative weighing and inspection solutions

Meat consumption patterns have changed significantly in recent years. In Germany, for example, 44% now eat a flexitarian diet, i.e. eat meat only occasionally, seven percent vegetarian and one percent vegan (BMEL Nutrition Report 2022). Animal welfare, environmental protection and health are some of the main reasons for giving up meat. The global market for plant-based meat alternatives is already worth billions and is growing at double-digit rates. Due to this development, many companies are already fighting for market share. Start-ups and traditional meat producers are competing with consumer goods multinationals like Nestlé and Unilever. Many companies are making targeted investments in their production facilities to keep up with the high demand. However, the current challenges such as supply bottlenecks and increased energy costs are not leaving these companies unscathed. Maximum efficiency and the greatest possible conservation of resources along the entire value chain from production to packaging are more important today than ever before.

Find out in this article which advantages meat substitute producers can draw from the latest weighing and inspection technologies from Minebea Intec.

s in the entire food industry, hygiene and product quality are of crucial importance in the production of plant-based meat alternatives. Contamination or foreign bodies in the vegetarian or vegan foods and the associated product recalls can not only be expensive and damage trust in the brand and the company, but above all endanger the health of consumers. At the same time, cost savings, sustainability and high throughput are important issues in the industry.



Requirements for the production of vegetarian and vegan meat alternatives

In order to come as close as possible to the traditional schnitzel, steak or burger in terms of shape, consistency, taste, smell and mouthfeel, the highest quality standards are required in production. The recipes often consist of more than 30 individual components - be it different flavourings or fibre structures of fruit seeds, pulses or vegetable peelings. To bring the ingredients together in the right proportions, companies work with automated mixing systems equipped with high-precision load cells from Minebea Intec. "Our weighing solutions guarantee accurate, continuous, fast and flexible

dosing processes and minimise material losses, Yannick Salzmann, Global Product Manager at Minebea Intec. The weighing solutions can be easily integrated into the production lines of manufacturing companies as an OEM solution. "Our Novego® weighing module was developed specifically for tank and process vessel weighing in the food and pharmaceutical industries," says Yannick Salzmann. "The hygienic all-in-one solution offers a variety of innovative features for easy, error-free installation as well as maximum resistance to lateral forces.' The Novego® weighing module ensures process reliability, measurement accuracy and fast cleaning processes. The exceptional corrosion resistance of the stainless steel as well as the product design oriented towards the guidelines of the EHEDG make the weighing module insensitive to dirt, water and even aggressive cleaning agents.

Increase precision and process speed with dynamic checkweighers

When the mixing process is complete and the products are on the conveyor belts, Minebea Intec's dynamic checkweighers come into play. "With the help of dynamic checkweighers, companies can optimise their production processes, improve material and resource management and increase the accuracy and consistency of production processes," says Lars-Henrik Bierwirth, Product Manager at Minebea Intec. "Our Flexus® checkweigher is the ideal solution for the highest product quality - regardless of whether customers want to check product weight or completeness or optimise their filling and sorting processes." High-resolution EMFR load cell technology and a customised design guarantee precise weighing results and high throughputs of up to 600 pieces per minute. The Flexus®



With the weighing module Novego® in hygienic design, very small quantities can be dosed to the gram from tanks with a canacity of several tonnes

checkweigher integrates effortlessly into existing production environments. Changing line configurations and rapid product changes are handled quickly and easily. Optional stainless steel tables make the Flexus® checkweigher easy and safe to clean.

Metal detector Mitus® reduces false rejects and ensures highest product quality

In addition to checkweighing, foreign object inspection plays an important role in the meat substitute industry. The new metal detector Mitus® with the innovative MiWave technology enables highly precise detection of metallic foreign bodies even with the largest product effects, which can occur frequently, especially with meat-type products. With MiWave, a multitude of frequencies are modulated onto the transmitted signal, which are then separated and evaluated separately by an intelligent algorithm. With the help of this separation, the products can be inspected symbolically from several perspectives. Due to this significantly increased information content, high search sensitivities can be achieved despite large product effects. The result for producers: maximum product safety and maximum output.

The Mitus® metal detector is available in standard sizes as a rectangular, round or compact detection coil as well as a free-fall and pipeline application, so that it can be integrated into production facilities even where space is limited and depending on requirements. The Mitus® metal detector can also be easily combined with additional weighing technology if required. "With the Mitus®, we offer users a premium solution for metal detection," says Linus Dellweg, Global Product Manager at Minebea Intec. "Meat substitute producers can thereby rely on our premium quality 'Made in Germany'."

Carefree with safety: Dypipe X-ray inspection system with innovative validation system

As plant-based meat alternatives are made from a variety of ingredients, unwanted parts such as shell remnants may end up in the products during raw material preparation. To identify these tiny foreign bodies and remove the contaminated products, many companies rely on Minebea Intec's X-ray inspection systems. Minebea Intec offers a complete portfolio of X-ray systems for the inspection of packaged products. Typical applications include cartons, boxes, bags, pouches, trays and portion packs, which can contain a wide variety of dry or liquid food products. The Dylight and Dymond models have been specially developed for these applications. They feature a hygienic design in accordance with EHEDG principles and high detection sensitivities with low power consump-



The Mitus® metal detector with flexible MiWave modulation is a metal detection system that reliably detects contamination from the smallest metal particles in the product stream

Advantages of Minebea Intec's solutions for the meat substitute industry

- Automation for efficiency: Minebea Intec weighing and inspection solutions are fully automated and allow seamless integration into the production line. They optimise workflows and increase production rates.
- Reduction of false rejects: The high precision of the inspection solutions leads to a reduction in false rejects. Products are inspected reliably, minimising rejects and saving costs.
- Ensuring hygiene and quality: The advanced inspection technologies guarantee the highest safety standards and ensure products that are free from contamination.
- Highly effective seal seam inspection: The VisioPointer® enables precise and reliable inspection
 of seal seam integrity, contributing to improved product quality.
- Increased sustainability: Minebea Intec solutions play an essential role in promoting sustainable production. By specifically reducing misdirection and minimising material waste, they help to use resources more efficiently. In addition, they increase energy efficiency and optimise packaging processes, which supports and enables an environmentally conscious approach.



The Flexus checkweigher® meets the highest demands for hygienic design guidelines for packaged food. A wide range of configurations covers all requirements

For viscous and liquid products such as vegan mince, Minebea Intec has recently launched the Dypipe X-ray inspection system. The Dypipe is equipped with an innovative specimen insertion system that enables specimen verification in live operation. This means that producers can always be sure that their production processes are working properly and do not lose any time for inspection when the plant is at a standstill. For the high hygienic requirements in meat substitute applications, the Dypipe is equipped with an easy-to-open separator that has been specially developed for this purpose. This system guarantees excellent results and gives the security of producing high quality food.

Smart labelling enables maximum traceability

Another technology to increase efficiency in the meat substitute industry is the WPL-A Automatic Price Labeling System from Minebea Intec. With its reliable software and state-of-the-art weighing and printing technology, this system not only allows live production data to be displayed, but also dynamic graphics of the freshly printed labels to be shown on the integrated 19" Windows touch screen. This provides immediate control over the labelling process and promotes transparency in the production chain. Maximum traceability is

ensured through the accurate recording of pack numbers, product information, batches, user and device IDs. In addition, the system offers ERP connectivity and can be extended with the e-mark software module to ensure seamless integration into existing operations.

The WPL-A's intelligent label design meets the latest regulatory requirements for product labelling. No external software solutions are required as the system comes with native templates and formats for all printer configurations. This user-friendly design not only simplifies the work process, but also ensures that all specifications are met. At the heart of the WPL-A is its state-of-the-art weighing and compression technology, housed in a compact design. This enables high processing speeds and innovative options to meet the demands of a dynamic production environment. In this way, the system not only contributes to accurate price labelling, but also to increased throughput and productivity.

Defect-free packaging guaranteed: The VisioPointer® from Minebea Intec with hyperspectral analysis

Minebea Intec's visual inspection solutions are used at the end of the meat substitute production line. The VisioPointer® is a forward-looking solution for, among other things, highly effective seal seam inspection of packaging in the food industry. By using hyperspectral analysis for coloured packaging or infrared for transparent packaging, the VisioPointer® can detect even the smallest leaks or irregularities in the packaging seal. This ensures product



The VisioPointer® reliably automates inspection processes in food packaging lines thanks to leading image processing technology and multiple inspection modes

integrity and minimises the risk of contamination from defective packaging.

Automation: the path to sustainable production

"We offer our customers in the meat substitute industry weighing and inspection solutions for the entire production process: from incoming goods to outgoing goods. From entry-level products to premium solutions," says Lars-Henrik Bierwirth. "In addition to our high-quality equipment, we also have intuitive software solutions in our portfolio that simplify recipe processes, reduce raw material waste and have sophisticated safety functions such as track and trace." For manual recipe processes, Minebea Intec offers the PC software ProRecipe XT®, for automated recipe processes the Batch-PMS software is ideally suited and with the SPC@Enterprise software, customers have a central data management tool at their disposal.

Automation enables meat substitute producers to save money and increase efficiency, while high-precision technologies ensure product quality and protect against costly recalls. In addition, Minebea Intec's solutions help to make the production process more sustainable by reducing false rejections, minimising material waste, increasing energy efficiency and optimising packaging processes, thus supporting responsible resource use. This is likely to be in line with the aspirations of most producers of plant-based meat substitutes, who are likely to be interested in improved sustainability in addition to revenue shares in this future market.



www.minebea-intec.com

About Minebea-Intec

Minebea Intec is a leading manufacturer of industrial weighing and inspection technologies. Headquartered in Hamburg, the company offers products and services that have stood for innovation, performance and reliability for more than 150 years. Its product portfolio includes platform scales, load cells, vessel and silo scales, check-weighers, metal detectors, X-ray inspection systems and user-friendly software solutions. More than 1,000 employees at 18 sites worldwide increase the precision and efficiency of industrial customers' weighing and production processes. A network of over 200 partners in 71 countries complements the sales and service locations of the global player. The performance strength and distinctive German Quality are reflected in the brand promise "the true measure".

Minebea Intec is part of the MinebeaMitsumi Group, a comprehensive precision components manufacturer that integrated a wide range of cutting-edge technologies, from ultra-precision machining technologies, such as miniature and ball bearings, which boast the No. 1 global market share, to motors and sensors. The Tokyoheadquartered group, which employs over 92,000 people worldwide, reported consolidated net sales of 1,292,203 billion yen (approximately 9.17 billion euros) for the 2023 financial year.

British Frozen Food Federation pioneers crucial new guidance to protect workers in extreme cold environments

Cold feet could be a thing of the past for coldchain workers, thanks to pioneering work by the British Frozen Food Federation (BFFF).

The trade association has developed new guidance on how to test the suitability of footwear used in the frozen food industry so that workers avoid injuries such as frostbite.

Until recently there has been no official guidance on testing cold insulative (C.I.) footwear below -17°c. Now, the BFFF recommendations have been assured by their primary authority partner, Wakefield Metropolitan District Council, meaning they have legal standing and a listing on the primary authority register.

BFFF's new methodology will allow industry members to test C.l. footwear and insulated sock combinations to check they are suitable for their cold store environment. In addition, the guidance provides considerations for completing or reviewing cold store risk assessments.

Research began in 2019, after the BFFF was approached to investigate whether C.I. footwear was fit for purpose. In the frozen food industry cold store temperatures can be as low as -25°c to -40°c.

Due to a lack of thorough research, employees have been exposed to these very low temperatures, without being provided with the correct assessed footwear. This has resulted in cases of potentially serious injuries, such as

frostbite

"Having first started this project four years ago, we are very pleased that it has now finally come to fruition," said Simon Brentnall, Head of Health & Safety at The British Frozen Food Federation.

"Ensuring the safety of workers in the frozen food industry is paramount, and our research into the suitability of cold insulative footwear has resulted in critical new guidance which will ensure the protection of employees working in cold stores below -17°c. It's a crucial step towards ensuring the safety of industry workers and preventing future injuries"

The request for BFFF's involvement followed a successful civil claim case in which an individual working in a frozen cold store suffered serious frostbite. The legal team for the defending party in this case advised that the current testing method for C.I. footwear under the current EN ISO 20345 standard only tests footwear at -17°c. The tests therefore do not reflect the extreme cold temperatures adopted in the frozen food industry.

BFFF has been working closely with Arco (experts in safety and the UK's leading supplier of safety equipment) and SATRA (experts in the research and testing of footwear), as well as many of their members to produce an accurate, realistic testing method which reflects the industry cold store temperatures.

www.bfff.co.uk

OMRON Robotics and Safety Technologies enters strategic partnership with Lowpad for mobile robots

MRON Robotics and Safety Technologies, Inc. and Lowpad BV have recently announced a strategic partnership to expand OMRON's line of mobile robots with Lowpad's low-profile product offering. OMRON is a leader in the Autonomous Mobile Robots (AMR) industry, serving a broad range of industrial customers with payload requirements from 60 kg to 1500 kg. In parallel, Lowpad has built a leading position in low-profile mobile robots for retail and logistics. Lowpad's products provide profiles between 80 and 130 mm with integrated lift, allowing them to handle racks, trollies, and pallets used to automate manual transport across a wide variety of industries.

Under the strategic partnership, OMRON will promote and sell customized versions of Lowpad's robots through its global sales network under the OMRON brand. Lowpad's products will be integrated with OMRON's industry-leading FLOW Core software, allowing autonomous operation and a single point of control for fleets of up to 100 mobile robots. Combining Lowpad's hardware and OMRON's fleet management software enables a highly flexible solution for smart factory transportation.

OMRON AMRs are already widely used for parts and product transport in the e-mobility,

digital, food & commodity, and medical industries. Lowpad brings a strong presence in the warehouse and logistics industries, where their low-profile AMRs make them an ideal solution for transporting roll cages, pick carts, pallets, and trollies. Similar requirements are growing rapidly in factory automation, with a projected 60% CAGR in low-profile robots through 2025.

"We are delighted to complete this new strategic alliance with Lowpad. Lowpad's line of low-profile solutions are the perfect complement to OMRON's existing portfolio. It's also a strong cultural fit, with our teams working very well together. This partnership represents a true winwin for our companies and our customers." — Olivier Welker, President & CEO, OMRON Robotics and Safety Technologies, Inc.

"OMRON's footprint in robotics and industrial automation is an excellent fit for Lowpad. We've built a strong and growing position in retail and logistics, and are excited to leverage this new partnership with OMRON to expand further in factory automation. This alliance allows our respective companies to focus on the markets that we know best, accelerating growth for both organizations." – Jan Bakker, CEO, Lowpad BV

www.industrial.omron.eu

Organic wholesaler bio partner outpacing the competition with Infor's industry cloud service

Infor®, the industry cloud company, has announced that Swiss food wholesaler Bio Partner has successfully implemented Infor CloudSuite Food & Beverage. Besides automating and accelerating business processes, the company benefits from the scalability, security and innovation of the Infor cloud platform powered by Amazon Web Services (AWS).

Bio Partner Schweiz AG is the leading wholesale partner in the Swiss organic food market, based in Seon (Canton Aargau). The company supplies 3,500 customers in the specialist organic trade, retail, catering, and food processing industries with a full range of organic products and services. Due to the ongoing trend toward sustainable and organic food, demand at Bio Partner is growing, and the resulting business challenges are growing, too.

Bio Partner's previous locally-hosted ERP system could no longer meet the company's requirements, so its leaders looked for a solution that would cover the company's needs. That this should be a cloud solution was a given. Infor's industry cloud solution impressed with its baked-in food and beverage wholesale capabilities and future-proof innovations, helping Bio Partner to outpace the competition.

Infor CloudSuite Food & Beverage is specifically built for the food and beverage industry and provides proven business processes and preconfigured capabilities as a true public cloud service. Thanks to Infor's multi-tenant cloud strategy, Bio Partner benefits directly from innovations that are continuously being added, driven by the needs of all Infor users in the industry without having to do upgrades.

With Infor's cloud solution, Bio Partner improves the management of its inventory turnover and returns of excess and expired products. Especially when trading fruits, vegetables and dairy products, an efficient handling solution is crucial regarding products' shelf life.

Infor CloudSuite Food & Beverage also supports the Swiss wholesaler in managing its suppliers. With about 10,000 products, independently running workflows are essential to operate efficiently. One part of this is the automated connection of the ERP system to the web store, guaranteeing the electronic exchange of data between the company, customers and suppliers. Automating the invoicing process also plays a large part in increasing the company's

"Infor provided us with the perfect solution for our needs. The industry-specific out-of-the-box features not only convinced us in theory, but also deliver on their promise in practice," says Hans-Ruedi Meyer, head of ICT at Bio Partner Schweiz AG. "We work more efficiently and can deploy our specialists in a more targeted manner than before. As we are affected by the shortage of skilled workers, this is crucial to make the best use of our resources."

"With Infor CloudSuite Food & Beverage, we offer companies like Bio Partner the opportunity to implement a single solution that covers all their needs. They also benefit from best practices of other customers through the multi-tenant architecture," said Bernhard von Berg, account manager at Infor. "We have already been able to implement various use cases at Bio Partner, and we are constantly working with the company to further exploit the potential of the Infor solution."

www.infor.com

ACG Inspection launches new cloud-based offering to address upcoming VRS requirements under DSCSA regulations

n light of the impending Drug Supply Chain Security Act (DSCSA) regulations, ACG Inspection, a leading track and trace solutions provider for the pharmaceutical industry, has launched its new cloud-based Verification Router Service (VRS).

The new system, which forms part of the ACG's Inspections Life Sciences Cloud Service and Compliance Gateway, enables the automatic verification of saleable returns through product identifiers by routing requests and responses between stakeholders. Serialized products are assigned a unique identifier that can be used to track the product throughout its entire journey, enabling wholesalers to verify the authenticity of the products before they are resold.

Shine Vijayan, CTO at ACG, commented: "The regulations, which have now been delayed by 12 months (coming into force in November 2024), will require all trading partners in the pharmaceutical supply chain to verify the identifier of any serialized drug product before redistributing it.

"AČG's existing VeriShield solutions tackles the implementation and interoperability challenges faced at Level 1, through to Level 3. With DSCSA's regulation in place, ACG's VRS covers level 4 - helping pharmaceutical manufacturers, distributors and retailers easily track and verify the saleable returns and secure their supply chain from counterfeit and substandard products.

"ACG works closely with its customers,



helping to address their pain points - one of which being concerns around data security. Our VRS employs robust security measures to safeguard serialized product information, guaranteeing the confidentiality and integrity of sensitive data throughout the verification process."

The system also guarantees real-time verification, to enhance operational efficiency and prevent supply chain delays. Additionally, it provides scalability assurance to accommodate an expanding volume of serialized data, to ensure continued robustness and reliability. And it incorporates exception handling, empowering stakeholders to address issues promptly to help maintain supply chain integrity.

Shine Vijayan: "We are trusted experts and through our Life Sciences Cloud Service and Compliance Gateway, we can support counterfeit prevention, improving recall efficiency and data security. At all times, ensuring our clients are fully compliant with international standards and ready to meet the requirements as laid out in the impending DSCSA regulations."

www.acg-world.com

Better scalability for leading Swiss milk processor

Infor®, the industry cloud company, recently announced that Emmi, a leading dairy product manufacturer based in Lucerne, Switzerland, has implemented Infor CloudSuite Food & Beverage, powered by Amazon Web Services (AWS). The company has replaced its previous on-premises enterprise resource planning (ERP) infrastructure with the industry-specific multi-tenant platform at five locations within just 6.5 months.

Emmi is the leading manufacturer of high-quality dairy products in Switzerland. The company was founded in 1907 as a merger of several cooperatives of dairy farmers in the Lucerne region. Emmi attaches the utmost importance to the careful treatment of nature, animals and people, and also contributes to value creation in rural regions. The company manufactures its products with around 9,000 employees at more than 50 locations in 11 countries.

Infor CloudSuite Food & Beverage is designed specifically to meet the needs of the food and beverage industry and also provides special functions for dairy processing companies. Infor's public cloud strategy enables Emmi to benefit directly from proven industry best practices at its international acquisitions. Locations in Canada, United Kingdom and Benelux are working with Infor CloudSuite Food & Beverage, as well as two subsidiaries in Turlock and Sebastopol, California, in the United States. More subsidiaries are being deployed in Infor CloudSuite Food & Beverage.

Of particular benefit to Emmi are, among other things, the excellent scalability of the cloud platform — which allows new branches to be connected easily — as well as the lower costs in



operation. In addition, the multi-tenant-capable solution is always up to date due to regular real-time updates. Emmi can benefit particularly from the newest functions in the areas of finance and reconciliation.

The out-of-the-box functionalities for the dairy and cheese industry enabled a fast and efficient implementation at Emmi. These include, for example, the receipt of milk in fat, protein and dry matter components; push-pull planning for milk and dairy products; consideration of variable weight in cheese production, and seamless batch traceability.

"Infor CloudSuite Food & Beverage is a great asset to us," says Markus Blatter, project lead at Emmi. "It is not only more transparent and has a better cost structure compared to the old on-premises system, it also shows itself to be more flexible and agile due to the regular updates and the new features."

"The food industry, in particular, demands compliance with the highest standards," says Matthias Neu, Infor senior account manager. "Infor CloudSuite Food & Beverage has the flexibility and industry focus necessary to meet these standards—and we are proud that Emmi has trusted us with this task."

www.infor.com

Empowering operators, enhancing efficiency: Collaborative robots automate palletizing at Sanofi

anofi, one of the world's leading vaccine manufacturers, has implemented an OMRON palletizing solution with robotics to enhance efficiency and relieve workers from strenuous tasks. At Sanofi's Marcy-l'Étoile site, where one billion doses are produced and distributed annually to 150 countries, the focus is on continuous improvement and streamlining processes.

One area that required attention was the end of the packaging line, where 9 kg boxes needed to be manually placed on pallets. This

task involved heavy lifting and repetitive movements. To address this, Sanofi decided to install collaborative robot palletizers.

OMRON, with its 90 years of experience in machine automation and robotization, was the ideal partner for this project. The TM12 collaborative robot from OMRON was chosen for its performance, range, and payload capacity. Its compact footprint made integration seamless, especially in existing machine setups.

The collaborative robots, or cobots, have proven to be a valuable addition to the

production line. They empower line-side operators and increase their capacity. Each cobot palletizes 150,000 kg of products per month, significantly reducing the manual workload for operators.

Safety is a top priority, and the cobots integrate seamlessly into the human environment, working alongside operators without compromising safety. From the start of production, the cobots have provided significant support, allowing operators to refocus on line management roles with greater added value.















This has improved their quality of life at work and enhanced overall productivity.

OMRON's support extends beyond the Marcy-l'Étoile site, as the company operates in over 120 countries and has together with partner FlexLink, a specialist in automated production and material flow solutions, completed similar installations across the world. OMRON is committed to supporting this global project, making sure the right products and support is available everywhere Sanofi is located.

This ensures that OMRON's latest technologies can be integrated to meet the specific needs of customers in the pharmaceutical industry. The collaboration between Sanofi and OMRON aligns with OMRON's strategy of innovating in response to societal needs. The palletizing solution contributes to improving the quality of life both at Sanofi as a workplace and to Sanofi's customers.

The solution implemented at Sanofi showcases the power of collaboration and innovation in the pharmaceutical industry. By leveraging advanced automation solutions, companies can enhance efficiency, improve operator well-being, and ultimately deliver better healthcare for patients worldwide.

sanofi

For more information about Sanofi, please visit: https://www.sanofi.com/en

OMRON



www.industrial.omron.eu

OMRON Corporation is a global leader in the field of automation, based on its core technology of "Sensing & Control + Think." OMRON's business fields cover a broad spectrum, ranging from industrial automation and electronic components to social infrastructure systems, healthcare and environmental solutions. Established in 1933, OMRON has about 29,000 employees worldwide, providing products and services in some 120 countries and regions. In the field of industrial automation, OMRON supports manufacturing innovation by providing advanced automation technologies and products, as well as extensive customer support, to help to create a better society. For more information, visit OMRON's website at industrial.omron.eu.

OMRON introduces new MD-series autonomous mobile robots for medium payload range

MRON has announced the launch of the MD-650 and MD-900 medium-payload (650 kg and 900 kg) autonomous mobile robots (AMR). Designed to provide greater efficiency in material transfer with medium-duty payloads and integrated control technology, the new series increases OMRON's range of autonomous robots to meet the needs of a wide variety of part and material transport applications.

A key feature of the MD-series AMRs is its high speed and safety, with top-level transfer speed*1 in the medium payload range*2, and its unique obstacle avoidance algorithm. The system is based on implementing several thousands of mobile robots at manufacturing sites around the world, making it the result of proven experience.

The new system operates smoothly even in narrow aisles with a maximum speed of 2.2 m/sec in case of MD-650 and 1.8m/sec in MD-900, advanced navigation functions, and obstacle avoidance algorithms. In addition, the introduction of advanced battery and charging technology enables 8 hours of operation on a 30-minute charge for MD-650, and 7.5 hours in case of MD-900.

It has integrated control of all mobile robots using proprietary software. A single system can provide integrated transfer routes for up to 100 mobile robots with different payloads and control the transfer sequence in real time. The advanced linkage within a single system enables the real-time routing, even for interprocess transfers at different production speeds, to achieve efficient transfers with minimal

Miguel Garcés, Mobile Robotics Business Development Manager at OMRON Europe, said: "Manufacturing sites today focus on productivity and quality, while creating

workplaces that reduce the physical burden on workers. In automotive manufacturing for example, automating part and material transport operations is key. This includes the movement of heavy work-in-process products and finished products, as well as the frequent inter-process transfers of small lots of WIP material in high-mix, low-volume production systems. Autonomous mobile robots, with smart fleet management software, can take over these heavy and repetitive tasks".

The MD-series is designed with a high level of safety in accordance with international standard ISO3691-4*3 (enacted in 2020), the latest safety standard for driverless industrial trucks and their systems.

OMRON's existing lineup of mobile robots ranges from 60 to 1500 kg, and the MD-650 and MD-900 provide a new mid-weight range option (650 kg / 900 kg). Their unique control technology enables safe and smooth transport that can be easily implemented at production sites where people and machines work in the same area.

The unique OMRON Fleet Manager software enables integrated control of up to 100 mobile robots on a single system, eliminates the need for multiple fleet management systems, and automatically selects the optimal mobile robot for each process based on payload and availability.

ÓMRON will continue to develop safe and high-quality mobile robots and proprietary software control to help reduce the burden of material transport in diverse industries. OMRON's goal is to create automation solutions that maximize the value of people and contribute to a prosperous future for individuals, industries, and the environment.

www.industrial.omron.eu



Busting the automation myths: 7 reasons to embrace robotics



Carl Patrick
Robot Sales Manager —
Machine Tool Automation
FANUC UK

he UK is currently the world's sixth largest economy and eighth largest manufacturing nation¹. But despite being the third biggest aerospace manufacturer, and boasting a world-leading premium automotive sector, there remain concerns around labour shortages and our low productivity rate. These issues are – and always have been – linked to automation.

In order to remain competitive, industrial companies need to produce more goods, to a higher quality and in less time. Since the first industrial revolution through to the current fourth iteration, automation has been proven to boost productivity. Yet whereas the UK was once the world leader in its adoption, we now rank a lowly 25th in the world for robot density, with 98 robots per 10,000 workers. Germany, the leader in Europe, boasts 415².

There are some signs of improved take-up, however; 2,534 new robots were

installed in the UK in 2022 – 54% more than in 2015. But the productivity gap persists and reluctance to invest in automation is still a major challenge, especially among SMEs. Much of the lingering reluctance is around a long-held fear of automation, largely based on myths that are well past time for busting. Here, we counter seven of the most popular misconceptions around robotics and explain why there's never been a better time to make the move to automation...

Myth #1: Automation solves everything

Automation is not a magic bullet. If a manufacturer is looking to solve a bottleneck, then automating the process will just mean parts arriving at the bottleneck faster, exacerbating the issue. And nor will problems with quality and consistency be solved simply by installing a machine.

Instead, factory owners should seek advice from an automation expert, such as FANUC or one of our system integrator partners, about their exact needs and what they want to achieve. We can help to identify problems with existing processes and advise on how best to employ automation to deliver the required objectives: greater efficiency, shorter cycle times, more consistency and higher quality, leading to improved competitiveness and profitability.

Myth #2: Automation is too complicated

It really doesn't have to be. Businesses can start small, with simple functions such as a palletising/depalletising cell, and progress from there. Our automation experts can help identify where manufacturers can get a good return, quickly.

When it comes to operation, this doesn't have to be complicated, either. FANUC's user-friendly software tools – such as FANUC Ladder III, FANUC PICTURE and C-Executor – feature command systems with drop-down menus and choice paths that look comfortingly familiar, making them extremely user-friendly.

Myth #3: Automation will replace valued employees

The right automation solution will replace tasks, not people. The best way to approach a robotics project is to look at what is happening already and identify ways to do it better. Automating processes that are dull, dirty or dangerous helps reduce staff injuries and overcome quality issues born of boredom, freeing up employees to take on more value-added tasks. This can improve staff retention rates, boosting morale and positively impacting productivity.

Automation can also help to capture experienced employees' expertise. A



Automating processes that are dull, dirty or dangerous helps reduce staff injuries and overcome quality issues born of boredom, freeing up employees to take on more value-added tasks

successful project will involve talking at length to the people who carry out the task and discussing with them how to do it better. By actively engaging shop floor workers, their expertise can be retained. This last point is particularly pertinent, given that almost one fifth of employees in the UK manufacturing industry is aged 55 or over, with 20% of the workforce set to retire within the next decade³.

Myth #4: Why fix something that isn't broken? Our current equipment has been working fine for decades...

Great! There's no reason why embracing automation should require any company to ditch their current equipment, especially if it is working well. FANUC robots are regularly integrated into existing lines, complementing older machinery to enhance working practices and increase efficiency and boost productivity. What's more, these modern alternatives are designed to last for decades.

Not only are today's automation solutions fast, consistent, flexible and adaptable, but they are also extremely reliable. Older machinery can require more maintenance to keep it running, meaning more time offline and resulting in unproductive downtime and growing repair costs. By contrast, advanced condition monitoring has almost completely eliminated unforeseen breakdowns and unnecessary part replacements in modern robotics, enabling longer service intervals and increased uptime. FANUC's robots are known for their outstanding reliability with an eight-year mean time between failures, while our CRX collaborative robot (cobot) series boasts eightyear zero maintenance. Failure to update and invest in new technology erodes competitiveness and ultimately risks putting a company out of business.

Myth #5: We lack the in-house skills to programme a robot

The amount of knowledge and expertise that businesses already have on site often comes as a surprise. If employees are used to setting up CNC equipment, they will find it much easier to set up a robot. FANUC software does not require in-depth knowledge of coding. Simple drop down 'nesting' menus



FANUC can help identify problems with existing processes and advise on how best to employ automation to deliver the required objectives

automation systems far simpler and more adaptable than previous iterations, and easily capable of being programmed by in-house staff.

In addition, we offer training, either at our UK headquarters in Coventry or at customers' premises, as well as a dedicated after-sales support team for any queries that may arise throughout the robot's lifespan.

Myth #6: Any automation system we install will quickly become obsolete

Robot technology and tasks, such as pick, turn and place, have been around for decades. What has changed is control software and the tools that can be attached to them. Robotic tools will last at least as long as ordinary tools but deliver far more value throughout their lifespan.

Regarding operating software, this is supported at FANUC with ongoing, automatic upgrades, including to cybersecurity processes. Our lifetime support promise ensures that we will continue to upgrade, support and repair our products for as long as the customer wishes to use them.

expensive

The key here is only to buy equipment appropriate to need and to focus on the total cost of ownership, rather than the initial purchase price. By speaking with an experienced automation provider, manufacturers can ensure that their system is not over-specified, and that it will deliver a good return on investment over the planned lifespan of the installation.

The UK government is encouraging the purchase of capital equipment with annual investment allowances that enable machinery costing up to £1,000,000 to be fully offset against profits in a single year. And the rise in corporation tax means that tax reliefs are now even more valuable. In addition, banks and finance companies offer a range of financing packages, including leasing, that can spread costs by offsetting them against taxable revenues.

By working with a reputable, experienced automation expert, manufacturers of all sizes can reap the benefits of robotics and ensure their business continues to thrive for years to come. For more information on how FANUC's range of robot and cobot solutions can transform your manufacturing enterprise, visit www.fanuc.eu/uk/en

Reference:

- https://www.themanufacturer.com/articles/uk-manufacturing-sector-climbs-to-eighth-in-world-rankings-make-uk-analysis/
 IFR report 2023
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FANUC software uses simple drop down 'nesting' menus with standard procedures and a range of Yes/No choices making today's advanced automation systems far simpler and more adaptable than previous iterations

FANUC

www.fanuc.eu/uk/en

UPM Specialty Papers now offers packaging papers certified for home composting

PM Specialty Papers now offers a wide range of packaging papers that are designed for composting. Six UPM packaging papers are now certified as home compostable, according to the NFT51-800:2015 standard. These papers are also certified as industrially compostable (EN13432:2000):

- \bullet Barrier papers: UPM Prego $\dot{}^{\text{TM}},$ UPM Asendo $^{\text{TM}}$
- Coated one side (C1S) papers: UPM FlexPack™, UPM UniquePack™, UPM UniquePack™ Strong
- \bullet Specialty kraft papers: UPM Solide $^{\rm TM}$ Lucent

UPM's fibre-based and recyclable packaging materials empower brand owners and converters to develop home compostable packaging solutions.

"Recycling should always be the first option to consider when possible. However, compostability is a good option when recycling of packaging papers is not possible due to food residues, for example. Compostability can also play a role when recycling infrastructure is limited," says Susanna Hyrkäs, Senior Manager, Sustainability, UPM Specialty Papers.

Compostability is one form of recycling, that is degrading compostable materials into



UPM has set ambitious responsibility targets for 2030, such as promoting a circular economy and sustainable product design. Recyclability and compostability are part of the solution by ensuring a sustainable product end of

www.upm.com

fertile soil suitable for plant growth. The differences between home composting and industrial composting are found in the process temperature and the time it takes before you can expect disintegration and biodegradation to happen. Given the right conditions (20°C - 30°C), home compostable materials are designed to biodegrade within 12 months and disintegrate within 6 months into non-ecotoxic compost.

ondi, a leader in packaging and paper, has ondi, a leader III paunaging and page / introduced its Advantage StretchWrap, a paper wrapping solution that replaces plastic stretch film and enables a more efficient logistics process, to Sentrex, a European manufacturer of paper bags.

for pallet wrapping

Sustainability meets

efficiency: Sentrex

chooses Mondi's

Advantage

StretchWrap

Advantage StretchWrap is a fully recyclable kraft paper that is made from responsibly sourced materials. Mondi developed it to stretch and resist punctures, making it ideal for replacing the plastic stretch film that has traditionally been used for pallet wrapping and transportation. Advantage StretchWrap has 62% lower greenhouse gas (GHG) emissions when compared to virgin plastic stretch film, and 49% lower GHG emissions when compared to plastic film made with 50% recycled content, according to a peerreviewed independent life cycle assessment.*

By switching to Mondi's kraft paper solution and using EW Technology's fully automated machinery, Sentrex was able to increase efficiency in the wrapping process: The production of the paper bags requires a drying process to remove moisture from the bags before they can be wrapped in plastic stretch film, to avoid condensation within the packaging. Mondi's Advantage StretchWrap is breathable and can therefore be used to wrap and pack products immediately after paper bag production within one in-line process.

The larger dimensions of the Advantage StretchWrap reel mean that a new reel is only needed every 400-600 pallets compared to every 40-60 pallets for plastic wrapping. The paper solution can be used to wrap different shapes and sizes of pallets and cover the gap between the pallet and the product, providing good stability and safety during transportation.

Michał Nogielski, Technical Director at Sentrex says: "We are fully committed to using Mondi's paper wrapping solution at scale, as part of our ongoing commitment to seeking out and using the most sustainable business practices throughout our operation. The teamwork between ourselves, Mondi and EW Technology meant that the whole adaptation process was swift, and the new wrapping machines and reels are running so successfully that we are delighted to recommend this to our own customers, for instance for pallet wrapping dry food products such as flour and sugar."

Jan Murzyn, Business Development Manager Speciality Kraft & Functional Paper at Mondi, says: "This change means that Sentrex can wrap their products in more sustainable packaging, work towards a more circular system and make a positive contribution to the environment. Additionally, the packaging sequence is more efficient due to the possibility of wrapping the pallet immediately after production, without the need for seasoning the paper bags. The collaboration with Sentrex is as living proof that our Advantage StretchWrap solution is not limited to business-to-consumer applications but brings value to leading industry players in the businessto-business sector."

Sappi introduces "Seal Light Gloss" and "Guard MH"

Dackaging paper manufacturer Sappi is market leader in the field of functional paper packaging. For more than 10 years, the company has been producing functional papers with integrated barriers against oxygen, grease, water vapour, mineral oil and aromas, as well as heat-sealing properties. Sappi is now further expanding its extensive portfolio with the "Seal Light Gloss" and "Guard MH" functional papers to offer its customers solutions that are even more customised to their specific product requirements. The innovation leader is making a decisive contribution to sustainability with these two new flexible packaging papers. The packaging solutions made from renewable raw materials represent recyclable alternatives to fossil-based packaging and help minimise the use of plastic in the long term.

- Sappi "Seal Light Gloss" with a glossy surface for outstanding printing results
- "Guard MH" barrier paper for many food and non-food applications
- Both papers are being produced on the state-ofthe-art barrier coating line at the Alfeld mill in

"Seal Light Gloss" - a sealable paper without barriers

The one side coated "Seal Light Gloss" features excellent heat sealability thanks to a coating on the reverse side. The paper, which is available in grammages of 54g/m² and 74 g/m², does not have any barrier properties and can be easily recycled in the paper waste stream. Over the long term, it is intended to help reduce the use of plastics in secondary packaging (e.g. for confectionery) or in primary packaging for products not requiring a barrier.

Developed for flexible packaging in the

food and non-food sectors, it stands out with its natural look and pleasant feel. Thanks to its glossy surface, outstanding printing results can be achieved with "Seal Light Gloss", which ensures a high-quality appearance with which manufacturers and brand owners can make an impression at the point of sale.

"Guard MH" barrier paper for many food and non-food applications

With its "Guard MH" barrier paper, Sappi has developed yet another sustainable packaging solution for a wide range of different applications in the food and non-food markets, which can be disposed of and recycled in the paper waste stream. The paper is available in Natural, Silk and Gloss variants - and all three boast a high value impression. Depending on these different surfaces of the top side - from natural matt to high-end glossy - brand owners could support perfectly the brand image of their product at the point of sale. Both the uncoated Natural "Guard MH" variant and the one side coated Silk and Gloss variants have an integrated barrier against water vapour and mineral oil as well as grease (according to test result KIT 12). While Natural is available in grammages of 60 g/m² 70 g/m² and 90 g/m², the Silk and Gloss variants are available in grammages of 75 g/m² 85 g/m² and 100 g/m².

René Köhler, Director Paper & Packaging Solutions at Sappi Europe: "The topic of sustainability is a hugely important priority for us as a paper manufacturer. With our two new functional papers, we are supporting our customers in their efforts to use paper-based, recyclable alternatives to non-recyclable packaging. In addition to Seal Light Gloss and Guard MH, other papers for special applications are currently being developed that will benefit both consu

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SCREEN launches upgraded and more sustainable thermal computer to plate lineup with PlateRite HD 8900N II series

CREEN, a leading Japanese manufacturer of high-tech printing equipment, will soon launch its new PlateRite HD 8900N II series of 8-page thermal Computer to Plate (CtP) systems. The lineup includes the latest models of SCREEN GA's PlateRite HD 8900N series range that delivers throughput of 70 plates per hour.

SCREEN plans to transition from its PlateRite HD 8900N series, originally launched in May 2016, to its new PlateRite HD 8900N II replacement lineup, due for release in the near future. Like the current series, the new range will include E, S and Z models, with each targeting specific needs.

The high-end Z model, featuring a 1,024 channel imaging head, is capable of outputting 70 plates per hour, while the E and S models, each with 512 channels, can process 36 and 48 plates per hour, respectively. The imaging head of each model uses GLVTM optical technology to produce more uniform distribution of illumination, ensuring higher quality. Its high-precision auto-focus mechanism also enables output of SCREEN's proprietary Spekta 2 screening and Randot X FM screening.

All models are able to handle a wide variety of plate sizes, ranging from 304 x 305 mm up to 1,165 x 950 mm. As with the current series, each model can also be combined with both MA-L8900 and SA-L8900 autoloaders¹, enabling the plate supply to be fully automated. In addition, when they are linked with AT-M8001N units² on the discharge side, plates can now be output in up to five different directions. This extended control further improves both automation and efficiency.

The new series has also been specifically designed to be more environmentally friendly. With the Z model, for example, power consumption during operation has been reduced by up to 43%³ per plate. It is also equipped with a new energy saving mode that can cut power use by 90%³ while the system is idle.

The launch of the PlateRite 8900N series is SCREEN's response to industry trends. In recent years, the commercial printing market has undergone a major shift toward diverse, small lot jobs with short turnaround times, opening up new opportunities to utilise digital presses. At the same time, the ever-improving performance of the latest offset presses has significantly reduced the time required for job changes and colour adjustments on these systems.

This has led to offset presses being used in many different scenarios, thanks to their excellent print quality, paper compatibility, and the number of copies they can print, among other factors. Their use is expected to remain particularly strong in the package printing segment.

References

- 1 The MA-L8900 is able to set up to 600 plates, while the SA-L8900 has a capacity of 120 plates. Both are optional units.
- 2 Third-party autoloaders can now also be connected at the same time
- 3 These reductions are based on a comparison with a PlateRite 8800N-ZX when an MA-L unit and built-in bridge are connected.

EkoCure® dual cure ink puts Flint Group and All4Labels on shared path to success

int Group and All4Labels have collaborated to fast-track innovation in flexo printing through eco-conscious inks and processes.

Hamburg-headquartered All4Labels is already reaping the benefits of more energy-efficient curing after switching to Flint Group's EkoCure® Dual Cure ink technology.

Flint Group is supporting the leading label manufacturer to improve its production processes during the transition to UV LED printing, with ongoing technical assistance and specialised

training enabling All4Labels to fully leverage the advantages of LED ink systems. The collaboration has already seen All4Labels successfully reduce the energy needed to run its curing stations, as well as reduce emissions and waste.

All4Labels is also trialing Flint Group's Evolution product range, which includes a deinking primer and caustic-resistant overprint varnish to see how these solutions can improve the recyclability of PET bottles, shrink sleeves, and pressure-sensitive labels.

Resource efficiency in package printing – SÜDPACK expands SPQ to include rotogravure printing

t reduces ink and solvent consumption while simultaneously optimizing print quality – with its innovative SPQ technology for flexo printing, SÜDPACK already offers potential carbon savings for package printing. The manufacturer has expanded the range of use for the innovative printing process to also include rotogravure printing and now offers an alternative that is not only highly efficient, but also conserves resources.

Using the technology for rotogravure printing requires the complete standardization of machine and process parameters as well as smart color management. And just like for flexo printing, all of the designs are mapped automatically in the pre-press stage using a reduced color palette.

Thanks to the PUR-based (polyurethane) color system, the ink is also suitable for pasteurization and sterilization. This opens up a wide variety of options for applications that involve heating, for example for packaging ready meals, pet food or baby food. The technology is also ideal for finishing flexible films for high-quality, fast-moving consumer goods, such as coffee, tea or confectionery, because it can also incorporate metallic colors, like gold or silver, as well as coatings for texture and other finishes. The process is also suitable for imprinting Digimarc digital water-marks

Primary focus - sustainability

Using SPQ can significantly reduce the carbon footprint of package printing. This is due in particular to the reduction of the standard color palette from ten to just seven colors, which decreases both ink and solvent consumption. "With SPQ, we significantly reduce ink consumption, ink waste and the number of color changes. Even though the color palette is reduced to seven colors, it is still possible to realize virtually the

entire color spectrum as well as additional metallic colors – all while maintaining superior print quality similar that of a photo as well as excellent color brilliance," highlighted Enrico Riesel, Senior Site Director at SÜDPACK Bioggio. In-house calculations performed by SÜDPACK have shown that limiting the palette to seven colors leads to a savings of approximately 36.5% in a typical standard process for a print order for 15 thousand running meters.

Additional factors in terms of sustainability include lower energy consumption and the reduction of film waste that would have usually been produced during the changeover of printing machines for the next print order.

SÜDPACK customers benefit most particularly from the reduced amount of effort required in the pre-press stage. Using a strictly defined color space eliminates not only constant color adjustments, but also complex and costly on-site print approval. An additional advantage is that different print designs can be combined in one print order.

Impressive print quality and color brilliance

Last but not least, the new technology stands out due to its high register accuracy as well as its outstanding color consistency and color brilliance. This is thanks to consistent, smart color management along the process chain, which, as Enrico Riesel confirmed, SÜDPACK "completely reinterpreted and reconceptualized from the very beginning of the project." Realistically speaking, the standardized color palette can create approximately 95% of all Pantone colors – and does so with stable, reproducible color conversion. As a result, SPQ completely eliminates all of the adjustments that had been necessary for conventional printing processes.

Xaar 2002 printhead powers Haotian's latest label embellishment machine launch

eading printhead technology provider Xaar and Chinese packaging and label printing machine specialist, Guangzhou Haotian Machinery Manufacturing Co. Ltd (Haotian), announced their strategic collaboration at Labelexpo Asia 2023, with the launch of the HTP-220/330 digital label embellishment machine.

Mr. Zeng Baixian, General Manager of Haotian, said, "We're delighted to partner with Xaar. The 2002 printhead provides the reliable performance and versatility our customers need to both boost their production efficiency and print quality. We believe this collaboration will contribute significantly to the growth of the label printing industry."

Samuel Tam, General Manager of Xaar Asia Pacific, added, "Xaar is dedicated to advancing label printing through developing innovative technologies. The collaboration with Haotian is a step forward in our commitment to technological progress and we look forward to advancing label printing with our unique printhead technologies, helping us achieve mutual success."

UK and EU food producers have just two years to comply with FSMA 204 Final Rule

ood companies in the UK and EU that export products to the US, which are on the food traceability list (FTL), have until January 20, 2026 to comply with the country's new regulations on traceability. An important development is the Food Safety Modernisation Act (FSMA) 204 Final Rule. This requires traceability data association for foods, including cheeses, fresh produce, and fish/seafood, that are listed on the FTL.

The Final Rule applies to not just domestic farms, food manufacturers, processors, packagers and restaurants but also to companies in the UK and EU that are selling or distributing food intended for consumption in the United States

To comply with the regulation, food supply chain companies must maintain records with Key Data Elements (KDEs) linked to Critical Tracking Events (CTEs). It is QR codes that are recommended for traceability because they link specific product or batch information to update KDEs and CTEs across the value chain. If there's a contamination recall, the QR code landing page can be updated with critical information to prevent consumers from buying potentially dangerous products. GS1 standards provide guidance on meeting Final Rule requirements.



"It might still be two years away but I would urge UK and EU exporters to get ready to meet these new US food traceability regulations," says Robert Vines, Country Manager UK, Ireland and Nordics for TSC Printronix Auto ID. "As a priority, facilities needing to comply by January 20, 2026 should implement preventive controls,

traceability systems, and recall plans. They also need to think about suitable QR code printers to uphold these practices. Our new TH DH series of desktop printers offer real versatility, like being able to print serialised QR codes for fresh fruit," says Robert

www.tscprinters.com

Domino's new print and apply labellers automate traceability coding for enhanced supply chain visibility

with the global logistics labels market poised for significant growth in the coming years, Domino Printing Sciences (Domino) has launched its new Mx-Series print and apply labelling machines. The growing need for traceability within global supply chains is fuelling demand for reliable product labelling solutions that promote quick and accurate data sharing. Recognising this need, Domino developed the Mx-Series for fully integrated, automated, GS1-compliant coding of products and pallets.

Feedback from extended customer testing, which took place at sites across Sweden, Germany, and the Netherlands, highlighted two key benefits that specifically resonated with Domino's test customers: the printer's high-speed variable data printing capabilities, up to ten times faster than previous generation print and apply labellers, and enhanced connectivity options to facilitate data sharing.

Designed and manufactured to European Standards, Domino's Mx-Series printers offer market-leading build quality and reliability, alongside variable data capabilities, and Industry-4.0 connectivity, for data collection and sharing across supply chains. Advanced connectivity and configuration options include machine vision for automated code inspection and validation; and coding automation for enhanced data sharing, including integration into factory MES and ERP systems.

"Reliable, consistent, and accurate product labelling is crucial for the global logistics sector," says Jan Lindgren, Customer Operations and Site Director at Domino. "Our Industry-4.0 ready Mx-Series print and apply labellers have been created in recognition of this need providing fully-variable data coding, with labels printed to exact customer specifications, and

connectivity options to enable seamless sharing with supply chain partners."

As all production lines are unique, printers in the Mx-Series range have been developed to suit a range of different production environments, and with a smaller overall footprint compared with previous print and apply labellers for easy integration. Printers are available as both left- and right-hand options, with options for 4" and 6" printheads, and both tamp and swing applicators, with variants providing different running modes to suit different production applications. The company is expected to announce more customisable features, including additional

applicator types and further connectivity options, in the coming months.

"The Mx-Series platform builds on our global reputation for excellence – with the quality standards our customers have come to expect from Domino – while delivering a whole new range of capabilities to satisfy new market demands," says Sharmil Ghouse, Global Head of TTO and P&A at Domino. "We are very pleased to be able to offer this state-of-the-art solution to our existing customers, and any business looking to embrace automation, integration, and increased trace-ability."

www.domino-printing.com



Highest environmental standard for packaging achieved

wo HERMA self-adhesive label materials that can be composted at home and in the garden have now also passed the critical earthworm toxicity test in accordance with the Australian standard AS 5810 - an outstanding performance. This is because when it comes to the composting of packaging materials at home and in the garden, this standard is ostensibly the gold standard. It is considered the highest environmental standard for packaging worldwide due to its strict requirements. "This means that HERMA offers probably the only self-adhesive materials at present that comply with this standard," says Dr. Stefan Kissling, Head of Development of Adhesives and Special Coatings for HERMA's Self-Adhesive Materials Division. The certification was obtained through the DIN CERTCO institute, a subsidiary of TÜV Rheinland. The basis for this is the new adhesive 62Q, which HERMA launched at the start of the year. The certification applies in conjunction with the two label materials HERMAextracoat (grade 242) and HERMAtherm Bio (grade 909). Soil toxicity is excluded with the earthworm test in accordance with the Australian standard. Compost worms (lat. Eisenia fetida), one of the most common types of earthworms in Europe, and white worms (Enchytraeus albidus), often used as live food, are used as "testers". If after 14 days there was a difference of more than 10 percent in the morbidity or average weight of the surviving worms between the sample compost and the pure compost, this criterion was not met.

Other elements of the Australian standard comply with the international standard NF T51-800:2015. This means that specific limits for volatile substances, heavy metals and fluorine must not be exceeded. The complete biodegrad-



ability, compostability and ecotoxicity was also checked. The two HERMA self-adhesive materials already met these requirements previously and were therefore already able to bear the label "DIN geprüft – gartenkompostierbar" ("DIN tested – compostable in the garden") – at least outside of Australia and New Zealand. Now the certification also applies for these two countries. "However, the additional certification also confirms once again the high composting quality of the adhesive 62Q and provides additional assurance for label users, who attach particular importance to sustainable packaging materials," stresses Dr. Stefan Kissling from HERMA.

Markem-Imaje innovation triggers breakthrough in portable coding and marking

arkem-Imaje has launched a Marking Trigger Device, a new product that enhances the flexibility of its equipment for direct coding on a wide range of surfaces and sizes, including objects as large as aircraft wings.

While some applications can be printed directly on a conveyor, some products or objects are more complex to code due to their size, shape or nature, particularly in industries such as aviation and automotive.

The Marking Trigger Device, which was invented by a Markem-Imaje product expert as part of an internal innovation competition, enables direct coding onto an object, regardless of its position or the environmental conditions. The Marking Trigger Device has a potentially large potential for use on many large and unwieldly objects large tubes and pipes and construction materials. Another major possible use case scenario is for reworking existing materials that are already installed far from a production line or workshop, without the need to dismantle, move and reassemble them. Additionally, it can be quickly and easily installed on the printhead or handheld by the operator, and each code is automatically triggered onto the object.

Markem-Imaje, the global provider of end-to-end supply chain solutions and industrial marking and coding systems, works directly with customers to innovate according to market needs

and challenges

Guillaume Montagnat, Product Marketing Manager at Markem-Imaje said: "The Marking Trigger device empowers customers to code what they need, where they need it, and bolsters the flexibility of the Markem-Imaje marking and coding solutions. With this device, customers in a broad range of industries can now easily and cost-effectively print on objects that were previously difficult to reach."

The Marking Trigger Device has been meticulously engineered and qualified using modern methods. It is designed to provide enhanced flexibility for difficult-to-reach objects, a productive rework solution, and an intuitive and cost-effective coding solution. The device is engineered according to the Intelli'Design principle, with handheld code-triggering properties that address hard-to-reach applications or conveyor-less production environments.

The device is easy and quick to install, with captive screws that can be set up in a few minutes. It has a plug-and-play connection to the printer, and no power supply is needed. Its preciseness is guaranteed thanks to its fixed head/distance brackets and an embedded encoder. It includes a support hook for easy maintenance and is available for 9330, 9450, and 97XX printhead series.

www.markem-imaje.com

Xaar Irix printhead delivers for Codpad's new coding and marking machines

eading printhead and inkjet technologies manufacturer Xaar, has announced a strategic partnership with Codpad, an inkjet coding and marking machine specialist based in Guangdong, China

The collaboration was announced at 2023 SWOP Packaging World Expo in Shanghai, where Codpad showcased its latest high-resolution UV inkjet coding machine, incorporating the Xaar Irix printhead.

The new machine is designed for a wide range of coding applications including printing on metal, plastic, cartons, wood, aluminium foil, and films and supports different subdrop volumes for extra versatility by using both the Xaar Irix 40 picolitre and 80 picolitre variants. Offering simple and effective installation and maintenance, the machine's built-in recirculation and ink supply temperature control, enable consistent performance in dynamic environments. In addition, the machine offers multi-level UV curing for superior adhesion on products with more challenging print requirements.

The print quality, user-friendliness, and reliability of the Xaar Irix printhead made it the ideal choice for Codpad. Individually lasered nozzles and Xaar's AcuDrp Technology ensure uniform print quality even at long print distances. In addition, its highly accurate drop placement and enhanced factory calibration provides consistent printing even during extended print runs. These advantages, together with its compact design, makes the Xaar Irix a cost-effective, highly reliable printhead for coding and marking applications.

As a subsidiary of the Docod Precision Group, Codpad boasts over two decades of expertise in the coding and marking industry. Specialising in providing comprehensive solutions for food, electronics, pharmaceuticals, plastics, construction materials and hardware, Codpad is widely recognised for its commitment to excellence.

The launch of its latest machine, with Xaar's printhead technology, perfectly positions Codpad to become a leading provider of robust printers in the industrial coding and marking sector.

Mr. Xie Ruzhou, General Manager of Codpad, expressed enthusiasm about the collaboration, stating, "We are happy to partner with Xaar and this partnership enables us to open new possibilities in the market.

"The integration of the Xaar Irix into our high-resolution UV inkjet coding machines will elevate our product performance and market competitiveness and we are very confident that our latest product launch will offer our customers the superior coding solutions required to meet their evolving needs."

Samuel Tam, General Manager of Xaar Asia, added, "We are extremely excited about our collaboration with Codpad. The Xaar Irix is a leading printhead in the coding and marking industry and delivers exceptional print performance and reliability for our customers. We look forward to working together to jointly explore new market opportunities and provide end-users with the latest in high-quality coding and marking solutions."

Orkla boosts ketchup production with Sidel's ultra-clean ambient Combi technology

y moving to a new PET packaging design and in-house blowing with Sidel's integrated blow-fill-cap solution, Orkla has boosted its ketchup production's safety and capacity to meet increased consumer demands for convenient, sustainable, and healthier products.

Orkla Foods, part of the wider Nordic Orkla Group, is a market leader in ketchup, sauces, and dressings, selling branded products in Central Europe, Baltics and Nordics. The group's main ketchup facility in Fågelmara, in the southeast of Sweden, produces thirty million

ketchup bottles a year with twenty different

recipes.

Within the sauces and dressings category, consumer demand has increased for healthier ketchup with less sugar, salt, preservatives and made using responsibly sourced ingredients. Similarly, there is a need for convenient and appealing primary packaging to deliver a great consumer experience while also differentiating brands. Additionally, as consumers are increasingly concerned by environmental issues, recyclable packaging is also essential for delivering sales and ultimately, gaining market share.

With the ambition to meet these market goals, Orkla worked with Sidel to adapt its current production model to increase its production capacity and cost efficiency while reducing its environmental impact.

It's all in the bottle

To meet consumer requirements, Orkla redesigned its packaging range from cylindrical PP (polypropylene) bottles to modern flat rectangular PET designs. The new easy-to-use 'squeezable' shapes allow users to completely empty the bottle and ensure no unnecessary

food wastage.

Additionally, the new PET bottles are up to 30% lighter than the previous PP design. Orkla has also increased its sustainability credentials as bottles are composed of at least 25% of rPET (recycled PET) while the ketchup manufacturer is aiming to utilise 50% in future.

Previously, bottles were blown externally and shipped from a UK supplier but now preforms are sourced locally in Sweden resulting in a ninety percent reduction in CO₂ emissions caused by transportation. The new shaped bottles are now blown in-house for a greater control of bottle quality and stock management. Orkla uses Sidel's preferential heating technology which optimises PET distribution while allowing the asymmetrical stretching needed to blow flat and shaped containers.

"Switching to a more modern and sustainable PET bottle to revitalise our ketchup brands has been positively received by consumers, resulting in an increase in sales and market shares," said Per Samuelsson, Project and Process Developer of Orkla Foods' Fågelmara Plant. "Reducing our sourcing costs has also benefitted our profitability."

A switch to ultra-clean ambient filling Combi

Orkla wished to remove additives from its product lines to answer the desire for healthier products.

"When we considered changing our recipe and filling temperature, we were concerned that this would change the product taste and quality which our customers have come to love and expect from Orkla. By working with Sidel, we were able to ensure that we kept our original taste profile while delivering a product that was healthier and more

eco-friendly," added Per Samuelsson.

With the replacement of outdated stand-alone filling technology, the ketchup manufacturer deliberately moved away from a hot filling process which uses temperatures above 85°C to ensure product stability and hygienic production but that also consumes vast amounts of energy.

Thanks to the use of an aseptic buffer tank, the new set-up not only allows for ambient filling with less preservatives in the recipe but also reduces the overall energy consumption of the process and packaging line. Additionally, no water is used as the need for container cooling is not required anymore.

As the product batch is now safely stored in the aseptic tank during production and bottle changeover on the packaging line, this has led to two key benefits. Firstly, a reduction in waste and secondly, changeovers performed by Orkla's operators are seamless with less pressure on the time it takes to complete the task.

Sidel has provided this ultra-clean ambient filling technology within an integrated Combi solution combining the blowing and capping functionalities. With the PredisTM preform sterilisation system embedded within the blower and the cap dry decontamination within the capper, Orkla's quality and safety requirements are also fully met. The PredisTM blow-fill-cap Combi integrates all functions and transfers (preforms, bottles and caps) in a unique safe enclosure avoiding any contamination risk.

This global solution has allowed a production capacity increase, from six tons per hour to nine preservative-free tons per hour. With production volumes being achieved in less time, Orkla benefited from the ability to introduce new formats and recipes onto its line.

"Sidel was able to draw upon its longstanding experience within the sauce and dressings industry to support Orkla reaching its overarching goals of health, modernity and productivity," said Sharma Abhinav, Account Manager, Food Home and Personal Care for UK, Ireland and Scandinavia.

Find out more about Sidel's solutions for sauces and dressings and how you can access this kind of support for your business on the Sidel website





www.sidel.com

Hot fill containers and the key to production line success

ot fill food container sealing presents a range of challenges to producers. Here Victor Sachs, Technical Services Manager at Selig Group will discuss the challenges associated with hot fill container sealing and how these can be overcome with the right choice of liner seal.

Although hot fill technology has existed since the 1980's, it is again surging in popularity, due to the increase in on-the-go and ready-to-consume products. A cost-effective solution, its reach is expanding thanks to demand for food and drink safety, extended shelf-life, and preservatives reduction. From beverages and sauces to soups and baby foods, it is predicted to have a CAGR of 2.58% between 2019 and 2029.

Hot fill technology is cost-effective and helps deliver uniform product quality that has high nutrient retention. Consistency is achieved by heating the food or drink product to 185-205°F (85-96°C). As a result, harmful microorganisms are inactivated, and a form of sterilisation occurs that enables spoilage prevention. Today's containers withstand high temperatures during filling, without any integrity issues, and improvements in filling and capping solutions have led to even faster, accurate filling.

Sealing is key to hot fill success

However, sealing plays a key role in the hot fill process, and cap and liner choice can make or break the process. Obtaining an effective seal is important to avoid leakage, contamination and reduced shelf-life but this can be challenging to achieve, due to the high temperatures involved in the hot-fill process. Common problems that we are called to advise on include which liner materials to choose, material compatibility queries, and thermal expansion and contraction issues.

Traditionally, hot fill plastic containers for induction sealing are made mainly of PP and heat-set. The liner chosen will depend on the type of food or beverage being packed, the container and production process used, and the desired shelf life. Material compatibility is also key to the integrity of the final seal. That is because the way the container and liner interact during the sealing process is of paramount importance. If the wrong material is chosen it can deform or lose its integrity at such high temperatures, impacting the reliability of the final seal. Also, the thermal cycle of expansion and contraction, the product's acidity and other characteristics of the product being heated can further influence which liner will suit which application.

Induction heat sealing

Induction heat sealing has been a popular way to seal hot fill plastic containers for many years. That is because during the induction sealing process, the liner's foil layer is electromagnetically heated, bonding to the container when cooled, creating a hermetic seal. This cost-effective sealing technique is also popular with producers, as it requires little, if any, modification to a producer's existing packaging line.

To ensure success, it is important to choose a liner that has been designed to endure



the rigours of hot fill sealing. For example, to give more flexibility to food and beverage producers, Selig's Uni-Gard™ and FoilSeal™ were developed for hot fill applications. Available in peelable or welded formats, these one-piece induction seals have been designed for producers looking to seal plastic PP, PP-EVOH and PET jars with hot fill contents. As well as delivering excellent barrier properties, it can run at high operating speeds and wide operating parameters, enabling it to bring flexible sealing to most hot fill production lines.

Achieving a consistent hot fill seal every time

Once the correct liner has been chosen, the key to a successful induction heat seal is creating consistency, through managing 'time', 'pressure' and 'heat'.

Time – Consistency of line speed under the induction heat seal unit is of real importance in the sealing process. Variability means variable energy delivery to the liner and the result is variable seal quality. Measuring the line speed in metres per minute (m/min) using a tachometer, rather than in bottles per hour, will ensure an accurate reading is taken of how long the foil of the liner spends under the induction heat head and therefore the amount of energy applied to the liner can be managed.

Pressure - Too low and the container may leak or any plastic components within the liner melt, too high and the thread of a container and cap can be stripped. Consistent application (or on-torque) pressure needs to be delivered by all the capping heads in the process. To get the pressure right, as a rule of thumb, take the liner radius (in millimetres), convert the radius into inch/pounds and this is the pressure to apply. For example, if its radius is 15mm, therefore, the on-torque pressure is 15 inch/pounds.

Heat - Set the right heat seal window. To find the maximum point of the sealing

window, set the unit to the mid-point power setting and run three filled containers under it. Then run a further three filled containers with the power increasing in increments of 3-5% (noting the point at which they fail according to a pre-determined test method). To set the lower limit this process is reversed and the sets of three filled containers are run through the system again at power increments of 3-5%.

Choosing the cap and liner for hot fill applications can make or break the process. Thanks to the latest in induction heat sealing technology, the process has never been so fast, cost-effective or reliable.



www.seliggroup.com

About Selig Group

Selig Group is a leading global provider of innovative packaging solutions. The company is the leading global supplier of innovative, technically differentiated container sealing and venting solutions for food, beverage, wine, pharmaceutical, healthcare, personal care and industrial applications. Selig also manufactures a range of technical laminates and flexible packaging products in Europe for these applications. The company's products are designed to serve customers' needs for ensuring freshness, providing packaging integrity, extending shelf life, providing tamper evidence, expanding in e-commerce, and protecting brand identity. Selig is headquartered in Schaumburg, Illinois, USA with manufacturing and distribution locations worldwide

Kraft Heinz introduces first 100% recyclable ketchup cap with help from Berry Global

The launch by Kraft Heinz Company of its first 100% recyclable cap for its famous squeezy ketchup bottle demonstrates the collaborative achievement utilizing the innovative design and manufacturing capabilities of Berry Global in supporting retail brands with a move towards more sustainable packaging solutions.

Historically, Heinz sauce bottles used a flexible silicone valve to deliver a consistent portion of sauce per squeeze, but this was often challenging to recycle. Together with Berry Global Heinz has now switched to a mono-material cap, manufactured in PP. This means it meets requirements for recyclability.

The project has been eight years, 45 prototypes and more than 185,000 hours in development, to ensure the optimum balance between functionality and sustainability. Berry was involved through

the design and production process, from concept to the creation of the series tools in Berry's in-house tool shop, as well as the development of the assembly equipment for industrial production.

Heinz followed a rigorous testing procedure to make sure the cap met the highest quality standards. An extended consumer survey confirmed that the new concept would be well received by the public, as it dispenses the same perfect amount of sauce every time without



affecting the squeezability.

In fact, the study found that the new cap design helps consumers squeeze more ketchup out of the bottle when it is nearly empty – a testament to Berry's ability to look holistically at the overall solution to improve the cap's performance alongside its recyclability.

The concept won Rigid Pack of the Year for Kraft Heinz at the 2023 UK Packaging Awards.

Matthias Hammersen, Sales Director –

Food Market at Berry Global, commented: "Heinz set us the kind of challenge that suits us and our development departments best: to reconstruct the design of the cap to make it 100% recyclable, without affecting the performance that millions of consumers know and love. We're delighted that the finished result exceeds our initial expectations and actually improves the consumer experience."

The caps are being rolled out UK-wide on 400ml and bigger top-down bottles of Heinz Tomato Ketchup, including 50% Less Sugar and Salt varieties. In the future, the cap will also be rolled out across more of the Heinz sauces range in the U.K. and Europe.

Heinz claims the move to the recyclable cap will save a potential 300 million plastic lids from being sent to landfill every year globally.

Jojo de Noronha, President of Kraft Heinz Northern Europe, said: ""We know our consumers care about their impact on the environment and so do we, which is why we're delighted to see our innovative, more sustainable caps on Heinz Tomato Ketchup bottles across the UK. Although a small change, this makes it easy for the millions of Heinz lovers across the country to recycle their whole squeezy bottle at once – a small action with big potential for impact."

Fromagerie Milleret launches premium cheeses in Amcor's recyclable paper packaging

Amcor, a global leader in developing and producing responsible packaging solutions, has collaborated with the French family-owned cheese producer, Fromagerie Milleret, to launch a new recycle-ready paper packaging for the company's Le Baron Brie and l'Ortolan Bio premium cheeses.

Amcor and Fromagerie Milleret have worked together for over 30 years, leveraging their in-depth knowledge of soft cheese products to develop more sustainable packaging. Utilizing Amcor's AmFiberTM Matrix recycle-ready breathable wrap, Fromagerie Milleret's new paper packaging solution is recyclable in existing paper streams, without compromising the quality or integrity of the product itself.

The new packaging solution contributes to a 53% reduction in water consumption compared to the previous pack – according to Amcor's ASSETTM Life Cycle Assessment.

"We know that 84% of European consumers actively seek recycling instructions on packaged products, while 60% say that recyclability instructions and sustainability logos positively influence their purchase decision¹," said Laura Delapeyronnie, Marketing Manager Dairy at Amcor.

Amcor's AmFiber™ Matrix packaging allows soft cheese producers to control the level of moisture within the product and the ripening

process. This is important, as packaging with too little air exchange can trap excess moisture, leading to a soggy or undesirable texture. While overly porous packaging can cause the cheese to dry out. Amcor's solution is designed specifically to support cheese ripening, allowing Fromagerie



Milleret to maintain the desired texture and flavour of their cheese.

Laura Delapeyronnie added, "The solution is breathable in a way that protects product quality in shops and at home, addressing consumer concerns about the shelf-life of dairy products and food waste. And the packaging can be fashioned into a variety of shapes, colours, and sizes."

For a company that promises a locally

crafted product – Fromagerie Milleret collects all of its milk within 30 km on average from its cheese factory – the new packaging meets consumers' preferences for natural, authentic dairy products presented in paper packaging.

"Fromagerie Milleret has been producing

soft cheese products for over a century. Since our foundation, we have worked to ensure sustainability in our products. Our long-standing partnership with Amcor to produce more sustainable soft cheese packaging reinforces our cheese packaging reinforces our shared commitment to achieving full recyclability for all our dairy products," said Chloé Petit, Export Manager at Fromagerie Milleret.

AmFiberTM Matrix soft cheese wrap is just one example of Amcor's portfolio of recycle-ready packaging solutions. The company is dedicating significant resources to fulfilling its pledge to develop all of its packaging to be recyclable or reusable by 2025, with over 80% of its global flexible packaging portfolio available today in recycle-ready solutions.

Learn more about Fromagerie Milleret's sustainability activities at: https://www.milleret-international.com/en/the-environment-preserved/

Learn more about Amcor's sustainability activities at: www.amcor.com/sustainability

Reference

1 Based on a study commissioned by Amcor in November 2022 – surveying 3,000 consumers in UK, Italy, France, Germany, Sweden, and Poland.

Pringles launches a new 'designed for recycling' paper-based tube

Now, one of the most iconic brands is making a more sustainable switch.

n a historic moment for the snacking industry, which reflects the world's collective mission of acting and consuming more sustainably, Kellanova Europe has given its Pringles tube a more sustainable redesign.

Together with Sonoco, Kellanova Europe has redesigned its Pringles packaging to make it widely recyclable by replacing the metal bottom with a paper fibre-based bottom.

Earlier this year, Kellanova Europe's Belgian engineering and R&D teams announced the official launch of the new 'designed for recycling' Pringles tube and introduced the new paper sealing technology on production lines in Mechelen Belgium. These specially designed machines once fully operational across all production lines will be able to produce more than 1 billion perfectly sealed recyclable Pringles tubes per year.

The original Pringles tube, which many households are familiar with, is iconic and "has been a defining feature of the product since it was launched in 1967 in the USA", says Kellanova.

The new tube retains the brand's iconic cylindrical shape – enabling the crisps to remain stacked. The shape and stacked nature of the crisps is part of the Pringles image and adds an element of fun for the consumer. Furthermore, the new paper-based tube protects the chips and preserves the flavour of the Pringles to help keep them as fresh as the day they were made. Consumers can also reclose the tubes with the recyclable plastic lid to ensure the chips stay fresh after opening.

Most importantly, the new paper-based tube takes into account "Circularity by Design" guidelines from the European fibre-based packaging value chain, the 4Evergreen alliance, and obtains a good recyclability score for its suitability

for recycling in standard paper mills under 4evergreen's Recyclability Evaluation Protocol. The tubes are accepted in recycling streams across Europe, as the new paper end makes it easier to recycle for paper recyclers. The launch follows Kellanova's trial of a steel can in Italy in 2019 and a

paper tube in the UK in 2020. The vast majority of the paper used for the old and new tube is made from recycled material, helping to boost the circular economy for recycled paper packaging.

The introduction of the recyclable Pringles tube is an important step towards Kellanova's commitment of all its packaging being recyclable, reusable and compostable by 2030. Ultimately, the new paper-based Pringles tube sets an example for the food packaging industry while bolstering brand loyalty too.

Tracy Murphy – Senior Director Salty Snacks at Kellanova "As part of our Better Days Promise, we have been working hard to reduce our environmental footprint. The recyclable Pringles tube is another important step on our sustainable packaging journey. From the trial of the paper tube that we did in 2020, we already know that consumers love the new-look tube, so we're now very excited that they'll be able to get their hands on it."

Seàn Cairns, President - Global Rigid Paper and Closures (RPC) at Sonoco, worked with both companies' technical teams, to develop the new 'designed for recycling' Pringles tube. He notes that consumers are more aware than ever of how their purchasing behaviours are impacting the environment, as well as the more sustainable packaging options available to them. "With this in mind," he says, "it's important for businesses to

stay ahead of the curve by exploring new packaging technologies and materials."

Highlighting the importance of partnership in packaging design, he adds: "It was a pleasure working with Kellanova and we look forward to seeing how the new paper-based Pringles tube is received by the market. We hope the success of this project inspires other companies and brands to convert to more sustainable packaging."

Sonoco has long been committed to increasing the paper content in its packaging to maximise its recyclability. Sonoco has taken steps over the years to re-design its packaging and make it more sustainable. This process involved the company hugely investing in research and development to reduce or, where possible, completely remove the plastic and metal components of its packaging.

The result of this is Sonoco's successful, rigid paper packaging lines as part of the EnviroSense® family including EnviroCan®, GREENCAN® and EnviroStick $^{\text{TM}}$.

The new Pringles paper-based recyclable tubes are already available in Belgium, in the UK (initially available at UK Tesco and One Stop stores) and in the Netherlands with plans to scale up their launch across Europe.

www.sonoco.com

Ferrarelle Società Benefit relies on Sidel's aseptic technology for its new range of functional water and teas

errarelle Società Benefit partners with Sidel to install its first ever aseptic line at the Boario plant to produce its product range of Vitasnella 'Le Linfe' functional water and teas. With natural ingredients and a mix of flavours, the products have been designed with consumers well-being in mind, promoting a 360-degree healthy lifestyle.

Ferrarelle Società Benefit, one of the largest mineral water producers in Italy well-known for its unique naturally sparkling water properties, bottles "Boario", "Vitasnella" and "Fonte Essenziale" mineral waters at its Boario plant. Close to the picturesque Iseo Lake, the plant sources its water from the mountains close to the factory. This strategic location allows Boario to produce uniquely bottled mineral water with health-enhancing properties.

Ferrarelle Società Benefit chose Sidel's Aseptic Combi Predis technology to produce its new range of functional water and teas. Sidel supported the company in installing its aseptic technology to ensure a high-end taste experience, product integrity and a long shelf-life, utilising its PredisTM dry preform decontamination solution — a safe, hygienic, cost-effective way of packaging a variety of sensitive beverages.

By installing Sidel's Aseptic Combi



Predis to produce Vitasnella 'Le Linfe' product range, Boario's line is capable of handling two different formats, 0.5 litres and 1.25 litres, and achieves 18,000 bottles per hour. This system ensures full production sterility, beverage integrity and food safety with easy operations.

"'Le Linfe' functional waters and tea ranges are extremely important for us and we wanted to avoid any potential risks. That's why we decided to turn to Sidel, given their extensive expertise in aseptic technology," said Nicola Tignonsini, Operations Director at Ferrarelle.

"As our only line producing sensitive beverages, it was crucial that we had an aseptic system that could ensure the highest level of product safety and integrity," said Marcelo Astrini, Plant Director at Boario. "We trusted Sidel to install our first aseptic line in the company due to its extensive expertise on total food safety."

Achieving product safety with Sidel's aseptic solution

Sidel's Aseptic Combi Predis offers the simplest and safest dry preform decontamination on the market, the lowest Total Cost of Ownership (TCO) and an optimised environmental footprint. No water is used in this process and the use of chemicals is radically reduced, matching the highest sustainability standards required, while maintaining a high output, offering great ease of operations and ensuring a very flexible production.

Offering optimum food safety and product quality, Aseptic Combi Predis has now been installed in over 200 solutions worldwide and has enabled Sidel to be a global leader in aseptic production.

www.sidel.com

Berlin Packaging expands to South Korea with the acquisition of Nest-Filler

Packaging, the world's largest Hybrid Packaging Supplier®, has announced the acquisition of Nest-Filler PKG Co., Ltd., a packaging supplier focused on beauty and cosmetic products.

Established in 2003 by Steve Shim and located near Seoul, South Korea, Nest-Filler provides an impressive suite of packaging solutions for the skincare and color cosmetic beauty markets. The company offers a broad portfolio of innovative plastic and glass packaging products with a significant focus on sustainable solutions.

Nest-Filler designs and develops technically advanced packaging products made by industry-leading South Korea-based manufacturers. Nest-Filler's in-house research and development center helps its customers with trendforward packaging that uses post-consumer resin (PCR), refill technology, or other environmentally friendly solutions.

"This is a highly strategic acquisition for Berlin Packaging that expands our presence in Asia-Pacific and adds to our growing global beauty and cosmetic capabilities," said Bill Hayes, Berlin Packaging's Global CEO and President. "This acquisition also offers our customers even greater access to premium skincare packaging made in South Korea, the industry leader for skincare products."

"We are very pleased to join Berlin Packaging, and we are eager to take an exciting step forward to provide our customers with access to Berlin Packaging's impressive suite of packaging products and services while sharing our innovative packaging solutions," said Steve Shim, Nest-Filler's CEO.

The Sustainable Bottling Co. launches UK aluminium bottling factory

on the back of a £1million investment, the founder of anti-plastic campaigning soda brand GUNNA Drinks, has launched a brand new aluminium bottling facility near Leicester. The 8,000 sq ft site is the first in the UK and Europe with the capabilities to bottle drinks in aluminium beyond water and, as well as bottling GUNNA's own lemonades, will also offer white label own incomes in line with the booming aluminium bottle market in the US, as seen via brands such as PepsiCo's Proud Source Water.

Launching as The Sustainable Bottling Co., this step from the business has seismic positive environmental implications, due to the new ease and availability of aluminium bottling for drinks brands across Europe. Currently around 70% of soft drinks are bottled in damaging single use plastic (SUP), whereas aluminium is infinitely recyclable, meaning that comparably The Sustainable Bottling Co.'s offering has very strong environmental credentials.

It is estimated that an average of 35.8 million plastic bottles are used every day in the UK, with only 19.8 million recycled . Only around 10% of everyday plastic gets recycled in the UK, while the majority is either incinerated, goes to landfill or is sent abroad

Chadwicks and Tekplas unveil spoon-in-lid solution for infant formula packaging

Pre-cut lidding manufacturer Chadwicks, in collaboration with plastic engineering specialist, Tekplas, has developed a spoon-in-lid solution for the infant formula market in New Zealand, Australia and East Asia.

In a departure from traditional packaging, which involves placing the scoop spoon inside the can of formula, this solution incorporates a plastic spoon securely sealed within the over-lid, with a transparent die-cut lid provided by Chadwicks. The over-lid and scoop are injection-molded by Tekplas, and all the components of the packaging including the aluminum can, over-lid, scoop, and die-cut lid, are fully recyclable.

"The issue with the existing packaging is that the scoop becomes submerged within the contents of the can. By partnering with Chadwicks, we have introduced a significantly more user-friendly and accessible solution, explained Scott Laurence Tekplas' General Manager. "Consumers can simply open the over-lid, peel away the clear pre-cut lid, and have the scoop spoon readily available for use."

John Harrison, Technical Sales Manager for Australia/New Zealand at Chadwicks, added, "Packaging must combine functionality and userfriendliness to meet customer expectations, and the key to achieving this is through collaboration and innovation. While this application of a die-cut lid is a novel approach for both Chadwicks



and Tekplas, it has already proven to be highly effective "

Tekplas is a renowned plastic engineering specialist, with the only facility in New Zealand that offers plastic molding within an ISO Class 7 clean room environment. For more information, please visit https://www.tekplas.co.nz/

Chadwicks of Bury, headquartered in the UK, is a leading supplier of pre-cut lidding solutions, catering to a diverse range of sectors, including food, dairy, beverage, personal care, and household products. The company has a global distribution reach and a strong market presence in Australia and New Zealand.

www.chadwickslids.com

Compostable film first at Empack event

The latest in sustainable packaging materials – compostable shrink film – will be on show at this year's Empack event! Yorkshire Packaging Systems (YPS) will be demonstrating the film on their stand – D50 – showing the excellent finish achievable, as sample products are wrapped live.

The compostable film will be teamed up with an I-sealer for a high-gloss finish and strong seal, ideal for display packaging. It's the first time event visitors have had the chance to see both this film and this machine from YPS.

"We can't wait to show visitors this innovative, green packaging development. The finish we can achieve with this film proves that there's no need to compromise on quality when you're pursuing sustainable goals," stated YPS MD, Glyn Johnson.

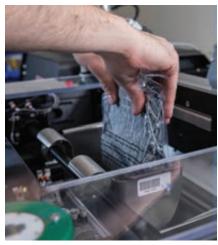
The European-made compostable film is available from 12 - 38 microns, with excellent tensile strength and a bright, highly transparent finish

This sustainable innovation joins a wealth of green film options from YPS, whose materials range is the widest in the market. All films the company offer are recyclable, many are available with recycled content of 30% or more and their range even includes both bio-based material and food-contact approved recycled-content specifications.

Demonstrating how the compostable film is handled, it will be running on an exclusive I-sealer machine. This equipment is fully automatic and can achieve professional display-standard wrapping at speed. Designed for the operator's ease, it features an enlarged infeed belt for loading, front and rear opening for improved access and simple, graphics-based controls.

And there's more...

The YPS stand will also feature not one, but two, other examples of leading packaging equipment from the company's comprehensive portfolio of equipment.



To complement the I-sealer wrapping line, YPS will also show a twin-lane side-feed sleeve wrapper, designed for transit packaging applications. Flexibility is key for this machine, creating multiple collations, including trayed and trayless, with fast changeover routines.

Last but not least, the shrink wrapping equipment will be joined by a market-leading bagging machine, representing YPS' e-commerce and mailing fulfilment machinery offering. This machine takes the crown as the widest autobagger on the market. It's also the only hybrid bagging machine available, able to use both paper and plastic materials.

The YPS Team are looking forward to talking through the materials and equipment on show, plus answering any questions about the ideal packaging combination for visitors' operations. With over 45 years' experience in the industry, YPS are ideally placed to discuss how to achieve packaging goals across a myriad of industries and products.

www.yps.co.uk

Eyes on the future: The Packaging Innovations & Empack 2024 show preview

With dozens of top brands confirming their attendance among an expected 7,000 visitors, and over 400 exhibitors showcasing the brightest and the best the packaging industry has to offer, Packaging Innovations & Empack 2024 is proving to be the hottest ticket in town

With the final preparations and countdown to the UK's flagship packaging exhibition well and truly underway, organisers Easyfairs believe that all things point to February's Packaging Innovations & Empack being its most successful yet.

The two-day packaging showpiece is set to get underway on February 21 & 22, and Easyfairs indicates that the largest annual event in the UK will likely grow in size and scale once again. A bumper crowd of over 7,000 visitors is expected, with dozens of representatives from top brands filing past a capacity of 400 of the world's biggest suppliers, who will be waiting to showcase the latest innovations on offer.

Exhibitor places are sold out ahead of another blockbuster show, with exhibitors preparing to network with brands such as Aldi, Asda, Britvic, Boots, Cadburys, Costa Coffee, Diageo, DHL, Heinz, Holland & Barrett, Hovis, Iceland, KFC, M&S, Molson Coors, Nestle, Oh Polly, Sainsbury's, Sky, Superdrug, TATA, Tesco, Unilever, and Waitrose.

The big-name brands turn out to explore the diverse array of suppliers offering a comprehensive range of packaging products and services, spanning from design to cutting-edge primary and secondary packaging, contract packing, e-commerce fulfilment, labelling and printing, and advanced packing and processing technology.

Insights from across the world of packaging

But what else can visitors expect to see at Packaging Innovations or London Packaging Week? Well, they're not just your typical tradeshows. In addition to the impressive show-

Berlin Packaging acquires Alpack Limited to expand further into Ireland

Perlin Packaging, the world's largest Hybrid Packaging Supplier®, has announced the acquisition of Alpack Limited, a family-owned food packaging supplier located in Dublin, Ireland.

Founded in 1988 by Tony Lord, Alpack is now owned and operated by his son, Peter Lord. Alpack supplies a wide range of food packaging products, including glass bottles and jars, twist-off caps, cardboard boxes, and eco-friendly containers.

"This acquisition not only strengthens our business in Ireland but also expands our food packaging offering and provides even more packaging options for our customers," said Sasha Erben, who leads Berlin Packaging's United Kingdom, Ireland, and South Africa regions.

"We are proud to join Berlin Packaging and to bring our experience in food packaging to the rest of the company. I'm certain this new chapter will benefit our customers in Ireland as well as the United Kingdom and provide even more opportunities for our employees," said Peter Lord, Managing Director of Alpack.

case of exhibitors, there is an inspiring line-up of speakers across two days and three dedicated event stages – the Innovation & Design Stage, the Supply Chain & Manufacturing Stage, and the Circular Economy stage.

With over 30 free-to-attend sessions, panels, interviews and more, the conference programme promises to aid registered visitors with their packaging objectives through educational content and pioneering solutions from various industries, markets, and professionals.

Speakers include the leading voice on innovation and creative thinking Ben Edmonds, who spent twelve-and-a-half years at the cutting edge of new product innovation as Principal Engineer at Dyson. He'll deliver his unique session titled 'Innovation & the Power of YET: Releasing your full potential' on the Innovation & Design Stage.

Meanwhile, Julien Tremblin, general manager of TerraCycle Europe, a global leader in repurposing non-recyclable post-consumer and post-industrial waste, will deliver his keynote called 'Sustainable Packaging: Solutions for right now and the future' on the Circular Economy Stage.

These conference theatres will also play host to engaging, lively debates that seek to unpick the key questions of today's industry. One such panel takes place on the second day of the show, and sees Zoi Roupakia, Research Associate at the Institute for Manufacturing, University of Cambridge, moderate a Women in Manufacturing panel on the Supply Chain Stage. The panellists are Emma Verkaik, CEO of the BCMPA, Jo Stephenson, Managing Director of Print & Packaging B2B marketing specialists PHD Marketing, Nicola Peacock, Senior Relationship Manager at The Printing Charity, and Nicola Jones, Manager, Steel Packaging Recycling, at TATA Steel, making for what should be an eye-

opening discussion.

"Engaging presentations by industry professionals on three distinct stages will provide attendees with unparalleled insights into the sterling work that goes on right across the packaging supply chain," said Naomi Stewart, Marketing Manager at Easyfairs.

"Not only will it spark creativity in the packaging sector for 2024 and beyond, Packaging Innovations & Empack comprehensively addresses every facet of the packaging journey, uniting a range of experts from diverse industries," she continued. "So, if you're looking for an opportunity to network, discuss the latest developments, or grow your business, showcase your products and cultivate high-quality leads, look no further than Packaging Innovations & Empack 2024."

Inspiring the future

One thing you can always count on in the packaging industry is that things move quickly. The future is always just over the horizon. That's why the Future Trailblazer showcase has quickly become a highlight of the Packaging Innovations programme.

This special event honours individuals driving creativity in their respective categories, making it a must-see for attendees who like to keep one eye on the future. Meanwhile, the Packaging Showcase celebrates those pioneering innovations, giving visitors a glimpse of the future – and the chance to network with the bright young talent who will make it happen.

"There's no better way to learn about the future than by learning from those who will go on to shape it. This event will be a must-see for anyone wishing to get ahead of the curve in today's fast-paced, ever-changing market," added Naomi.

Integration complete: MALA is BERICAP Aluminium GmbH

Thuringia-based aluminum closure specialist MALA has been rebranded some three years after the acquisition by BERICAP. MALA Verschluss-Systeme GmbH is now BERICAP Aluminium GmbH. The new name clarifies the company's affiliation and integration with the BERICAP Group, a leading global manufacturer of plastic and aluminum closures.

The Budenheim-based closure manufacturer took over family-owned MALA Verschluss-Systeme GmbH with headquarters in Bad Liebenstein around three years ago, thereby complementing its product range with aluminum closures for spirits, wine, non-alcoholic beverages and cooking oil. Thanks to the acquisition BERICAP was able to close a strategic gap, enabling the manufacturer of closures for the food, beverage and chemical industries to extend its product portfolio with the aluminum roll-on caps that are widely used in the wine and spirits market.

BERICAP now has a single source supplier configuration covering all customer requirements – from simple roll-on pilfer proof (ROPP) aluminum closures to highly complex safety closures. It can also cater to customerspecific needs and preferences with greater precision, including numerous decoration and design options – some incorporating in-house pad printing, side offset printing and hot foil embossing

echnology.

"For us, the rebrand was the logical step to take after a successful integration and both partners benefit in equal measure: BERICAP from a product portfolio extension and MALA from access to international markets," commented Bernd Steiner, Sales & Marketing Director at BERICAP Aluminium GmbH. BERICAP today has more than 4,000 employees at 29 production sites around the world developing customerspecific solutions and innovative closure technologies on a daily basis.

INNOVATIONS IN FOOD (& BEV)
PROCESSING & PACKAGING

FEB / MAR 2024 ISSUE

Copy deadline is March 11

ULMA supplies Eurilait with the perfect cheese packaging solution

eading packaging machinery manufacturer, ULMA Packaging, has recently supplied Eurilait, a speciality dairy provider, with the ideal packaging solution. The FM305C, ULMA's latest flow wrapping machine, proved to be the ideal fit for Eurilait's diverse range of French and British cheeses.

For over a decade, ULMA has been a pivotal part of Eurilait's growth, which started with the installation of a NEVADA flow wrapping machine in 2006. As Eurilait's business expanded, so did their need for a more advanced packaging solution to replace their ageing NEVADA; ULMA's FM305C emerged as the superior choice, offering unmatched flexibility and efficiency.

"Our previous machine served us well for nearly two decades, but natural wear and tear began to impact its performance, prompting us to upgrade," explained Damian Wills, engineering manager at Eurilait. "We have a longstanding relationship with the ULMA team, having purchased multiple machines in the past. So, I simply contacted our dedicated contact and shared our specific criteria."

Designed for fresh food products, the stainless-steel FM305C offers remarkable flexibility, thanks to its box motion sealing head powered by two independent motors. While accommodating different product shapes and sizes, the FM305C ensures high-quality hermetic seals,

thereby preserving the freshness of Eurilait's cheeses.

Nick Ghent, sales manager at ULMA Packaging, said: "Given that many fresh food businesses offer multiple products, having a packaging line that can adapt accordingly is essential. When Damian explained Eurilait's needs, it became clear that the FM305C was the perfect fit "

After determining that the FM305C fully met Eurilait's requirements, the team promptly placed the order. Subsequently, several of Eurilait's key team members visited ULMA's head-quarters in Spain for a pre-delivery inspection of the packaging solution. This crucial step in the ULMA process allowed Eurilait to assess the machine and identify any necessary customisations. This proactive approach facilitated a seamless transition and installation at Eurilait's Somerset facility.

Following installation, Eurilait renewed its servicing contract with ULMA, further solidifying the trust and reliance on ULMA's extensive network of expert engineers and their prompt, effective maintenance services. This ongoing support underlines ULMA's exceptional postinstallation care and commitment to long-term client relationships.

For more information, visi https://www.ulmapackaging.co.uk



Sabert launches innovative fully recyclable multifunctional Tray2Go

Sabert Corporation Europe has launched Tray2Go, a fully recyclable packaging solution for sushi, other chilled food-to-go, confectionery and bakery products.

"Practical to use, our new multifunctional and versatile Tray2Go range features a robust and durable double-wall tray design, coupled with an innovative secure fitting click-lock lid," says Sabert UK & Ireland Managing Director Alex Noake.

"The Tray2Go range is made using sustainable materials and is fully recyclable. The board bases, manufactured in the UK, are made with FSC® certified material, while the lids are made from rPET, at our facility in Belgium, and comprise a minimum of 50% recycled material."

Ideal for chilled food-to-go, notably sushi, and for confectionery and bakery products, Tray2Go is available in four standard sizes, while custom sizing is also an option.

Practical to use, the multifunctional and versatile Tray2Go range features a robust and durable double-wall tray designed for efficient nesting, and delivers secure stacking, while retaining excellent product visibility.

The innovative secure fitting high-clarity click-lock lid locks securely in place, offering great product protection for food-on-the-go and delivery, and enables one-hand closure for more efficient preparation in the manufacturing process.

Available in kraft, black, or white – which is ideal for bespoke printing and customisation – the tray has an inner PE varnish and a GR coating on one side for additional oil and grease resistance. The recessed (footed) base also offers added protection from wet food preparation conveyor belts and manufacturing processes whilst still providing excellent 'nestability'. Further to enhanced functionality, the feet also offer a premium design, and this new innovative concept is fully patented by Sabert.

"Tray2Go represents a practical new sustainable solution for the presentation of sushi, other chilled food-to-go, confectionery and bakery products, and the design enables easy use in food preparation," says Alex Noake. "True to our slogan: 'Sabert makes food look great', Tray2Go delivers stand-out shelf presence and premium product presentation.



SIG celebrates grand opening of new Packaging Development Center Europe

SIG is celebrating the official opening of its €10 million Packaging Development Center Europe, located at the site of the company's packaging plants in Linnich, Germany. The center will accelerate new and most sustainable packaging developments and offer SIG customers added value.

The new center features state-of-the-art extrusion and finishing technology, coupled with advanced quality measurement systems and testing equipment. It will significantly increase packaging processability in serial production, system validation and capacity for future digital technologies.

As demand for more sustainable packaging options increases, the new Packaging Development Center Europe will speed up the development of innovative packaging formats and materials to further expand SIG's leading position in sustainable packaging solutions. It is built according to the latest and most effective energy standards.

Marcel Schopen, Department Manager Test Field, Prototype & Pilot Plant at SIG: "In today's fast-paced food and beverage industry, the need to be one step ahead with new product development is vital, and this equally applies to the product's packaging. Our high-end Packaging Development Center means we can support our customers at greater speed, with complete end to end solutions. We will be able to develop and validate new packaging solutions and innovative packaging materials even faster and more efficiently. Together with our existing co-creation and test-filling facilities for food and beverage products, we can produce carton sleeves, fill products in line with food hygiene regulations and pack them on pallets - operating like packaging and food & beverage mini factories from start to finish.'

Gavin Steiner, Chief Technology Officer at SIG: "We're incredibly proud of our new Packaging Development Center Europe. It perfectly complements our existing facilities and enhances our ability to deliver breakthrough developments and accelerate speed to market. Our partnerships with customers will be strengthened and second to none customer service will be provided. With the packaging innovations we are developing on site, we're setting the course for SIG's future growth in Europe and beyond." www@sig.biz



SACMA develops compostable ovenable bag for rotisserie using NatureFlex™ films

talian paper bag manufacturer, Sacma S.p.A., founded by Eligio Maestri, has been producing paper-based single use flexible packaging for over 55 years. Although the family-owned business has always been known for its high-quality products and outstanding customer service, it is also praiseworthy for its commitment to sustainability since its early days. In 2007, Sacma moved to new premises in their journey to reducing their environmental impact and enhancing self-sufficiency: producing today most of the energy that they require with photovoltaic panels on their factory roof. In 2023, the company obtained the ISO 14001 certification and are now actively pursuing ISO 14064 with the vision to become carbon neutral in the next few years.

Today, Sacma are expanding their eco-friendly B.Life range with B.Life Gaia: a revolutionary packaging solution, offering a renewable and compostable alternative to pack hot products such as cooked chicken. These new bags combine FSC certified grass paper with a NatureFlex™ cellulosic inner liner from Futamura. The resulting product is a highly technical solution for the rotisserie segment, a high performance bag that also provides valuable end of life options.

From a performance perspective, the new Gaia bags are ideally suited to pack hot products such as cooked chicken. The NatureFlex™ heat sealable inner layer ensures that the bags are leak-proof even in the presence of juices, and grease proof to protect the consumer. The

materials are resistant to high temperatures so that they can be used in ovens and hot cabinets, or in the microwave to reheat the product. Sacma also tested the bags for usage to temperatures as low as -40C, to confirm their suitability for freezing. The bags are available with the paper look or with a transparent window so that consumers can see the product.

Not only do the Gaia bags provide the pack performance required from the rotisserie aisle, but they are also certified to the OK Compost Home standard for backyard composting. This means that they can be composted after use, both at home or industrially. Gaia bags are also certified recyclable with paper by Aticelca.

According to Robert Pellegrino, Sales and Export Manager at Sacma S.p.A., 'the new heat sealable Gaia bags provide the technical performance of conventional plastics laminated to paper, as well as valid end of life options after the packaging use. These highly renewable bags are an exciting addition to our product range and are gathering real market interest'.

Andy Sweetman, Sales and Marketing Director EMEA at Futamura, adds: 'we are delighted that our new NatureFlex™ NVO film has been considered for this food-to-go application. Packaging that has been heavily contaminated by food is impractical to recycle mechanically: having the option to compost the packs enables a valid end of life solution'.

Aptar Closures offers line of fully recyclable flow control dispensing solutions for food & beverage products

A ptar Closures, an industry leader in flow control dispensing solutions for over 25 years, now offers a line of fully recyclable flow control dispensing solutions suitable for a wide range of products, most notably food and beverage applications such as condiments and sauces. The company's SimpliCycle™ valve is designed for brand owners seeking to enhance packaging sustainability without sacrificing precise, hygienic product dispensing and consistent consumer satisfaction

True to its name, SimpliCycle™ provides ease and function by streamlining mechanical recycling. Comprised of low-density thermoplastic elastomer (TPE), the valves float during the recycling sorting process, separating them from the polyethylene terephthalate (PET) stream; from there, they are recycled in the polypropylene (PP) and polyethylene (PE) stream. When assembled into a compatible Aptar closure, SimpliCycle™ creates a fully recyclable solution for use with PET, PE or PP containers.

Most importantly, SimpliCycle™ offers exemplary product performance, with its exacting, clean-cut dispensing that meets or exceeds that of valves composed of conventional, less recyclable resins. Available in multiple sizes and configurations, SimpliCycle™ can be paired with both rigid and flexible containers for products with a wide range of viscosities, from honey to water. Notably, this includes fat- and acid-based products such as mayonnaise and ketchup.

SimpliCycle™ yields exemplary flow control and consistent flow rate, ensuring users get precise amounts of product when and where they please. Clean product cut off avoids drips,



leaks or spills during product use, and inverted storage compatibility helps consumers use the entirety of each package's contents.

SimpliCycleTM has received Critical Guidance Recognition from the US-based Association of Plastic Recyclers (APR), as well as RecyClass in Europe. Other distinctions include a World Food Innovation Award for "Best Corporate Social Responsibility/Sustainability Initiative," and a coveted WorldStar Global Packaging award.

"As the emphasis on sustainability increases across the globe, many brands have faced the challenge of providing more recyclable packaging solutions without compromising performance, convenience and product safety," said Raphael Grange, President Global Marketing Development at Aptar Closures. "At Aptar Closures, we leverage multiple decades of consumer and market expertise to continuously help brands innovate, meet new market demands, and achieve bold environmental goals by becoming even more sustainable – all with packaging solutions that do not sacrifice the consumer experience."

World Packaging Organisation (WPO) appoints Luciana Pellegrino as President

The General Manager of ABRE (Brazilian Packaging Association), Luciana Pellegrino, has been appointed President of WPO (World Packaging Organisation, during the Board Meeting in Cape



Town, South Africa. Luciana, is the first woman to assume this position in the Organisation, and was elected in May this year, in a meeting during interpack. She will replace the Australian Pierre Pienaar that has been ahead of WPO for two consecutive terms, the first began in 2018.

Active in the packaging industry since 1996, when she began her journey in the sector at Bryce Corporation USA, Luciana Pellegrino is graduated in Business Administration, with specialization in Environmental Science. Recently she got a Master in Board of Directors Governance. For more than 20 years, Luciana is the General Manager of ABRE that is a long time member of WPO. Before assuming as President of WPO, Luciana was Senior Vice President Marketing, one of the roles she had during 20 years of experience in the Organisation.

"It is a great honor to be elected by WPO Board as President. In the last 20 years I dedicated to support and strength WPO because I really believe this organisation has an extremely important role and a positive impact in the global packaging community. We will continue all the well succeeded projects and actions conducted by Pienaar in the last years and go beyond".

Holographic tear tape Supastrip® Prism from Filtrona

Packaging solutions expert Filtrona Tapes has reintroduced its holographic tear tape range to enable brands and their packaging suppliers to deliver on pack impact and security for a new age.

Whether looking to catch the eye through a kaleidoscope of rich colours or opting to pair holography with high-quality printing to achieve cost-effective brand protection, those accessing the Prism range of tear tapes also unlock the best-in-class easy opening that is synonymous with Filtrona Tapes.

Prism offers a range of unprinted or flood-printed decorative holographic films available from 1.6mm and Prism Plus utilises Filtrona's design expertise to combine holographic films with print for maximum brand awareness.

Prism Ultra uses de-metallised or selectively metallised holographic effects to deliver a customised on-pack solution, whilst, Prism Unique takes things to the next level by offering bespoke hologram designs and features for maximum security and brand protection

Food waste: Being part of the solution





Eliisa Laurikainen Business Development Manager Consumer Goods UPM Raflatac

U countries are committed to the UN Sustainable Development Goal of halving per capita food waste at retail and consumer level by 2030. However, with data showing that 131 kg of food waste per inhabitant is generated in the EU, this is a significant goal to meet. Although food labels might seem like a small part of the packaging puzzle, Eliisa Laurikainen, Business Development Manager, Consumer Goods, at UPM Raflatac argues that they are important in helping tackle food waste.

The European Commission is proposing to set legally binding food waste reduction targets to be achieved by Member States by 2030 as part of the revision of the Waste Framework Directive, adopted by the Commission on 5 July 2023. At present, households generate 54% of food waste, accounting for 70 kg per inhabitant, with the remaining 46% waste generated upwards in the food supply chain. Waste reduction strategies are focused on the prevention of both avoidable and unavoidable food waste. Packaging has an important role to play in this, and producers and retailers are being encouraged to be part of the solution, not the problem.

Clear communication reduces food waste

As packaging materials and techniques have developed, the shelf life of foods has grown and as a result helped prevent food waste across the supply chain. However, informing customers about relevant information also helps prevent food from being wasted and this is where labelling plays a key role. Alongside a continued focus on the material used to package the food, there is the need for a lot of information on the packaging, for example best before dates or use-by dates, ingredients, allergens, price, shelf life, brand information etc., and in the future, communicating this information will have an even more important place in tackling food waste.

In a recent consumer survey exploring

how packaging can prevent food waste, it was found that safety cues for meat and seafood, ideas for leftovers or tips on repurposing produce, and portion sizing were common responses to avoiding waste. Food labelling therefore has a part to play in helping consumers, producers and governments alike in reducing food waste.

Labels impact packaging recyclability

However, the power of the label extends far beyond food safety and reducing food waste. It can also directly affect the sustainability of a product. Even if the main food packaging material is recyclable, label choice can have a big impact on overall recyclability. Using the wrong type of label can result in lower quality of recyclate and downcycling of valuable raw materials. With four out of five consumers saying that they consider the sustainability of packaging in their purchasing decisions and 74% willing to pay more for it, the need for more



sustainable label options for food packaging has never been more environmentally, or financially, important.

Delivering labelling solutions that are both food-safe and more sustainable is an ongoing journey of product development. Creating solutions that meet stringent food safety regulations, while also lowering environmental impact, are of paramount importance. By opting for innovative label materials that move away from fossil-based materials to verified sustainable and renewable ones, or solutions supporting circular economy and reducing the

Helping reduce food waste using low carbon labels

The RAFNXT+ line is a low-carbon alternative to traditional self-adhesive labelling materials, and includes food, retail, logistics and home care labelling solutions. By making smarter choices and using renewable materials, along with using recycled content, RAFNXT+ features products with smaller carbon footprints than standard labelling materials. While we continue to reduce our carbon footprint, we are also taking immediate action with the emissions that cannot be reduced to zero today. To reduce our climate impact further, we also offer the opportunity to choose CarbonNeutral®-certified RAFNXT+ products.

pressure on using virgin feedstocks, brands can meet food safety requirements. Such labels can also support their environmental targets, helping to combat climate change, and enhancing circular economy.

Examples of these solutions include our Ocean Action label, the world's first certified label material made from chemically recycled ocean bound plastic through a mass balance approach, as well as RAFNXT+ label line, our externally verified lower carbon alternative to traditional self-adhesive labelling materials and our Forest FilmTM, a 100% wood-based film label material made from residue of the pulping process, from sustainably managed forests.

Labels have a role to play in helping prevent food from being wasted and in improving packaging recyclability. As such, they offer yet another tool which producers can use to reduce food waste and promote a better tomorrow, today.





www.upmraflatac.com

How harnessing real-time data to predict shelf-life could help tackle the global food waste crisis



Lynneric Potter Food Packaging Technical Lead Campden BRI

It's estimated that one-third of all food produced for human consumption is lost or wasted every year¹. This reveals the scale of the global food waste crisis we are facing. Work commissioned by Blakbear Ltd, and conducted by Campden BRI, has revealed how new sensory technologies and cloud software can reduce food waste by tracking food spoilage indicators in real time.

The importance of shelf-life predictions

All perishable food products begin to degrade from the moment they are produced. Depending on the product and its processing, the speed at which it spoils will vary. Fresh meat and poultry, for example, will degrade at a much faster rate than frozen food. This is why providing a shelf-life for consumers is vital. Without a validated shelf-life indicated by a use-by date, consumers may eat foods that pose a risk to their health.

A use-by date indicates the date when a food should no longer be consumed due to potential food safety issues. A best before date indicates when a product's quality (for example taste and texture) begins to decline, however it will not be unsafe to consume. A product's shelf-life can be affected by various factors such as light, moisture, heat, mechanical processes, exposure to contaminants and transmission of

If a product's shelf life can be maximised, without compromising on product safety or quality, this will benefit businesses, consumers and the environment by helping reduce food waste.

The global food waste crisis

A common reason for global food waste is food spoiling before being sold or consumed. When food is wasted, so are the precious resources that went into producing it, including water and energy. In the UK alone, we waste a staggering 9.5 million tonnes of food every year². Approximately 20% of meat produced globally is wasted, and 900,000 tonnes of bread spoils before being consumed3. According to the Waste and Resources Action Programme (WRAP), of the 9.5 million tonnes, 1.5 million is wasted by manufacturers and 0.3 million by the retail industry².

As a significant amount of waste comes from food going bad before being sold, having a longer or more accurate shelf-life will have a positive impact on food waste. WRAP estimates that every additional day of shelf-life offers a financial saving of 3.6% to the annual waste cost3.

Addressing food waste is becoming increasingly important, as consumers are becoming more aware of the impact food businesses are having on the environment. The majority of food waste ends up in landfills, releasing harmful methane gas as it breaks down. Of the UK's total greenhouse gas emissions, 35% comes from food and drink, of which 23% is linked to food that ultimately becomes waste4. By reducing food waste, it is estimated that we could reduce global greenhouse gas emissions by up to 10%5

As well as the environmental benefits, maximising a product's shelf-life may increase profitability and improve brand reputation. This is especially true in the current global landscape, where consumers are calling out for more sustainable supply chains.

Blakbear Ltd case study

When it comes to setting shelf-life, food safety should always be the most important consideration, with food waste and other consumer or commercial desires coming second. Due to this, there is often a margin of safety and imperfect storage conditions are taken into account when setting shelf-life. As such, the shelf-life assigned to a product by its manufacturer may be cautious, with additional safe shelf-life potentially available. Once printed, use-by dates are fixed and cannot be adjusted, which presents a limitation in reflecting the actual freshness, which varies widely between individual packages.

BlakBear Ltd is a company that produces sensors and associated cloud software that provide real-time data and shelflife predictions, to enable quality control and food waste reduction. Blakbear Ltd has developed a sensor to determine product shelf-life based on the breakdown of the product – measured by the sensor's detection of spoilage gases such as ammonia. The sensor will function as a freshness indicator to provide real-time data during shelf-life testing.

We at Campden BRI have recently worked on behalf of BlakBear Ltd to investigate whether the outputs from their sensor technology matches the results of standard shelf-life testing. We conducted a trial focused on raw chicken breasts packed in a modified atmosphere. These were stored chilled for up to 15 days with a Blakbear sensor in place inside each pack. We performed a gas analysis, microbiological testing, as well as sensory assessments on the packs.

We found that the data gathered from our testing and assessments of the chicken breast samples correlated with Blakbear Ltd's data from their sensors. These findings could have a hugely positive impact on businesses and the planet, by supporting shelf-life testing and helping in the assignment of optimal shelf-

How Campden BRI can help

We take a holistic approach to shelf-life

testing that provides insight into all aspects of the food. We can assess how your product performs over time and identify the changes to ingredients, packaging or other contributory factors that will help maximise shelf-life across a variety of product types, to deliver results you

We provide tailored, expert support in all areas of shelf-life evaluation, maximisation and extension, and have specific expertise in microbiology, chemistry, sensory, regulatory and product innovation services. Using state-of-theart facilities and the latest methods and technology, we help our members and clients to improve their products, processes and profitability, whilst protecting product safety and

- 1 https://www.theworldcounts.com/challenges/people-and-poverty/hunger-and-
- obesity/food-waste-statistics 2 https://cpdonline.co.uk/knowledge-base/food-hygiene/food-shelf-life-guide/
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www.campdenbri.co.uk

Campden BRI

With over 3,000 member companies in 80 countries, Campden BRI (www.campdenbri.co.uk) is the trusted, premier, independent technical partner of choice for the food and drink industry, working with all of the top 10 UK retailers, the top 15 global food and drink manufacturers and many of the world's biggest brands. Leveraging its 250 plus world-renowned technical experts in the UK and Europe, it helps to make food safer, tastier, healthier, affordable, sustainable, convenient and innovative, underpinned by investment in meaningful research and

Campden BRI offers an extensive range of services and products including consultancy, analysis and testing, processing and manufacturing troubleshooting and advice, training and legislation, regulatory and labelling advisory services. Members and clients benefit from industry-leading facilities for analysis, product and process development and sensory and consumer studies, which include a specialist brewing and wine

TECHNOLOGY NEWS

HepcoMotion announces GFX-r guidance system for Beckhoff's XTS: A flexible, precise solution for higher payloads

In the past decade, HepcoMotion and Beckhoff have forged a strong relationship, yielding the market-leading linear SCT (Smart Conveyor Technology) product in the form of GFX/XTS. In that time, there has been a major uptake of SCT. As early adopters have seen significant benefits in performance, service life, capabilities, and flexibility, GFX/XTS has become their go-to product for Smart Conveyor Technology for many industries including pharmaceutical, food handling & processing, mid-line and end-of-line packaging, EV battery assembly and handling, inspection, and product sorting operations. With thousands of metres of GFX/XTS out in the market, working year-in, year-out, industry confidence in the product is very high.

Incredibly flexible, the Beckhoff XTS drive uses unique linear motor technology to independently drive and control movers around a track, enabling the seamless combination of work processes of varying durations, on the fly product changes, and the addition or removal of workstations as needed. Hepco's GFX serves as the transport path, mechanically guiding the movers along the motor modules. It absorbs the substantial forces acting on the movers, ensuring precise alignment and resistance to deflection with great precision.

Growing market demand for higher loads

Smart transportation systems are undergoing strong growth, marked by a noticeable increase in higher load applications. Responding to this market demand, HepcoMotion is expanding its range of guidance solutions for Beckhoff's XTS with the new GFX-r; a system providing movement in rectangular paths. Based on the existing GFX design and incorporating the inherent flexibility and precision of GFX/XTS technology, the curved segments have been removed, enabling transportation of payloads up to 40kg.

The technology that makes it happen

GFX-r is the integration of Beckhoff and Hepco's TMS (Track Management System) and the increased drive capacity of XTS 7 & 10 pole magnet arrays. By removing the curved sections, a larger mover, powered by Beckhoff's longer magnet arrays can be used. TMS completes the rectangular path, transitioning movers between tracks.

Increased payload capacity

With an impressive load-bearing capability, GFX-r is ready to make a significant impact across many industries including automotive and EV, aerospace, and logistics. GFX-r is ideally suited

for machine cells incorporating robots, power tools and sensors, as well as for automated assembly and inspection systems. The possibilities are endless; indeed, any application with loads up to 40kg, significant moment loads, and heightened in-process stresses, stands to gain immensely.

The absence of curved motor sections allows movers to be stronger, more powerful and with a larger mounting platform, while maintaining accuracy, durability, and agility. Mover speeds of 4m/s, payloads up to 40kg and press loads up to 1500N are possible. Additionally, movers with longer magnet arrays also reduce heating losses by up to 60%. GFX-r is available in both 4 & 6 bearing versions for increased strength and stability.

Seamless integration of expertise for optimal performance

GFX-r utilises the existing parts and expertise that have made GFX/XTS, the industry-leading solution including GFX-PRT2 straight slide hardware, base plates, and motor brackets, as well as Beckhoff's XTS motors and TwinCAT system. GFX-r offers repeatability of 10µm, even when carrying a 30kg payload at a speed of 3m/s. www.hepcomotion.com

Goudsmit develops compact 12,000 gauss pipe magnet separator in stainless steel

Waalre-based Goudsmit Magnetics has developed a new pipe magnet that requires half the installation height of its predecessor and is also twice as strong. Manufactured entirely from stainless steel, the magnetic separator contains a core of neodymium (NdFeB) magnets and creates a flux density of 12,000 gauss. The conicalshaped magnet core contains more pole plates, so even 30 µm particles stick to more engagement points. This results in a higher degree of separation and also makes it possible to capture smaller metal particles in addition to coarse ones. Steel particles present in the product flow such as bolts, nuts, washers, screws, small metal balls, broken threads and clips can be effortlessly separated from grains, corn, flour, wheat flour and other incoming goods flows.

The new magnet system is suitable not only for mounting in free-fall pipes, but also for pressure pipes. The stainless steel bullet magnet can be used in food but also other industries.

Low installation height & compact design

The 12,000 gauss pipe magnet was developed in response to specific market demands. The first requirement was to develop a pipe magnet with a low installation height that, with a small adjustment in terms of pipe length, can be

easily integrated into existing processes. This, together with the high flux density, means that the magnet can already be used at goods intake. An additional advantage is that the pipe magnet captures smaller metal particles in addition to large metal particles, improving product quality. This prevents dust explosions and damage to machinery, resulting in production stoppages. The stainless steel pipe magnet can optionally be fitted with various flanges, such as DIN, Jacob etc. This makes the product widely applicable.

Quick access for easy cleaning

Despite the strong permanent magnetic core, the magnet is easy to clean. Through the door with vertical suspension, inspecting for contamination levels is seconds work. The magnet can be opened and cleaned by hand or a scraper. Smaller metal parts, such as balls or broken threads, can be easily pushed above the tapered top of the magnetic core and then removed. This is an improvement over previously designed versions. To prevent the magnet from being opened during the production process, it is possible to fit the stainless steel pipe magnet with a safety switch.

www.goudsmitmagnetics.com



Send your product launch news to Terry Prior

at terryprior@innovationsfood.com

You can also use the the power of our social media resources

News website:
www.innovationsfood.com
Weekly newsletter (every Thursday)
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Instagram:
@innovationsinfoodtechnology

nEDC300 by EDWARDS VACUUM – The latest generation dry claw vacuum pump

The nEDC300 from EDWARDS VACUUM is the latest iteration of mono claw vacuum pumps which boasts a range of inventive attributes that not only boost performance but also minimize noise levels, improve reliability, and facilitate on-site maintenance. This means that it can be used in a wide range of applications, such as water and wastewater treatment, thermoforming, vacuum conveying, food processing or even in medical systems. In these processes, the dry claw pump guarantees its users a reliable, cost-effective operation with easy maintenance options.

Uncomplicated vacuum solution

"All in all, with the nEDC300 we have developed an uncomplicated vacuum solution that is closely oriented to the standards and quality requirements of the target markets," reports Megha Ajmal, Product Manager at EDWARDS VACUUM. "This claw pump features stainless steel rotors as well as a durable stator coating safeguarding its process wetted parts which ensures robustness in effective contaminant handling. The nEDC series of mono claw vacuum pumps stands out as the intelligent option in many rough applications.," adds Megha Ajmal.

Better serviceability

This has been achieved mainly through the modular design of the EDWARDS dry claw pumps. A separate, insulated pump element also makes the inside of the pump easily accessible to



users for maintenance, repairs and cleaning. This means that the nEDC claw pump can be cleaned quickly and easily by the customer and then put back into operation meaning lower cost of ownership and less downtime for the customers.

Improved noise levels

Along with offering you higher pumping speed, the silencer has undergone a redesign to guarantee reduced noise levels, fostering a more comfortable workplace, all the while preserving optimal vacuum performance. The nEDC300 offers the best in class noise level compared to some of the other competitors in the market.

Peace of mind

The new silencer also helps in improved airflow thus helping in lowering the internal pump temperature. This extends service life of the lip seal and prevents any risks of oil leaks, giving customers a reliable long-term solution.

www.edwardsvacuum.com

LED signal tower eSIGN - now also in white!

The eSIGN LED signal tower has already established itself in the industry - the unique signal tower is now also available in white! The beautifully designed, versatile eSIGN is a big step forward and a visible sign of the technological progress that WERMA is consistently promoting. With full-surface signalling, robust industrial design and strong features, it sets new standards.

Whether in white or black - the eSIGN is a shining example of a signal tower with visibly more performance: more colours, more effects, more flexibility and more individuality! Thanks to electrical modules combined with the latest LED technology, various signalling modes with multiple colours, brightness levels and illuminated images can be implemented - from classic traffic light displays to fully customised settings.

Variable fill level displays or full-surface signalling can also be easily im-plemented with this signal tower. This not only provides an overview of process sequences, but also opens up completely new possibilities for the user.

Signalling technology has never been seen like this before

It is fair to say that the eSIGN is the best signal tower that WERMA has ever developed. As the beautifully designed, unique signal tower is now also available with a white housing, it opens up even more appli-cation possibilities: In addition to clean rooms, it is predestined for use in



electronics production, on white and lightcoloured machines, pick-and-place machines or extraction systems.

Its applications range from simple visual warnings or optical-acoustic alarms to status, fill level or fault indicators, material status or building security. The eSIGN also offers maximum flexibility with its two different sizes: 15 or 9 segments, with or without siren, standard 24 V version with configuration transfer via USB or with IO-Link technology.

Numerous industries rely on production under high or even the highest cleanliness conditions. Even the slightest impurities in the production process lead to considerable disruptions and losses, meaning that the demand for cleanroom-compatible systems and devices is constantly increasing. For this reason, the new eSIGN was developed, tested and certified according to the highest criteria and bears the "Fraunhofer Tested Device" seal of approval - an internationally renowned test mark for products that have been objectively qualified according to recog-nised standards and guidelines with regard to their cleanroom suitabil-ity.

In addition, the high protection class IP66 / IP69k ensures improved resis-tance to typical production substances, while UL Type 4X guarantees resistance to UV radiation and environmental influences.

Alfa Laval free rotating retractor: 100% cleaning coverage for ducts and tanks in hygienic processing lines

preventing contamination is a crucial element in the design of hygienic processing lines. Yet manufacturers often face uncertainty when cleaning ducts, tanks and other confined spaces with hard-to-reach shadow areas. The new Alfa Laval Free Rotating Retractor, a high-efficiency retractable cleaning device, provides complete cleaning assurance, enhancing product safety while boosting uptime and productivity.

"The Free Rotating Retractor is the latest example of how Alfa Laval works to make 100% cleaning coverage in hygienic processing lines, like milk or infant powder plants, a reality," says Babak Shojaei, Manager, Product Management, Tank Cleaning, Alfa Laval. "We remain tireless in our efforts to innovate to meet customer needs."

Complete cleaning assurance

Preparing hygienic vessels quickly and economically so that all interior surfaces are spotlessly clean and ready for production is easy with the Free Rotating Retractor. Dynamic and resource-efficient, this retractable Cleaning-in-Place device remains sealed off from the product area during production, flush with the vessel wall. The spray head slides out, expelling cleaning media in a 310°-up spray pattern across the vessel surface. Upon completion of the cleaning cycle, the spray head retracts, and the vessel is production-ready.

Boost process uptime and product safety

The Free Rotating Retractor quickly and effectively removes residues from the interior

surfaces of hard-to-clean vessels, limiting cross-contamination, minimizing downtime, and increasing productivity. It complies with FDA, EU and China regulations while securing good manufacturing and hygiene practices at dairy, food, beverage, home and personal care, and other processing facilities. For high-purity pharmaceutical and biotechnology processing lines, the Free Rotating Retractor UltraPure is the solution. A 3.1 documentation package for metal parts is available upon request.

Up to 35% savings in water, chemicals

Dynamic and resource-efficient, this cleaning device delivers up to 35% savings in water, chemicals and time for every CIP cycle compared to conventional static spray ball technology. Moreover, more efficient use of resources enhances sustainability throughout manufacturing operations.

Low total cost of ownership

It is easy and economical to install, operate and maintain the Free Rotating Retractor due to its streamlined construction. To fully automate operation, pair two or more of these cleaning devices and Alfa Laval ThinkTop sensing and control units with an existing CIP system. All told, the retractor's total cost of ownership is low due to the minimal cost and effort involved in owning and operating it.

www.alfalaval.com/FreeRotatingRetractor

innovations Infood Processing & Packaging

ALL CHANGE FOR 2024

Innovations in Food (& Bev) Processing will have a new look for 2024

Innovations is going BI-MONTHLY

Dec 2023 / Jan 2024 Feb / Mar 2024 Apr / May 2024 June / July 2024 Aug / Sept 2024 Oct / Nov 2024

Introducing some new categories including:
Retail/Consumer Packaging
Packaging Technology
Software innovations

For more information contact:

Terry Prior: terryprior@innovationsfood.com or David Copperfield: davidcopperfield@innovationsfood.com



Editorial Calendar 2024

ALL CHANGE FOR 2024: INNOVATIONS WILL BE BI-MONTHLY IN 2024

DECEMBER 23 / JANUARY 2024

Vision systems
Freeze drying
Thermoformed packaging
Colour sorting
Dairy packaging
Waste management
Injection moulding
Food safe lubricants
Food traceability
Conveyor belt systems
Labelling solutions
Robotic automation
Checkweighers
Bar coding

PREVIEW:

Dairy packaging

PACKAGING INNOVATIONS & EMPACK 2024

Deadline: 12 January 2024

APRIL / MAY 2024

Packaging coding management systems
Stainless steel bespoke products
Vacuum pouch technology
Weighing technology
Ready Meal equipment
UV/EB technology
RFID (Radio Frequency Identification)
Waste management
AI technology
Tray erectors
Food traceablility
Labelling solutions
Robotic automation
X-ray inspection systems

PREVIEW: AUTOMATION 2024

Deadline: 6 May 2024

AUGUST / SEPTEMBER 2024

Strapping machines
Dairy packaging
X-Ray inspection
Vacuum packaging
Waste management
Bag-in-box technology
Flooring innovations
Closure technologyLabelling solutions
Ready meal packaging
Thermoformed packaging
Food traceablility
Bagging technology
Vacuum pouch technology
Weighing technology

PREVIEWS: PPMA 2024 FACHPACK 2024

Deadline: 9 September 2024

FEBRUARY / MARCH 2024

Strapping machines
Dairy packaging
X-Ray inspection
Vacuum packaging
Bag-in-box technology
Flooring innovations
Food traceablility
Labelling solutions
Closure technology
Ready meal packaging
Thermoformed packaging
Embossed packaging techniques
Waste management
Robotic automation

PREVIEW: ANUGA 2024 SACHSENBACK 2024

Deadline: 4 March 2024

JUNE / JULY 2024

Vacuum packaging Sensors for packaging Waste management Computer software Food traceability Closure technology Ready meal packaging Thermoformed packaging Barrier films Closure technology X-ray inspection systems Labelling solutions Strapping machines AI technology Recycling technology

Deadline: 8 July 2024

OCTOBER / NOVEMBER 2024

Injection moulding
Steam processing technology
Bagging technology
Ready meal packaging
Food safe lubricants
Cryogenic freezing
X-ray inspection advancements
Robotic automation
Barrier films
Beverage processing techniques
Waste management
Closure technology
UV/EB technology
Food grade flooring innovations
PET technolog

PREVIEWS: ALL4PACK 2024

Deadline: 4 November 2023