

food & beverage

REPORTER

March 2025

FLAVOUR INNOVATION & FOOD TECH:

How Rainbow
Chicken is driving
the future of taste

RAINBOW  W.



CUT ADHESIVE USAGE SAVING ENERGY REDUCING MAINTENANCE

DISCOVER THE INVISIPAC DIFFERENCE



PROFITABLE

With a 10-minute start-up time, InvisiPac speeds up profitability while conserving energy and reducing waste. True melt-on-demand technology lowers adhesive usage by at least 30 percent and ends unplanned downtime due to adhesive charring, nozzle plugging, and hose issues.



RELIABLE

InvisiPac operates on a first-in first-out (FIFO) principle that eliminates charring and thermal shock. Hot melt adhesive stays at the required temperature and viscosity as it moves to the point of dispense. InvisiPac Plug-Free™ applicators dispense a consistent bead of adhesive hot melt on every box, preventing pop-opens.



SAFE

Since they have no direct contact with hot molten adhesive, InvisiPac operators are safe from burns, toxic fumes, and other hazards.



PRETORIA Head Office
(012) 548 7204
info@aqslt.co.za

MONTANA
(012) 548 7204
aqsmontana@aqslt.co.za

FOCHVILLE
(018) 771 2393/2545
aqsfochville@aqslt.co.za

DURBAN
(031) 563 4301/4288
aqskzn@aqslt.co.za

STEELPOORT
(013) 230 9213/9252
aqssteelpoort@aqslt.co.za

CAPE TOWN
(021) 948-4134
aqscapetown@aqslt.co.za

RUSTENBURG
014 596 7735
aqsrus@aqslt.co.za

KATHU
053 010 1302
aqskathu2@aqslt.co.za



Editor

Simon Foulds
WhatsApp +447840535794
editor@fbreporter.co.za

Advertising

Wendy Breakey
wendy@fbreporter.co.za
083 653 8116

Design & Layout

Jane Prinsloo

Contributors

Brandon Head
Irene Neave
Jie Ying Lee
Ozzy Nel

Published by

Food & Beverage Reporter
47 Tugela Terrace
Jacaranda Street
Linden Ext
2195

www.fbreporter.co.za

From the editor

In the March edition of Food & Beverage Reporter we focus on what makes the South African food & beverage industry uniquely our own. We kick off with Rainbow Chicken's continuing focus on innovation which is the cornerstone of its product development. From leading the way in pre-cooked chicken in 2006, to ready to eat and ready to braai products to its focus on flavour innovations and understanding the science behind taste combined with advanced food technology has made **Rainbow Chicken** a firm favourite with South African consumers. Don't miss out reading all about it.

We celebrate **Synercore's** achievement (once again) of FSSC 22 000 certification at its dry blending production facility Allmark Foods in Pretoria. This achievement underscored the company's unwavering commitment to maintaining the highest food safety and quality standards in dry blending and packing – and can put suppliers minds at ease that they are offering the very best in ingredients. Synercore's comprehensive Food Safety Management System provides a strong framework to mitigate risk, enhance operational efficiency and meet the stringent requirement of global customers.

In our Processing Tech feature, **Endress+Hauser** brings us insights on how selecting the right instrumentation for your process is a critical driver for efficiency and success. Its FLEX segmentation simplifies this process, ensuring you get the perfect fit for your needs, whether you're looking for fundamental reliability or cutting edge performance. We also tackle the impact of downtime and its impact on productivity, profitability and customer satisfaction. The new InvisiPac Hot Melt System from **AQS** offers a revolutionary solution that goes beyond mere possibility, transforming downtime into a thing of the past.

While we know that things can feel tough at the moment, there are some fantastic new investments impacting the food & beverage industry. One of the highlights must surely be the commercial partnership between Soufflet Malt and Heineken Beverages. As part of this agreement, **Soufflet Malt** will invest 100 million Euro to build a new malting facility, strategically located next to Heineken's Sedibeng brewery. This is expected to be operational by mid-2027.

Stay ahead of the trends—dive into the latest insights in this month's edition of *Food & Beverage Reporter*.

Simon



Endorsed by the SA Association of
the Flavour & Fragrance Industry.



Endorsed by SAAFoST

fbr Contents

04 Industry News

Diageo addresses youth unemployment

Organic & Natural Products Expo is back!

Kerry partnership set to enhance taste solution in Pakistan

New CEO for Husky

Syspro extends ERP solutions



10 Food Safety

Synercore strengthens food safety standards

12 New Products

Sasko's best loaf yet

A fresh look for Nuy Perlé

13 Profile

Rainbow Chicken drives flavour excellence

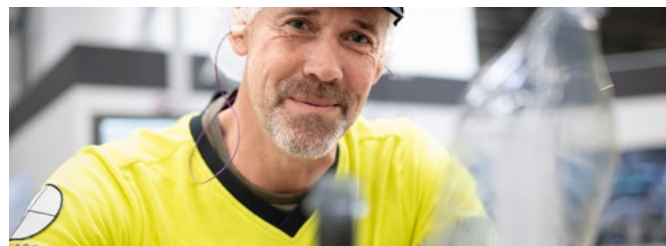


20 Processing Tech

Increase efficiency and overall operations with Endress & Hauser

KHS established new benchmarks in operational efficiency

Putting the yum into candy!



Highlight your brand in Food & Beverage Reporter's April features:

- Colours & Flavours
- Snacks & Confectionary
- Chemicals & Lubricants
- Processing Technology
- Food Safety
- MAP
- Flexible Packaging

Editorial and advertising deadline
28 March 2025

food & beverage
REPORTER

For more info contact editor@fbreporter.co.za



fbr Contents

24 Dairy

Discover SA's dairy champions
New energy efficient dairy evaporator launched
Lasec showcases top brands at analytica Lab Africa



28 Business & Investment

New partnership between Heineken & Soufflet
Malt in SA
Growth strategy and investment pays off for
Fuchs Lubricants



32 Botanicals

Unlocking the future of functional ingredients
Where flavour & functionality meet

36 Flavours

Unveiling APMEA's to taste trends

38 International Women's Day

Bühler celebrates 3 extraordinary women

40 Food Waste

Collaboration & innovation is transforming
SA food waste problem

Aquaponics – a sustainable food solution
Upcycled avocado by-products



Packaging 45

REPORTER



STITCHING MACHINES

Designed to close a wide variety of industrial packaging materials including paper, plastic, woven polypropylene and jute bags.

Call us today on:
+27 11 613 8024

email: info@bucklepack.co.za • www.bucklepack.co.za

Diageo South Africa helps to address youth unemployment crisis

Diageo South Africa, the leading producer of premium spirits in South Africa, is committed to helping address the crisis of youth unemployment in the country. As many as 65% of young South Africans are struggling to find employment, and this is often because of them not having marketable work experience.

Diageo SA has partnered with the School of Tourism and Hospitality at the University of Johannesburg to facilitate youth entry into the hospitality sector. Already in its second year, the partnership has seen over 1,000 unemployed young South Africans benefitting from work-based education through the Learning for Life programme.

The Learning for Life programme is Diageo's flagship initiative designed to equip young South Africans with the knowledge and practical experience necessary to excel in the tourism, hospitality, and food & beverage sectors. The initiative is part of the ESG commitment - 'Spirit of Progress' - where Diageo committed to facilitate business and hospitality skills for 200,000 aspiring hospitality professionals globally to increase employability by 2030.

A total of 511 young people graduated from the programme this year. The graduation ceremony took



Andrew Ross, Managing Director of Diageo Southern Africa; Precious Dube, L4L Graduate; and Dr Tracy Daniels.

place on Wednesday the 19th of February at the Kerzner Building on the Bunting Road campus of the Johannesburg University.

"We proudly celebrate 511 graduates from the Diageo Learning for Life programme with the University of Johannesburg. This achievement underscores our dedication to empowering the hospitality sector through education and skill-building, showcasing the transformative power of strategic partnerships," said Andrew Ross, Managing Director of Diageo Southern Africa.

The 2025 Annual Wine Harvest Commemorative Event

The 2025 Annual Wine Harvest Commemorative Event celebrated the outstanding contributions of five individuals who have set remarkable standards in the South African wine industry.

Praisyl Dlamini, General Manager and Winemaker at Adama Wines was awarded the Growing Inclusivity Award for her dedication to reshaping the industry.

Under her leadership, Adama Wines has become a powerful symbol of diversity, being entirely managed by a team of professional young black women.



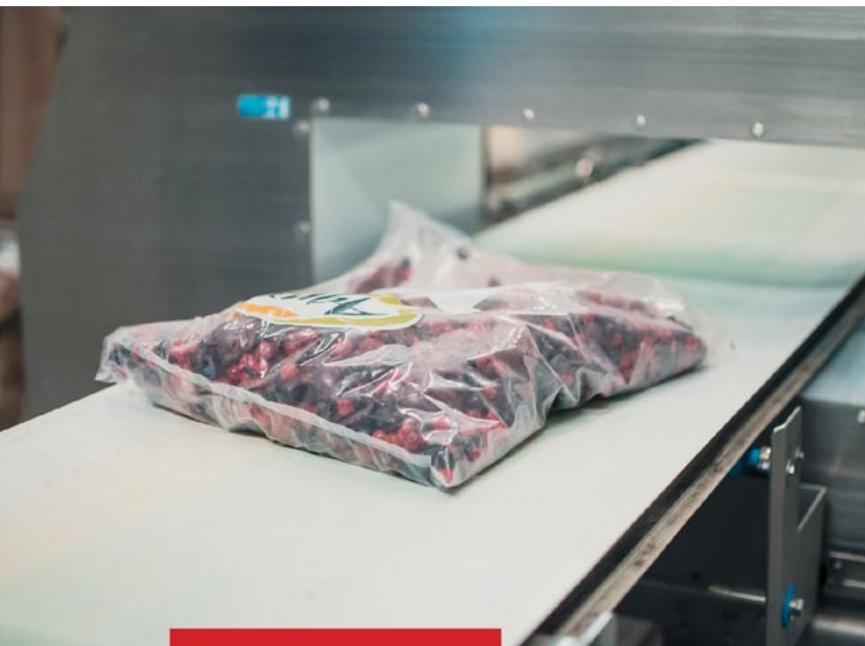
Organic & Natural Products Expo Africa 2025 returns to Cape Town

The much-anticipated Organic & Natural Products Expo Africa is returning to the Cape Town International Convention Centre (CTICC) from 28-30 March 2025.

As Africa's premier showcase for organic and natural products, the expo continues to expand its influence, attracting exhibitors and buyers from across the globe. With over 923 trade registrations already confirmed, the expo is set to surpass initial participation targets.

The 2025 edition of the expo will see participation from a diverse range of countries, including Cameroon, the UAE, the UK, Kenya, Pakistan, Nigeria, Ghana, Lesotho, Botswana, Sierra Leone, Germany, Congo, Namibia, Russia, and the Czech Republic. This international presence is a testament to the event's growing reputation as a key platform for businesses in the growing organic and natural products sector.

This year, a structured conference schedule will offer valuable insights for both businesses and consumers. The conference will cover a range of relevant topics, including business-to-business subjects like export strategies, accessing finance for organic and natural products businesses, and navigating the complexities of supply chains. Consumer-focused discussions will explore areas such as the latest trends in organic nutrition, the benefits of natural skincare, and sustainable living practices.



Gain food safety + quality control confidence with high performance metal detection

Deliver unparalleled inspection with extremely high detection sensitivity for metals - whether ferrous, non-ferrous, or stainless steel - for all manner of food products, anywhere along the line.

LOOKING BACK. PRESSING FORWARD.
ALWAYS INNOVATING.



Local manufacturing partnership for taste solutions

Kerry, a global leader in taste and nutrition, has partnered with Far Eastern Impex (FEI) to open the first international production operation for flavourings in Pakistan. The manufacturing facility, built to world-class standards and Kerry specifications, will commence production immediately, servicing PepsiCo, a global snacks manufacturer.

In localising production through FEI's advanced manufacturing facility, Kerry is setting an industry benchmark, signalling the development of local capability, and ensuring a faster go-to-market process, with a "Made in Pakistan" designation that appeals to manufacturers and consumers.

"We are excited to develop our expertise and capabilities in Pakistan, a dynamic and rapidly growing food market," said Peter Dillane, President and CEO of Kerry Asia Pacific, Middle East & Africa. "Through our

partnership with FEI, we are offering customers, including PepsiCo, a local manufacturing footprint, reducing lead times, and enabling innovation tailored to local tastes. This investment underscores our commitment to nurturing local suppliers, growing local talent, and supporting the evolving food industry in Pakistan."



Verified cage-free campaign launched

A new campaign in South Africa's food industry is empowering consumers to make more ethical food choices while encouraging businesses to commit to higher animal welfare standards. The Verified Cage-Free Campaign, launched by the South African Faith Communities Environment Institute (SAFCEI), recognises businesses that publicly declare their commitment to sourcing only cage-free eggs—including free-range, barn, organic, and pasture-raised.

By signing the Verified Cage-Free commitment, businesses make a transparent, public pledge to phase out battery-cage eggs from their supply chains. This campaign also seeks to educate consumers about sustainable and ethical food choices and encourage them to support businesses that align with their values.

The cage-free movement has already gained momentum, with well-known South African brands like Nando's, and Famous Brands having made cage-free commitments. Internationally, companies such as Spur Corporation, McDonald's, and Nestlé have



already committed to sourcing only cage-free eggs, setting a strong precedent for others to follow.

Under the Verified Cage-Free Campaign, a growing number of South African brands and independent businesses are also joining the cage-free movement, including Bootlegger Coffee Company, and Vondi's Holistic Pet Nutrition.

SAFCEI Executive Director, Francesca de Gasparis said, "This campaign is not just about the welfare of hens, our aim is for all South Africans to have access to, and to eat healthy, nutritional food that is free from harm. We are inviting businesses to get behind this campaign to show that South Africa can be 100% cage-free, whilst still ensuring every person can afford healthy and nutritious food."

Husky welcomes Balaji Suresh as new Chief Operations Officer



Husky Technologies™, a global leader in injection moulding technology and solutions, is pleased to announce the appointment of Balaji Suresh as Chief Operations Officer (COO). With over two decades of experience in global manufacturing, supply chain, and operational leadership, Balaji brings a wealth of expertise to Husky at a pivotal moment in the company's growth journey.

"Balaji embodies the core values that define Husky's relentless pursuit of excellence," said Bradley Selleck, Husky's CEO. "His deep expertise in digital manufacturing innovation, coupled with his ability to build and inspire high-performance teams, makes him the ideal leader to elevate our operations and accelerate our ambitious growth trajectory. His passion for technology-driven transformation and commitment to delivering superior customer value align seamlessly with Husky's strategic vision."

As COO, Balaji will oversee Husky's global manufacturing and supply chain operations, ensuring seamless integration of cutting-edge digital solutions and lean manufacturing principles to enhance efficiency and customer experience. His leadership will play a crucial role in strengthening Husky's operational resilience and reinforcing its industry leadership

World's Leading Trade Fair for the
Beverage and Liquid Food Industry

drinktec
Grow with the Flow

15 – 19 September 2025
Munich, Germany

www.drinktec.com

YONTEX

SYSPRO extends its niche ERP solutions

From time to time, manufacturers will need to augment or supplement their ERP solution with a specialist, best-of-breed application. Companies will look for these third-party applications because of a competitive advantage process, compliance, or regulatory requirement. Because of this, SYSPRO has an Independent Software Vendor (ISV) Programme with trusted partnerships to help provide customers with their selection process.

By partnering with industry leaders, SYSPRO can offer cost-effective solutions to its customers, providing integrated solutions in a seamless and efficient system.



Integrating DATASCOPE's warehouse management solutions within the SYSPRO ERP system simplifies functionality and avoids the need for external third-party plugins. This offers customers the benefit of a comprehensive solution within their ERP umbrella, enhancing ease of use and efficiency. Integrated WMS also supports Industry 4.0 initiatives including machine learning, automation, and cloud versions, making it a foundation for digitisation within the manufacturing industry. Demand for warehouse management solutions is extensive, with some solutions costing in excess of \$25 million a year, a tangible demonstration of their value and importance in the manufacturing industry. With the systems managing everything from improved real-time inventory tracking and stock management to optimised storage and faster and more accurate order fulfilment, WMS is crucial when it comes to optimising warehouse operations, improving inventory accuracy and enhancing supply chain efficiency.

"With 23 years of intense research and development behind DATASCOPE WMS, the software is the most advanced full-stack WMS developed specifically for SYSPRO on the market, and we are pleased that our highly integrated software offers SYSPRO customers a solution that takes their manufacturing and distribution operations to world-class levels," says Terry Shaw, Managing Director at Enterprise Mobility Services (EMS), DATASCOPE's DSP for the African region.

Pernod Ricard wholly acquires luxury African gin brand Inverroche

The sale of the remaining Inverroche shares not owned by the Group was concluded on 6 February 2025. Making Inverroche Pernod Ricard's first wholly owned African spirit brand.

Sola Oke, Managing Director of Pernod Ricard Africa says, "Africa is a market with great potential and an important milestone in realising our ambition to make Inverroche Africa's First Global Luxury Spirit Brand."

Lorna Scott, Inverroche's Founder, is expected to continue working with the brand, ensuring her passion and intimate knowledge of Inverroche will be kept within the Pernod Ricard family. A resident of Stilbaai, where Inverroche was founded, Scott pioneered the use of the area's indigenous fynbos to infuse traditional gin botanicals more than 12 years ago. Inverroche is now available in 25 markets around the world, including most recently the United States.



Sola Oke

RAINBOW  **W.**
**NOURISHING
THE NATION**



**TO FIND OUT MORE, VISIT
WWW.RAINBOWCHICKENS.CO.ZA**

Synercore achieves FSSC 22000 certification again, strengthening food safety standards

Synercore's dry blending production facility, Allmark Foods located in Hermanstad, Pretoria, has once again successfully achieved FSSC 22000 certification.

This achievement underscores Synercore's unwavering commitment to maintaining the highest food safety and quality standards in the blending and packing of dry blends for dairy, beverage, and bakery industries, to name but a few.

As consumer demand for safe and high-quality products continues to rise, Synercore remains at the forefront of the food industry through continuous improvement and adherence to global safety standards.

The company's comprehensive Food Safety Management System provides a strong framework to mitigate risks, enhance operational efficiency, and meet the stringent requirements of global customers.

“Synercore’s comprehensive Food Safety Management System provides a strong framework to mitigate risks, enhance operational efficiency, and meet the stringent requirements of global customers

What is FSSC 22000?

FSSC 22000 is a comprehensive Food Safety Management System that is fully recognised by the Global Food Safety Initiative (GFSI). It consists of the following elements: ISO 22000:2018, ISO/TS 22002-1:2019, and Additional FSSC 22000 requirements (Version 6). This certification ensures Synercore's compliance with internationally recognised food safety standards and best practices

“We take great pride in upholding world-class food safety standards,” said Mariesa Vrey, Synercore's Group Manager – Quality and E&S. “Our renewed Allmark Foods FSSC 22000 certification underscores our dedication to delivering safe and high-quality



Tebogo Kutumela, Letha Spangenberg and Rendani Makhado

ingredients to our customers. This achievement reflects the hard work of our team and the robust processes we have in place to maintain food safety at every level.”

Benefits of FSSC 22000 Certification

- **Enhanced Food Safety Management:** A robust and internationally recognised system ensures product safety and quality.
- **Competitive Market Edge:** Compliance with global standards strengthens trust among stakeholders, customers, and consumers.
- **Sustainability and Innovation:** Aligns with Synercore's mission to drive excellence through sustainable practices and technological advancements.

By continuously investing in food safety and quality, Synercore remains a trusted partner in the South African and African food industries. The company is committed to supporting global food security with integrity and excellence.

For more information about Synercore and its food safety initiatives visit www.synercore.co.za

Innovating Functional Solutions for Yoghurt Manufacturing

Through continuous innovation, Synercore has developed a wide range of functional system blends for various yoghurt applications, ensuring optimal texture, mouthfeel, and stability.

Our ifaTECH™ system blends introduce consistency, convenience, and simplicity to both manufacturing processes and final products. While our existing range is versatile and compatible with various recipes, we also offer tailor-made solutions to suit unique applications and manufacturing processes.

Synercore remains committed to innovation and the continuous optimisation of its ifaTECH™ functional system range, while prioritising quality. We take pride in delivering cost-effective solutions that are easily accessible to the local market.

Why choose ifaTECH™ functional yoghurt systems?

- Versatile applications
- Convenient and time saving
- Maintaining consistency
- Ease of use
- Cost-effective
- Tailor-made to suite your application or manufacturing process
- Clean label options
- Gelatine and gelatine-free options
- Halal & Kosher certified
- Manufactured in FSSC 22000 certified production facility

Smooth and creamy mouthfeel

Improved stability

Enhanced texture

Optimal viscosity

Syneresis control

Extended shelf-life

Excellent flavour retention

STIRRED
SNACK
DRINKING
PLANT-BASED
LACTOSE-FREE
AMBIENT STABLE



Sasko unveils its best loaf yet!

With deep-seated roots in care, quality, and innovation, Sasko is on a continuous quest for excellence. This commitment to striving for better has led to the introduction of the Bettererest Loaf Ever—a softer and tastier version of its beloved white and brown loaves.

The Bettererest Loaf Ever is the latest iteration of an ongoing quest to satisfy consumer preferences and improve on its best—thus creating an even betterer loaf. This is achieved by sourcing a superior strain of wheat from around the world and using refined milling techniques to enhance flour quality. As a result, this loaf boasts:

- ✓ A softer and fluffier texture that lasts longer
- ✓ A lighter, airy crumb with a visually appealing rise
- ✓ A more refined taste than ever before

SASKO's quest for continuous innovation is part of its brand DNA, as seen in its Specialty Range, which introduced health-conscious loaves such as Low

GI Multigrain Cranberry and Low GI Oats & Honey Flavoured Bread. This commitment to anticipating consumer needs and delivering on new trends has now resulted in the Bettererest Loaf Ever. With this, SASKO takes everyday bread to the next level, offering an exceptional experience in every slice.



Nuy unveils first-ever Perlé with a fresh look

Nuy Wine Cellar has launched its first-ever Perlé wine, the Nuy Winery Rosé Moscato Perlé, accompanied by a vibrant new look for its Inspiration range.

Christo Basson, Nuy's Cellar Master, describes the Rosé Moscato Perlé as a wine that embodies summer in a glass, with its delicate pink hue and fine, dancing bubbles. It delivers a semi-sweet palate with layers of flavour: rose petals, white Turkish delight, and refreshing hints of lemon and elderflower. Notes of litchi and soft, ripe prunes add depth and intrigue, while the gentle fizz rounds off a crisp and clean finish.

This versatile wine is perfect for various occasions. Enjoy it chilled as an apéritif, paired with light summer salads, chicken dishes, or charcuterie boards. For adventurous palates, it complements mild curries beautifully. Its semi-sweet nature also makes it an excellent partner for brunch or desserts.

The Inspiration range now features a striking new design, with a signature "suikerbekkie" (sunbird) gracing the label. Known for their long, curved bills and love for nectar, these tiny birds are a proud part of Nuy's natural heritage, thriving in the winery's gardens. The label pays tribute to the hundreds of sunbirds that call Nuy home, reflecting the harmony between nature and winemaking.



Claire Mundell

Flavour innovation and advanced food technology: Driving excellence at Rainbow Chicken

The evolution of the food industry is rooted in constant innovation, particularly when it comes to balancing flavour, quality, and sustainability. At Rainbow Chicken, innovation has been the cornerstone of product development, allowing the brand to stay ahead of consumer demands while leveraging food technology to ensure superior taste, safety, and sustainability.

By continuously refining its approach, Rainbow Chicken has solidified its reputation as a leader in poultry innovation, ensuring that every product meets the highest industry standards.

Innovation vs. renovation: Striking the right balance

In the dynamic poultry industry, Rainbow Chicken continuously assesses when to introduce new products (innovation) and when to enhance existing ones (renovation). The key drivers for these decisions stem from market demand across different consumer segments, including end consumers, retailers, wholesalers, HORECA (Hotels, Restaurants, and Caterers), and Quick Service Restaurants (QSRs).

The market guides the direction that technical food scientists must take regarding innovation. However, even with solid insights, predicting consumer readiness can be challenging.

To illustrate this point, Claire Mundell, Technical Director at Rainbow Chicken, shared, "Back in 2006, when we introduced a range of pre-cooked chicken, it was truly ahead of its time. We thought the consumer was ready for the shift, so we launched 'ready-to-eat' and 'ready-to-braai' products, essentially fully cooked seasoned or marinated chicken. The products were marketed through retailers using the well-established Farmer Brown brand. This was over 20 years ago, but, despite the innovation, the consumer wasn't quite ready to make the switch."

Mundell added, "It's a prime example of how, even when you have an insight or a sense that the market is ready, it doesn't always guarantee success. Today, before making significant capital investments in innovation, we place much greater emphasis on market testing. It's a crucial part of our process to ensure we're aligned with consumer demand before diving into large-scale development."

This method ensures that resources are allocated efficiently, reducing the risk of launching products that might not yet have a viable market. Rainbow Chicken's ability to adapt when necessary has been critical in sustaining growth and maintaining consumer trust.

Over the years, Rainbow's dedicated Research & Development (R&D) team has played a crucial role in this evolution. From the 1970s, when whole birds were first portioned for convenience, to the introduction of weight-grading for price consistency in the 1980s, the company has refined processes to align with market needs. More recent developments, such as High-Pressure Processing for extended shelf life and sous vide sterilisation, reaffirm Rainbow's commitment to both innovation and quality enhancement.

Flavour innovation: The science behind taste

Flavour innovation is at the heart of Rainbow's processed chicken product development. Advances in marination and spicing have allowed for enhanced taste while also contributing to product preservation. Key technologies such as injection brine marination ensure consistent succulence by allowing flavours to penetrate the bone, providing a richer and more satisfying eat experience.

Rainbow Chicken invests heavily in R&D to uncover market gaps and explore new product opportunities to align with the evolving tastes of consumers. South Africa's diverse cultural heritage has significantly influenced these tastes, with bold and spicy flavours becoming staples in consumer preferences. From the fiery peri-peri influence of Portuguese cuisine to the rich spices of Indian curries, local consumers gravitate toward flavour profiles that pack a punch.

This deep-rooted love for robust flavours extends to the braai with smoky, tangy, and slightly sweet marinades and rubs take centre stage. In response, Rainbow Chicken – and other local brands – created pre-marinated cuts tailored specifically for the braai experience, ensuring convenience without compromising authenticity. Similarly, the growing popularity of Cape Malay curries, chakalaka, and sosaties has inspired the poultry industry to develop

products with spice blends and marinades that honour these traditional dishes.

Beyond heritage-inspired flavours, urban millennials have driven demand for global fusion trends, showcasing adventurous taste preferences that blend traditional South African spices with international influences. By leveraging global culinary trends, Rainbow Chicken ensures that flavour profiles align to cater to a more globally minded consumer base. This has led to the rise of flavours like Korean BBQ, sweet and spicy sriracha, and Mediterranean herb blends.

“Consumers are the ultimate arbiters of taste, while R&D serves as a bridge between their desires and technological possibilities, enabling food processing technology to meet and anticipate the evolving preferences of modern consumers”



Leveraging global trends and market research

Rainbow Chicken actively monitors international trends by attending food, packaging, and poultry expos worldwide to stay ahead of the curve. Insights gained from working with global fast-food giants like KFC and Burger King further keep the brand at the forefront of emerging industry shifts.

The role of technology in food innovation

Advanced food technology has played a defining role in Rainbow Chicken's innovation journey, enabling product capability and quality improvements. Several key technological advancements have contributed to the brand's success, including:

- Injection marination enables consistent succulence, enhanced flavour through to the bone and a tender texture of chicken meat (bone-in and or boneless portions).
- Vacuum Tumbling is a mechanical action on the chicken, enabling efficient marinade absorption and improved eat quality and consistency.
- Spiral freezing/Gyro freezing technology enables quick freezing, resulting in smaller ice crystals forming compared to slow or traditional freezing methods, resulting in less water and weight loss once thawed, yielding a better quality eat experience.

- The sous vide cooking process utilises high pressure and temperature in a sealed vessel to deliver sterilisation of cooked chicken, enabling a shelf-stable/ambient temperature storage condition that is safe (fit for human consumption) but has a long life with no refrigeration requirement.
- Packaging technology has advanced with fit-for-purpose materials or barrier properties that enable preservation and increased shelf life of the chicken product.

"These technologies have opened up new possibilities, greatly improving our chicken products' flavour, texture, and overall eat experience," confirmed Mundell.

Consumers are the ultimate arbiters of taste, while R&D serves as a bridge between their desires and technological possibilities, enabling food processing technology to meet and anticipate the evolving preferences of modern consumers. By combining insights into consumer psychology, sensory research, and market trends, Rainbow Chicken continues to innovate and deliver products that resonate with diverse consumer palates.

www.rainbowchickens.co.za

More Profit Less Waste,



Rely on Urschel for rugged, high-powered slicers and dicers to maximise capacity.

- Precision, targeted cuts throughout production runs to maximise yield.
- The sharpest knives team up with rugged components at powerful speeds to deliver the highest quality cuts.



#1 Best selling provider of industrial cutting machinery throughout the world.

© Urschel, Urschel logo symbol, and The Global Leader in Food Cutting Technology are registered trademarks of Urschel Laboratories, Inc. U.S.A



South Africa Exclusive Supplier
info@heatandcontrol.com | +27 21 948 5934



Increase efficiency and overall operations effectiveness with Endress+Hauser's new FLEX segmentation technology

In today's fast-paced world, choosing the right smartphone can be as daunting as navigating a maze. From the 'essential' models that offer just the basics, to the 'premium' devices that push the boundaries of technology, each category serves a unique purpose.

Just like selecting the perfect smartphone, finding the right instrumentation for your process is crucial for efficiency and success. In this article, we explore how Endress+Hauser's innovative FLEX segmentation simplifies this process, ensuring you get the perfect fit for your needs, whether you're looking for fundamental reliability or cutting-edge performance.

FLEX: Flexible answers to individual needs

Selecting the right instrumentation to monitor and control all the different applications in your process can be quite challenging.

Endress+Hauser's FLEX segmentation recognises that each application has its own goals to achieve and challenges to overcome. Some processes just need monitoring, while others need control and/or optimisation.

FLEX Selection ensure you receive instruments that fit the process, while avoiding sensors with unnecessary functions. According to the principle of 'FLEXible answers to individual needs', we designed four distinct portfolio selections:

- **Fundamental:** Simple products that meet your basic measurement needs
- **Lean:** Standard products that handle your core processes easily
- **Extended:** High-end products that optimise your processes with innovative technologies
- **Xpert:** Special products that can master your most challenging applications

This segmentation helps users easily identify the right product for their specific needs, whether they are looking for basic functionality or advanced features.



Fundamental Selection

Fundamental Selection products are designed for simplicity, with a limited number of variants to make selection easy. Compared to the other Selections, the Fundamental Selection products have fewer features and options, which simplifies installation, maintenance, and handling. Many are pre-configured, allowing for fast installation and

commissioning. They feature standard outputs, such as analogue 4-20 mA and switch PNP/ NPN, allowing for standardised and simple connections.

Their simplicity does not translate to lower or inferior product quality. We use the same quality components as in our other products. We also employ technologies we have developed over the last 70+ years together with our customers. Additionally, Fundamental products feature IO-Link connectivity, providing cost savings, enhanced process efficiency, and improved machine availability.

“Endress+Hauser’s FLEX segmentation recognises that each application has its own goals to achieve and challenges to overcome. Some processes just need monitoring, while others need control and/or optimisation”

Lean Selection

For core production processes, reliable process control within specified parameters is crucial. Lean Selection instruments are equipped with comprehensive diagnostic and self-monitoring capabilities to detect interruptions or deviations,

Xpert Selection	Master your most challenging applications	<ul style="list-style-type: none"> ▪ Specialized products ▪ Designed for demanding applications 	F L E X
Extended Selection	Optimize your processes with innovative technologies	<ul style="list-style-type: none"> ▪ High-end products ▪ Highly functional and convenient 	F L E X
Lean Selection	Handle your core processes easily	<ul style="list-style-type: none"> ▪ Standard products ▪ Reliable, robust and low-maintenance 	F L E X
Fundamental Selection	Meet your basic measurement needs	<ul style="list-style-type: none"> ▪ Simple products ▪ Easy to select, install and operate 	F L E X

ensuring timely and appropriate responses. These devices continuously monitor their own functionality, alerting you to malfunctions and providing guidance for corrective actions. Our measurement principles are designed to suit all process environments, ensuring consistent and dependable performance.

"Circumstances such as highly demanding ambient or process conditions, bold productivity targets, or far-reaching regulations call for specialised instrumentation".

Extended Selection

To stay competitive, it's essential to optimise production by reducing operational expenses, improving availability, or enhancing product quality. Achieve the necessary process insights by leveraging more data. Our highly functional Extended Selection products offer superior measurement reliability, even under rapidly changing product and process

conditions. They provide the highest accuracy and fastest response times in our portfolio. Enhanced transparency in detecting interruptions and deviations allows you to optimise processes and maintain consistency.

Xpert Selection

Circumstances such as highly demanding ambient or process conditions, bold productivity targets, or far-reaching regulations call for specialised instrumentation. Our Xpert Selection reflects our in-depth knowledge of industries, applications, guidelines and regulations. This drives our specialised product development, maximising performance and productivity in the most challenging applications. Additionally, we offer consulting and support services for instrument selection, commissioning, maintenance, and more, ensuring you have the right tools and guidance for success.

www.endress.com

About the author:

Irene Neave is the Local Industry Manager, Food & Beverage at Endress & Hauser

Food & beverage: IO-Link portfolio in process automation

The food & beverage industry is facing many challenges, such as stricter compliance regulations, a shortage of qualified staff, and increasing energy costs, among others. Our IO-Link devices can significantly contribute to overcome these challenges. IO-Link is a perfect entry into the world of digitalisation to enhance the efficiency of processes and upgrading your analogue device experience. Start your digital transformation process with the unique Endress+Hauser IO-Link product portfolio.

Benefits

- **Fit-for-purpose IO-Link instruments:** Ideal for OEMs (original equipment manufacturers) and skid builders, with outstanding quality for process automation
- **Hygienic approvals:** Most Endress+Hauser IO-Link devices have hygienic approvals and can operate under harsh conditions (Ingress Protection)
- **Expanded measuring points:** Measuring points that were previously not available for IO-Link technology in process automation are now part of the Endress+Hauser product portfolio

- **High interoperability:** High level of interoperability with third-party IO-Link masters and IO-Link configuration software tools achieved through a standardised and deep-level implementation of the smart sensor profile

Easy integration: Fast and easy device integration into leading process control systems thanks to the free-of-charge integration software package



Scan the QR code to learn more about our IO-Link Portfolio in Food & Beverage



We understand how you strive for constant product quality and optimized costs.

CONSISTENT + CONFIDENT

You are poised to meet your safety and quality requirements while optimizing resources and securing process repeatability.

Improve your processes with our comprehensive portfolio of measuring instruments:



Promag H 100:
The flow measurement specialist with an ultra-compact transmitter is designed for hygienic applications.



Liquiphant FTL33:
The compact point level switch saves your resources with a reliable overflow protection.



Smartec and Indumax CLS54D:
The toroidal conductivity systems optimize cleaning and reduce product loss.

Contact us
Email: info.za.sc@endress.com
Tel: +27 11 262 8000
www.endress.com

Endress+Hauser 

People for Process Automation



The InnoPET Blomax produces up to 20,000 2.0-liter containers an hour and a maximum of 30,000 bottles an hour in the 1.5-liter format

New benchmark in energy savings with the Double Gate heating concept

Not far from the idyllic center of Knetzgau in Germany on the banks of River Main stands one of the biggest Coca-Cola factories in the country.

Coca-Cola Europacific Partners (CCEP) employs around 500 personnel, producing popular classics Coca-Cola, Coca-Cola Light, Coca-Cola Zero, Fanta, Mezzo Mix, Sprite and various others on a site measuring 200,000m².

Sustainability is a key requirement for the group, and it is focussed on saving energy, water and materials to not only benefit the environment, but to save costs. This has resulted in the commissioning of a resource-conserving InnoPET Blomax from KHS.

Near infrared and Double Gate reduce energy consumption

The latest generation of KHS' proven stretch blow molding machinery is not only distinguished by its

high performance but also scores in direct market comparison with various measures designed to save energy. Two in particular stand out:

- The heater used to heat the PET preforms operates with what's known as near infrared radiation (NIR) that in itself is far more efficient than many of the infrared heaters otherwise installed.
- The InnoPET Blomax conveys the preforms without primary reflectors in two lanes on both sides of the lamps, enabling their energy to be applied much more effectively for heating.

In addition to its specific energy savings, the Double Gate is also more compact than standard preform heaters.

With the help of latest-generation KHS stretch blow molding technology, Coca-Cola Europacific Partners are taking the amount of energy saved in its PET bottle manufacturing operations up to the next level. Coca-Cola has replaced not one but two older machines with the InnoPET Blomax whose performance even exceeds expectations – largely due to KHS' optional and pioneering Double Gate (DoGa) heating concept.

Project manager Ralph Sauter spent a long time deliberating over the investment in advance, drawing up a comparison of various systems on the market. Not one but two old stretch blow molders manufactured in 1998 were to be replaced that were no longer expected to satisfy the company's requirements regarding energy efficiency and the general availability of spare parts.

A decision was ultimately made in KHS' favour. "In view of the targets we've set ourselves, saving energy plays a big role for us. With its new Double Gate technology and the savings this makes, the KHS system was of great interest to us," says Sauter. It is estimated that energy savings could be as high as 560,000 kWh per year – an impressive figure in the face of constantly rising energy prices.

“Regarding performance, our expectations were actually exceeded,” says Ralph Sauter, project manager at Coca-Cola Knetzgau, of the resource-conserving, highly efficient InnoPET Blomax Series V stretch blow molder.

Design engineering challenges mastered

“We're impressed by the functionality and performance of our new machine,” Sauter adds. “The Blomax processes 20,000 2.0-liter containers and 30,000 1.5-liter containers an hour – and as it's so flexible, it can be perfectly integrated into our line.”

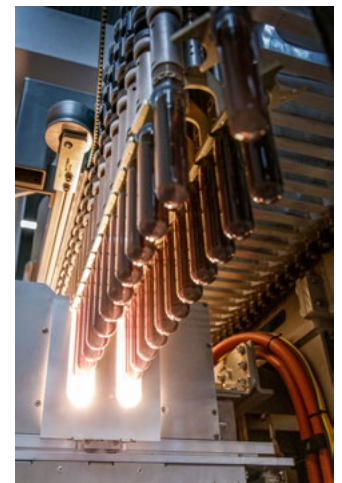
The production site was not without its share of challenges. The biggest was to convert the existing bottle air conveyor so that it served not two but just one machine.

As the conveyor's position was fixed, the new system had to be aligned in the bottle shop with centimeter accuracy. This is confirmed by Marc Harald Eysel, sales manager for PET Technology at KHS. “This was an exciting task for us.” He's keen to stress, however, that adjustments like these in the interests of the customer are a matter of course for KHS. “We don't just want to convince our clients with the system performance alone.”

In general, KHS is seeing a fast-growing demand for energy-cutting technologies such as the Double Gate. “Even in comparison with modern stretch blow molding systems installed up to about the end of the last decade, our machinery saves a maximum of 30% in energy,” Eysel concludes.



More compact than standard preform heaters: the InnoPET Blomax conveys the preforms without primary reflectors in two lanes on both sides of the lamps, enabling their energy to be applied much more effectively for heating



The unique Double Gate heating concept (DoGa) based on tried-and-tested, highly efficient NIR heating technology, enables up to 40% in energy costs to be saved compared to single-lane stretch blow molders of the same capacity



The latest-generation KHS stretch blow molder offers outstanding energy efficiency

For more information, contact KHS South Africa today. www.khs.com



Pumping yum into candy and confectionary

Though inflation and interest rates have affected consumer spending power in South Africa, contributing to minimal growth in the confectionery market of late, the industry is expected to see improvement between 2025 and 2030.

From chocolate and sugar confectionery to ice cream, pastries and cakes, the market's growth is being driven by the convenience of online shopping, the introduction of healthier options, and a wider variety of products. Revenue in South Africa's confectionery market is expected to amount to USD5.09 billion in 2025, and anticipated to grow annually by 6.96% (CAGR 2025-2030), **according to Statista.**

This aligns with global trends, where health consciousness and veganism, as well as sustainability trends, are driving both change and worldwide growth at **5.40% annually (2024-2029)**. As consumers locally and abroad increasingly demand healthier and more sustainable options, candy and confectionery manufacturers must adapt and innovate. Current production trends focus on reducing sugar content, embracing vegan ingredients, and minimising energy consumption — each reflecting broader societal shifts towards health and environmental consciousness.

Reducing sugar challenges manufacturers to alter traditional recipes without compromising taste and texture. The surge in veganism has prompted the development of plant-based confections - free from animal-derived ingredients - to cater to a rapidly expanding market segment. Intensified

focus on sustainability, demands that confectionery manufacturers relook their supply chains as well as intensify efforts to decrease energy usage in production processes, thereby reducing carbon footprints and operational costs.

“Intensified focus on sustainability, demands that confectionery manufacturers relook their supply chains as well as intensify efforts to decrease energy usage in production processes, thereby reducing carbon footprints and operational costs”

In this evolving context, the role of specialised equipment, such as pumps, becomes crucial. Efficient and versatile pumping solutions are essential to meet the stringent demands of modern candy production.

They must handle a variety of ingredients – ranging from high-viscosity syrups to delicate flavouring – while operating under the principles of energy efficiency and process optimisation.

Lobe pumps, for example, are an integral part of the hygienic production processes in the confectionery industry, not only because of their ability to pump viscous products but also due to their outstanding performance under various operational conditions. These pumps are particularly suited for applications that require high temperatures, such as processing melted chocolate (< 100 degrees) or sugar masses (>100 degrees), maintaining efficiency and reliability.

Moreover, lobe pumps offer excellent Net Positive Suction Head required (NPSHr), enabling their use in vacuum applications – which is a requirement in confectionery manufacturing for specific process steps.

Similarly, twin screw pumps should be considered, since they offer low-shear capabilities and are able to gently handle delicate products, preventing damage to ingredients such as nuts and fruits. They can handle a wide range of viscosities, from thin syrups to thick pastes and they ensure a consistent flow of product which is crucial for maintaining quality and uniformity in confectionery production. Twin screw pumps can



be easily cleaned and sterilized in place, reducing downtime and maintaining product safety.

To be assured of the quality of equipment, candy and confectionery processors should look to a trusted and reputable brand that can offer the optimal balance between performance, reliability and costs and help them achieve the sweet spot in their manufacturing process.

www.verder.co.za

VERDER

VERDER

The perfect pumps for your candy and confectionery processing applications





A record 1110 products from 77 South African dairy producers competed for the attention of 103 judges over three days, from Wednesday 19 February to Friday 21 February 2025, at Eensgezind outside Durbanville, during the 192nd SA Dairy Championships. Photo: A Gorman Photography

Innovation and records take centre stage at the 192nd South African Dairy Championships

The judging of Africa’s largest and oldest dairy competition, the 192nd South African Dairy Championships, began on Wednesday 19 February 2025 at Eensgezind outside Durbanville and continued over three days until Friday 22 February.

This year, a record 103 judges evaluated an unparalleled 1110 dairy products submitted by 77 manufacturers.

Breyton Milford, General Manager of Agri-Expo, which has hosted the championships since 1834, said the association is privileged to showcase excellence in the dairy industry through this prestigious competition. “We again attracted record entries, and this year’s event was highly anticipated by both entrants and judges as we introduced several changes to enhance the championships’ impact,” Milford said.

Innovation strengthens industry impact

Chief judge Graham Sutherland emphasised that innovation fosters participation. “The complexity of this competition requires that preparation commence a year in advance, in conjunction with the organisers and experts on the dairy advisory panel,” Sutherland said. “This year’s championships introduced several new initiatives. Firstly, we added various new product classes, resulting in increased entries.

Secondly, we invited additional technical judges and implemented an improved score sheet to capture 5 550 scores more effectively. Thirdly, we extended



Judge Sunett Gerber, sensory specialist at Mane, Breyton Milford, General Manager of Agri-Expo, the organiser of the championships, judge and celebrity chef Zola Nene, judge Anika van der Mescht, head of food development at Shoprite Checkers, and chief judge Graham Sutherland, during the judging of the 192nd SA Dairy Championships, presented from 19 to 21 February at Eensgezind, Durbanville, by Agri-Expo. Photo: A Gorman Photography

the judging to an additional day to accommodate ice cream products better."

Chris Fourie, President of Agri-Expo, highlighted the industry's enthusiasm for this year's championships. Judges praised not only the high-quality entries but also the valuable networking opportunities and the role of expert feedback in driving continuous product innovation.

Qualité – the dairy industry's sole mark of excellence

The SA Dairy Championships includes 150 different classes for cheese, yoghurt, milk, cream, ice cream, butter, and other dairy products. Class winners are awarded the title of SA Champion. Products of exceptional quality that achieve a minimum international score can earn the prestigious Qualité Mark of Excellence – the dairy industry's highest accolade. The product with the highest overall score is crowned Product of the Year. Winners will be announced at the SA Dairy Awards on 8 April.

Milford expressed gratitude to the thirteen industry partners supporting the SA Dairy Championships. "We sincerely appreciate the support of our platinum

partners IMCD and DSM-Firmenich, our diamond partners Novonesis and SIG, our gold partners Woolworths, Synercore, Condio, Hollard, Checkers, IFF, Orchem, and the Western Cape Department of Agriculture, as well as our silver partners Pick n Pay and Mane."

All products are donated to a charity after the judging.

For more information, visit <https://cheesesa.co.za/>



The country's top dairy experts gathered in Durbanville for the judging of the 192nd SA Dairy Championships, the largest and oldest dairy competition in Africa. Pictured is the panel of cheese and butter judges. *Photo: A Gorman Photography*



Optimise Dairy Quality with Confidence

From farm to packaging, our advanced solutions support dairy professionals in maintaining top-tier standards. The **Lactoscan Milk Analyser** delivers fast, accurate measurements of fat, protein, lactose, and more, while our somatic cell counters and microbial detection tools enhance food safety and compliance.

- **Compliance:** Meets ISO 13366-1:2008 (IDF 148-1:2008) standards
- **Measuring Range:** 2 to 30 µm
- **Output:** Results are expressed as the number of cells per ml
- **Speed:** Results are available within 20 to 60 seconds, depending on the type of analysis



Explore our newly launched Dairy Testing Solutions Catalogue

This catalogue offers a complete range of advanced technologies to support quality control, food safety, and compliance in dairy production.

Contact us for a quote or to request a copy of our dairy testing solutions catalogue at dairy@lasec.com

+27 21 531 7504 sales@lasec.com www.lasec.com



GEA launches an energy efficient dairy evaporator for the dairy industry



Evaporators are among the largest energy consumers in dairies. They are used in the production of whole and skim milk powder, infant formula and whey powder. Reducing their energy consumption can have a significant impact on both energy costs and overall plant sustainability. The new eZero Dairy Evaporator enables these energy savings without compromising product quality.

Significant reduction in energy consumption and CO₂ emissions

GEA's Dairy Evaporator eZero aligns with the company's commitment to eliminating dependency on fossil fuels by transitioning to renewable energy sources and empowering customers to produce more sustainably. Depending on plant operation specifics, resources, and the electricity emission factor, the new system can reduce energy consumption up to 60% and CO₂ emissions by up to 100% compared to conventional mechanical vapour recompression (MVR) evaporators. By means of green electricity, zero CO₂ emissions can be achieved which may also include offsetting measures depending on the energy mix of the electricity provider.

Engineering competence for future proofed solutions

Thermal vapour recompression (TVR) is typically applied to multi-effect evaporators powered by live steam, while mechanical vapour recompression (MVR) is more energy efficient and uses electricity to recompress and recycle product vapour in single-effect evaporators. Both technologies rely on steam for heating products before evaporation. The eZero

evaporator is compatible with MVR systems and can also be applied to TVR evaporators after conversion to MVR technology. It is also adaptable to new and existing systems.

To convert an existing TVR evaporator to use the eZero, the thermocompressor is replaced by a standard compressor, while reusing the evaporator's calandria and the high-speed mechanical compressor for the evaporation process. This conversion is the first crucial step in reducing steam consumption and CO₂ emissions by moving away from fossil fuels.

The eZero evaporator takes a further step by integrating an ammonia heat pump to transfer the heat from the vapor at the condenser to a low-pressure steam generator or flash vessel. This process naturally creates two loops of water: a cold loop (approximately 35–45°C) that cools the condenser water loop, and a hot loop (approximately 80–90°C) that provides heat for the heat treatment system. Hot water is flashed to produce low-pressure steam, which is then recompressed to higher pressure for efficient product heating.

www.gea.com



Lasec to showcase top brands, innovations and LIMS solutions at analytica Lab Africa

Lasec, the highly regarded solution provider for laboratories across Africa, will showcase 17 international suppliers and a broad range of solutions and innovations at its pavilion at analytica Lab Africa in Johannesburg in July this year.

The Lasec pavilion is a major drawcard at analytica Lab Africa, with delegates travelling from across Africa for a rare opportunity to get hands-on access to the latest laboratory furniture, equipment and software solutions.

According to Lasec Director Delphine Darling, the pavilion at the trade show will feature suppliers of products and solutions across the laboratory workflow, with product demonstrations and talks throughout each day.

She says: "Visitors to the pavilion will benefit from informative interactive talks, hands-on demos, and literally explosive demos on chemical safety. They will also get a first-hand look at some suppliers who are new to analytica Lab Africa, including innovative products for food and beverage and packaging quality control in the FMCG industry."

Lasec Product Portfolio Manager Kylie Davis says, "Lasec has grown its pavilion at analytica Lab Africa over the years. This year we had such an excellent response from previous suppliers that we had to work on a first-come, first-served basis for supplier participation. Many suppliers wanted to come again and many new suppliers wanted to participate, so we were oversubscribed for the space that we had available in 2025."

In line with a growing focus on AI and data-driven decision making, Lasec will also introduce a Laboratory

Information Management System (LIMS) partner at analytica Lab Africa this year.

Davis says, "LIMS can basically help you to run your lab more effectively, improving sample flow, and using data more effectively for decision-making. Where LIMS was once the preserve of highly specialised labs, it is now becoming more accessible and essential for most labs. At analytica Lab Africa, we will have a biotechnology-focused laboratory setup connected to a mock LIMS system, so visitors can see how working LIMS can function."

Davis adds that the co-location of analytica Lab Africa with IFAT Africa, the leading trade fair for water, sewage, waste, and recycling, is highly beneficial for exhibitors and visitors to the trade shows.

She says, "Lasec supplies products that assist with waste management, so at the last co-located event, we had numerous visitors to IFAT Africa visiting our pavilion too."

"Environmental impact is a priority within the laboratory space, and apart from waste management equipment, we also have a number of innovations that can support better use of consumables in the lab and the cutting down of waste in the laboratory industry. So it is a very relevant co-location."

Darling notes, "As the ultimate solution provider for laboratories, Lasec works to fulfil a complete workflow. At analytica Lab Africa, our biotech lab showcasing the furniture that our team manufactures, as well as the range of products we can offer for various types of labs. We will also highlight our application specialists who assist customers in getting the maximum out of their equipment, and the expertise of our service department."

www.lasec.com

Growth strategy and investment pays off for Fuchs Lubricants

An aggressive growth strategy in South Africa and Sub-Saharan Africa over the last decade has resulted in a CAGR of 6% in volume sold since 2015. “The result of this is that sales volume has nearly doubled in this time,” said Paul Deppe, managing director of Fuchs Lubricants South Africa and Regional Vice President of Sub-Saharan Africa.

Paul Deppe was speaking at the official opening of the expanded facility in Isando. “This growth would not have been possible had the Fuchs Group not the confidence and desire to support its subsidiary in South Africa.” More than R650 million has been invested in creating capacity at the South African subsidiary over the past eight years. “It is a huge confidence boost in the country and the Fuchs business in South Africa,” said Paul Deppe.

Joining the event from Fuchs SE was Dr. Ralph Rheinboldt, chairman of the South African subsidiary and member of the Fuchs SE Executive Board responsible for EMEA, Dr. Sebastian Heiner member of the Executive Board and CTO, and Matthias Spethmann, Vice President of EMEA OEM sales.

“Fuchs has marked a significant milestone with the completion of its expanded plant in Isando”, said Deppe. The project commenced in 2020 with the purchase of an adjacent site to accommodate the company’s growth. This expansion follows the initial investment in a new grease plant commissioned in 2018.

“The newly built facility, which now spans 6ha, doubling its previous size, represents a R500 million investment in “creating capacity” and technological advancement”

The project includes a new office complex, warehouse, laboratory, tank farm, oil lubricants blending plant, and state-of-the-art filling machines. Completed in December 2024, the expansion has increased production capacity by over 40%. The development has been a key factor in Fuchs’ growth, which now employs nearly 450 people, up from 250 in 2015. No staff redundancies took place during this period, with the company continuing to invest in employee training and upskilling.

Fuchs worked closely with several partners, including global engineering firm DRA Global, the Engineering, Procurement, and Construction



From left to right, Dr. Ralph Rheinboldt, Paul Deppe and, Dr. Sebastian Heiner



Paul Deppe, MD

Management (EPCM) consultant. Other consultants who contributed significantly were GPD Studio (architect), ILS (warehouse designer), ASP Fire (fire engineer), Stadler & Schaaf (plant automation), and Handson Electrical (electrical engineer).

Among the highlights of the new facilities is the modern office complex, which serves as the head office for South Africa and regional office for Sub-Saharan Africa. It is designed to house 110 people in a sustainable, energy-efficient environment, certified net-zero carbon by the Green Building Council of South Africa.

“The new 7 000 m² warehouse, four-and-a-half times larger than the previous one, incorporates SAP warehouse management technology supported by integrated scanning systems, and design incorporating narrow and wide aisle racking for flexibility and to maximise space utilisation”

The automated fire system conforms to NFPA standards and includes automated spill barriers. In addition, sustainability elements such as rainwater harvesting and a solar PV system which will increase total renewable energy supply to 30%.

A critical part of Fuchs’ value offering is quality control and product development. With the growth of operations, the laboratory has been renovated and upgraded. The upgraded laboratory supports its commitment to quality control and product development.

The expansion of the oil lubricants production capacity includes a new tank farm, blending plant, and filling hall designed for future growth. The tank farm includes capacity for 1 300m³ of base oil storage, 120m³ of heated additive storage and 300m³ of blending capacity.

There are 3 new filling lines, an IBC and drum line, a 20L filling line and Small Pack filling line currently configured to fill 5L and 1L pack sizes. All 3 lines have a high degree of automation. The IBC and drum line features a diving head piston nozzle to limit foaming and a load cell with level sensors for accurate volume and weight measurement. The 20L line and Small Pack filling line all have a range of quality features like weight checking, cap sensing, induction sealer sensing, label vision sensing and batch code printing.

“This expansion is set to enhance FUCHS’s operational efficiency, quality control, and production capacity, ensuring continued growth and customer satisfaction. The company extends its gratitude to its employees, consultants, and customers for their unwavering support throughout this transformative journey,” concluded Deppe.

www.fuchs.com/za



Large batch product



Commercial partnership to supply malt for South African brewing operations signed

Soufflet Malt and HEINEKEN Beverages have entered a commercial partnership in South Africa, with Soufflet Malt set to supply malt used in Heineken's South African operations. As part of this agreement, Soufflet Malt will invest €100 million to build a home malting facility, strategically located next to HEINEKEN's Sedibeng Brewery near Johannesburg, and set to be operational by mid-2027.

The new facility will be the most technologically advanced malthouse in South Africa and will produce 50% fewer emissions than the industry average by using trigeneration and solar energy. Its location next to the brewery will enable malt to be transferred via conveyors, reducing both emissions and costs.

With a production capacity of nearly 100,000 tonnes, the facility will create 55 full-time jobs and support over 200 local South African barley growers. Soufflet Malt will source 100% of the barley locally. To achieve this goal, Soufflet Malt has been working in the region for several years, building long term partnerships with both commercial and developing farmers. Through training, mentoring, and

commercial support, Soufflet Malt is helping them adopt agronomic best practices to grow high-quality, premium barley.

This new malting facility will play a key role in reaching both companies' long-term sustainability goals, create local employment, and bolster HEINEKEN's supply chain in South Africa.

"This significant investment by Soufflet Malt, in partnership with our company, marks a monumental commitment to South Africa and is a venture we are immensely proud to be part of. Our company is deeply committed to the region, continuously enhancing our investment in the country. Our focus is on intensifying our support for local production, local sourcing, and job creation. This project is a clear testament to these



objectives and aligns with our 'Brew a Better World' agenda, underpinned by sustainable practices and supporting the communities in which we operate," said HEINEKEN Beverages MD, Jordi Borrut.

"This partnership perfectly reflects Soufflet Malt's ability as the world's leading maltster to bring value by delivering agile and locally tailored solutions to long-standing global clients, such as Heineken. We are proud to be able to support HEINEKEN Beverages deliver its ambitious vision for South Africa through our unique capabilities that seamlessly blend innovation in agronomy with global malting expertise and a locally-integrated supply chain" said Jorge Solis, CEO of Soufflet Malt.

New €100 million malt production facility will create jobs, support local barley farmers, and strengthen South Africa's brewing supply chain

"Our collaboration with HEINEKEN Beverages marks an exciting chapter for Soufflet Malt to further strengthen the South African malt supply chain. We look forward to deepening our partnership with local farmers, fostering the development of sustainable barley farming across the country and contributing to the long-term prosperity of South Africa through this initiative", added Guillaume Couture, President EMEA at Soufflet Malt.



About

Soufflet Malt is the world's leading maltster, with 41 malting plants across 20 countries in Europe, Asia, Africa, Australia and America, and more than 2,300 employees. Soufflet Malt boasts a production capacity of 3.7 million tons of malt annually to meet the demands of its customers – large breweries and craft brewers, distillers and other industrial players – around the world.

www.heinekenbeverages.co.za/

Unlocking the future of functional foods

As the global focus on health and wellness intensifies, the functional foods sector is experiencing unprecedented growth. Products like meal replacer drinks, functional gummies, powders like super greens and other health-boosting consumables are no longer niche items but have become essential components of modern diets.

These products offer more than just basic nutrition – they provide targeted health benefits that align with the growing consumer demand for longevity and improved overall wellness. In this rapidly evolving landscape, food manufacturers have a unique opportunity to innovate and meet the sophisticated needs of today's health-conscious consumers.

The surge in demand for functional foods

In recent years, the functional foods market has witnessed a significant uptick in demand, driven by a consumer base that is more informed and proactive about its health than ever before. Market research projects that the global functional foods market will reach US\$ 275.77 billion by 2025, underscoring the importance of this sector in the broader food industry. The appeal of functional foods lies in their ability to address specific health concerns while providing convenience – a critical factor for today's busy consumers.

Meal replacer drinks, for example, offer a balanced array of essential nutrients, making them ideal for those who need a quick yet nutritious option. Functional gummies, packed with vitamins, minerals and adaptogens, cater to individuals looking for a convenient and enjoyable way to enhance their daily intake of health-boosting ingredients. As the consumer demand for these products continues to rise, manufacturers are tasked with the challenge of creating functional foods that not only meet but exceed expectations.

The role of innovative ingredients

The success of functional foods is heavily reliant on the use of ingredients that deliver real, tangible health

benefits. Among the most impactful and sought-after components in the industry today are botanicals, probiotics (along with prebiotics and postbiotics), plant-based proteins and essential vitamins and minerals. These ingredients not only enhance the nutritional profile of functional foods but also cater to specific health goals, making them indispensable to modern formulations.

1. Botanicals: The use of botanicals in functional foods is a trend that continues to gain momentum. These plant-derived ingredients, including herbs, roots, leaves and flowers, are revered for their natural healing properties. Botanicals like guarana, rosehip, rooibos and ginger are commonly incorporated into functional foods for their anti-inflammatory, digestive and calming effects, respectively. Rosehip, for example, is particularly noted for its ability to reduce inflammation and support joint health. Ginger is widely recognised for its digestive benefits and its role in enhancing immune function. Rooibos, often associated with relaxation, is also used for its antioxidant properties. The appeal of botanicals lies in their natural origin and their ability to provide specific health benefits without the need for synthetic additives.

2. Probiotics, prebiotics & postbiotics: Gut health is a cornerstone of overall wellness, and the integration of probiotics, prebiotics and postbiotics into functional foods is a testament to this understanding. Probiotics, which are live beneficial bacteria, help maintain a balanced gut microbiome, crucial for digestion, immune function and mental

health. Common strains like *Lactobacillus* and *Bifidobacterium* are frequently added to functional foods to promote digestive health and enhance immunity. Prebiotics, on the other hand, are non-digestible fibres for humans that feed these beneficial bacteria, supporting their growth and activity. They also have secondary health effects on people's immunity and mental health. Ingredients like inulin and fructooligosaccharides are popular prebiotics used to enrich functional foods.

The newest addition to the gut health trio, Postbiotics, are cells of inactivated bacteria (probiotics). Due to the inactivation step, these bacteria, including short-chain fatty acids, peptides and enzymes, are very stable and can pass through by gastric juice. They have been shown to exert various health benefits, such as reducing inflammation, enhancing gut barrier function and modulating the immune system. The inclusion of all three – probiotics, prebiotics and postbiotics – creates a synergistic effect that maximises the health benefits of functional foods, making them more supportive in promoting gut health and overall well-being.

“The appeal of botanicals lies in their natural origin and their ability to provide specific health benefits without the need for synthetic additives”

3. Essential vitamins and minerals: Vitamins and minerals remain foundational to the nutritional value of functional foods. These micronutrients are critical for various bodily functions, from energy production and immune defense to bone health and cognitive function. Recently, the trend towards naturalness has led manufacturers to choose vitamin solutions close to nature such as acerola which is a powerful antioxidant to support skin health, immunity and overall health. Next to Vitamin C, vitamins like D and B-complex are particularly vital. Vitamin D is essential for bone health and immune function, while B-complex vitamins are crucial for energy metabolism and brain function. Similarly, minerals like magnesium, zinc and calcium are indispensable for maintaining muscle function, immune health and bone density.

The challenge for manufacturers is to incorporate these essential nutrients into functional foods in a way that is both bioavailable and appealing to consumers. Innovations in food technology are making it possible to enrich products with these vitamins and minerals without compromising taste or texture, thus ensuring that consumers receive the full benefits of these critical nutrients in their daily diets.

Longevity & nutrition: The new frontier

The pursuit of longevity is increasingly driving innovation in the functional foods sector. This trend aligns with the broader concept of "better human nutrition," where nutrition plays a pivotal role in preventing chronic diseases and promoting healthy aging. Consumers are looking for products that not only nourish but also protect against the effects of aging, and functional foods are well-positioned to meet this demand.

- 1. Anti-inflammatory ingredients:** Chronic inflammation is a significant contributor to various age-related diseases, including heart disease, diabetes and neurodegenerative disorders. Functional foods that incorporate anti-inflammatory ingredients like pomegranate, elderberry and ginger are becoming increasingly popular for their potential to reduce inflammation and support overall health.
- 2. Antioxidants:** Antioxidants such as vitamin C, E, resveratrol and coenzyme Q10 are essential in combating oxidative stress, a key factor in the aging process. By neutralising free radicals, these ingredients help preserve cellular health and reduce the risk of age-related diseases, making antioxidants like acerola valuable additions to functional foods aimed at promoting longevity.
- 3. Plant-based Proteins:** The shift toward plant-based diets is also influencing the functional foods market. Plant-based proteins like pea protein, sunflower protein and hemp protein are not only sustainable and ethical but also offer significant health benefits. These proteins support muscle health and recovery, making them an attractive option for consumers seeking both nutrition and sustainability.

Seizing the future of functional foods

As the functional foods market continues to grow, manufacturers have a remarkable opportunity to lead the charge in promoting longevity and better nutrition. By focusing on innovative, science-backed ingredients and staying ahead of consumer trends, companies can develop products that resonate with today's health-conscious consumers.

The future of food lies in the fusion of health, convenience and longevity. Whether through a nutrient-packed meal replacer drink, a convenient functional gummy, super green and super red powders or any other functional food product, the potential to improve human health through nutrition has never been greater. Manufacturers who embrace this opportunity will not only succeed in a competitive market but also contribute to the global movement towards better health and well-being.

www.doehler.com



Botanicals: Flavour and functionality in product development – a view from the inside

Botanicals have long been the secret weapon of mixologists, adding depth, complexity, and a touch of nature’s magic to cocktails. But in recent years, they’ve gone from being a subtle accent to taking centre stage in both alcoholic and non-alcoholic beverages. This shift is particularly relevant for product developers looking to harness their unique properties in new drink innovations.

A fresh take and CO₂ emissions

For centuries, Mediterranean herbs, citrus peels, and floral extracts have been a bartender’s best friend. But now, there’s a shift towards local, sustainable ingredients—things you might find growing on a

nearby farm or sourced through responsible supply chains. Every botanical carries a sense of place, a piece of history, and an opportunity to create something truly unique. For product developers, this presents a chance to integrate botanicals that align with both flavour innovation and ethical sourcing.

At Queens Lounge, this philosophy is embraced in their cocktail creations. “We use a variety of Mediterranean botanicals, and occasionally some local Fynbos. Fresh botanicals impart depth, brightness, and aromatics to cocktails that no liquid-based ingredient can. For this reason, we make use of them to achieve specific results in a cocktail,” shares Matthew Cox, Bartender and Manager at The Queens Lounge.

The value of botanicals in product development

Thermal vapour recompression (TVR) is typically The use of botanicals in beverage development extends beyond taste, offering a range of functional benefits

that cater to modern consumer preferences. Some botanicals contribute to relaxation and stress relief, such as chamomile and lavender, while others, like ginger and ginseng, provide an energy boost. The digestive benefits of ingredients like mint and fennel also add value to formulations, especially in the growing wellness drinks category.

Balancing flavour and function

Product developers must consider how botanicals interact within a drink to achieve the perfect balance of taste and benefits. Some ingredients demand the spotlight, while others work best in the background, enhancing depth and complexity. This requires careful formulation, testing, and an understanding of how these ingredients evolve over time in a beverage. The rise of botanical-based liqueurs, syrups, and mixers is opening new possibilities for crafting distinct flavour profiles.

Challenges in working with botanicals

One of the key challenges in working with botanicals is maintaining consistency in supply and flavour. As fresh produce and botanicals are seasonal, their availability fluctuates throughout the year. This requires careful planning—short seasonal specials can be an effective strategy to celebrate botanicals at their peak while allowing for dynamic product rotations.

areas. Partnering with responsible growers and collectives, such as urban farms or certified organic suppliers, is a strategic way to ensure both quality and sustainability.

Emerging botanical trends

According to AJ Durrow, Bar and Beverage Specialist, a key trend in both alcoholic and non-alcoholic beverage development is the celebration of native and indigenous botanicals. These ingredients tend to be more environmentally sustainable, as they require fewer resources to grow and support local biodiversity. Additionally, initiatives such as The Bar World of Tomorrow's SIP and Drink More Water campaign highlight how botanical-infused water can promote responsible drinking practices and enhance hydration awareness.

“The ability to craft drinks that offer both flavour and functionality ensures that botanicals will continue to be a key focus for brands looking to meet the evolving demands of the industry”

The future of botanical innovation

With the rise of low- and no-alcohol drinks, botanicals are becoming increasingly influential in product development. Floral-infused gins, herbaceous aperitifs, and innovative botanical sodas are just the beginning. The ability to craft drinks that offer both flavour and functionality ensures that botanicals will continue to be a key focus for brands looking to meet the evolving demands of the industry.

For product developers, the integration of botanicals is more than just a trend, it's a strategic opportunity to create beverages that are flavourful, functional, and aligned with sustainability efforts. By balancing creativity with responsible sourcing, brands can tap into the growing demand for unique, experience-driven drinks. As the industry continues to evolve, those who leverage botanicals effectively will be at the forefront of innovation, crafting beverages that not only taste exceptional but also offer meaningful benefits to consumers.

For more information on Queens Lounge, please follow them on Instagram
https://www.instagram.com/queens_cpt/



Matthew Cox

Sustainability and ethical sourcing

Sustainability plays a crucial role in botanical selection. Brands and developers must ensure that their sourcing practices do not harm the environment or deplete natural resources. In some cases, foraging for botanicals may not be ethical, particularly in protected

Unveiling APMEA's 5 top taste trends

Consumers today are becoming more exposed to different cultures and cuisines, which has whetted their appetite for new and exotic flavours. As a result, the rise of fusion cuisine on menus has led to a more sophisticated consumer palate, bringing new opportunities for market players to introduce food and beverages with international flavours.

Reinvention is a recurring theme across Asia Pacific, Middle East, and Africa (APMEA). Kerry's 2025 Taste Charts reveal how global flavours are being adapted to regional preferences, allowing F&B brands to meet consumer demand and expectation while staying true to unique market characteristics.

Reimagined traditional and heritage flavours

A 2024 Global Data report shows fusion cuisine is gaining popularity in Asia. Foodservice operators are revitalising traditional menus by offering unusual flavour combinations and presentations to cater to changing consumer preferences.

Insights from **Kerry's** Taste Trends and Taste Charts for Southeast Asia and Africa support this. While people continue to celebrate traditional cooking methods and authentic, nostalgic foods and flavours such as salted egg, Indonesian rendang, Sarawak white pepper and Philippine adobo, they are also embracing a twist to classics.

We are seeing this in exciting pairings such as ramen- and scallion oil-flavoured popcorn, and rendang beef wellington from Asia, jollof sushi, injera tacos, or biltong pizza from Africa, as well as Asian-inspired matcha strawberry cheesecake and Korean bulgogi tacos from Australia and New Zealand (ANZ).

Turning up the heat with spice and smoke

Also setting tastebuds on fire are hot and smoky flavours. Kerry Taste Charts reveal kimchi, sambal, ghost chilli, peri-peri chilli, jalapeno chilli, and habanero chilli are hot flavours trending across APMEA.

Smoke flavours are also enjoying significant growth, particularly in Africa and Asia where barbecue or grilled meat is part of the culinary culture. Staples like South Africa's chicken dust, chinginga (West African kebab), and mishkaki (East African beef skewers) remain crowd favourites in Africa. As demand for smoky flavours grow, brands can turn to well-loved



African spice blends and chilli-based sauces, like smoky suya spices and peri-peri chilli, to add heat, depth, and complexity to dishes. In meat and snacks, cayenne pepper and cameroon pepper are also gaining popularity.

Elsewhere in APMEA, sweet combinations like honey barbecue, sweet smoke, and maple barbecue are showing up, while traditional preparations like Indian tandoori, Brazilian and Hawaiian barbecue are influencing global menus. Meanwhile, in other parts of the world, Asian flavours are going strong: Sichuan spices are turning up in condiments in Europe, and Korean barbecue is making waves in ready-meal options in North America.

Drink up to next generation beverages

Across the region, health and wellness continue to influence beverage trends in 2025. While consumers want products they perceive to be healthier, they also crave fun indulgence. For example, prebiotic sodas such as Poppi and Olipop are healthier alternatives that also satisfy soda cravings.

Africa's Taste Charts in the past years reveal local botanicals such as rose, marula, hibiscus, baobab, and moringa have been some of the fastest growing flavours.

Thanks to their healthy halo benefits and unique taste profiles, botanical, herbal, and functional ingredients are finding their way into beverages. Citrus flavours are also evolving. While lemon, orange, and lime continue to dominate refreshing beverages, other varieties are emerging in the region such as blood orange, yuzu, finger lime, pomelo, and verbena.

Beverages are also an opportunity for brands to customise global flavours to regional preferences, such as yuzu in reduced-sugar beverages, or hybrid green tea-infused cocktails and botanical-infused boutique gins in ANZ.

Enhancing taste experiences

The growing middle class is fuelling demand for premiumisation across categories, with Kerry insights showing there is an emerging gourmet street food scene in Asia.

The use of high-quality ingredients and innovative cooking techniques are raising the bar for street food classics. We see this in foods like pistachio kunafa martabak, durian churros, caviar Thai coconut pancake, and rendang pani puri.

In ANZ, consumers are reaching for premium comfort treats like decadent pistachio knafeh chocolate bars and chef-led gourmet burgers. Similarly, classic dessert flavours are making a presence outside of their categories. To meet consumer desire for premium snacks, brands in the Middle East have launched crème brûlée, salted caramel, and cheesecake-flavoured snacks and beverages.

Kerry's data also shows growing interest in flavours and ingredients associated with indulgence among consumers in India, including sun-dried tomatoes, pesto, lemongrass, and olives.

Innovative pairings for adventurous palates

The younger generation are taking the lead when it comes to experimentation.

Numerous reports indicate Gen Zs (those born between 1997 and 2012) are the most adventurous when it comes to food.

According to a study by Hartman Group, 32% of Gen Zs love to try new types of foods and cuisines, and 50% want more meals with unique flavours or different cuisines.

Making up 30% of the world's population, Gen Zs' adventurous palates are influencing food and



beverages trends across regions, with foods that experiment with flavour, format, and texture seeing an uptick.

On the menu are unexpected combinations like espresso ice cream-filled croissants and crispy breaded chicken coated in hot and spicy noodles in the Middle East. In Southeast Asia, cross-cultural flavour creations like Korean chestnut tiramisu and pistachio kunafa croissant are winning over tastebuds. Even brands like Coca-Cola and Oreo have jumped onto the bandwagon with their collaboration: an Oreo-inspired Coca-Cola drink and a Coke-inspired Oreo cookie.

Kerry Taste Charts for APMEA show flavours such as palm sugar, miso caramel, Thai tea, and matcha tiramisu are sought after as more consumers look for unusual flavours and collaborations to get a new taste fix.

Even traditional cheese is getting a makeover. While cheddar and parmesan emerged as the most popular cheese flavours worldwide, Kerry insights show that consumers in India are moving beyond classic cheeses to new cheese pairings like truffle parmesan.

Ultimately, consumers today want food and beverage products that offer more than just taste. What they want is a touch of nostalgia or familiarity coupled with fresh, exciting flavours, and sensory appeal — in short, a bigger, better, bolder eating experience.

Discover trending flavours and ingredients to support your next product innovation with **Kerry Taste Charts 2025**

www.kerry.com

About the author:

By Jie Ying Lee, Senior Strategic Marketing Manager, Taste, Kerry Asia Pacific, Middle East & Africa

Bühler showcases three extraordinary career journeys on International Women's Day 2025

International Women's Day (IWD) is a global celebration of the achievements of women and a call to action to accelerate gender equality. The theme for IWD 2025 is Inspiring Inclusion, emphasising the need for workplaces to embrace diversity, foster equity, and create an environment where all individuals can thrive.

Bühler is proud to stand at the forefront of this movement, championing the success of women in engineering and manufacturing. This year, it celebrates the remarkable journeys of three exceptional women who have paved the way for future generations: Angelique Visage, Nosipho Dlamini, and Lusanda Myeki.

Lusanda Myeki: Breaking barriers in Welding

Lusanda embarked on her career at Bühler as an apprentice, completing her studies in welding and manufacturing. Seven years later, she stands as the first female welder trained by Bühler Johannesburg, an accomplishment she holds with great pride.

Her defining career moment came when she had the opportunity to travel to Switzerland for training. "Seeing Bühler's global operations firsthand opened my eyes to new possibilities. Learning from different cultures expanded my knowledge and confidence."

Like many women in her field, Lusanda has had to prove herself against gender stereotypes. "Males often underestimated my abilities, but I have demonstrated that women can perform at the same level of quality and efficiency," she asserts.

She attributes much of her success to her foreman, who continuously motivates and challenges her. "Having someone believe in you makes a world of difference." Her advice to young women entering the trade: "There will be challenges but face them head-on. Every challenge shapes you into a stronger version of yourself."





Angelique Visage: A Passion for Health and Safety

Angelique's career path has been anything but conventional. Starting in finance, she transitioned into the field of health and safety 18 years ago and has since dedicated her career to creating safer work environments. Armed with a National Diploma in Food Safety and multiple health and safety certifications, she currently serves as the Health and Safety Manager for Bühler Johannesburg and has recently been promoted to Regional Health and Safety Manager for the Middle East, India, and Africa region.

"My passion for health and safety stems from my deep-rooted belief in protecting human life and well-being," says Angelique.

"At Bühler, I have had to be incredibly versatile, and this experience has strengthened my ability to lead and adapt."

As a woman in a traditionally male-dominated field, Angelique has faced skepticism about her ability to handle physically demanding tasks. "Early in my career, I learned that mutual respect is built by walking in others' footsteps and understanding their challenges," she explains. She credits her mentors for guiding her along the way. "A mentor does not need to walk the entire journey with you, but their belief in you during key moments is invaluable."

Her advice to young women entering the industry is: "Be passionate about what you do, seek mentorship, and stand firm in your beliefs. Challenges will come, but perseverance and confidence will set you apart."

Nosipho Dlamini: Carving her path as a boilermaker

Born and raised in Thokoza, Nosipho is the third of four siblings and was raised by a single mother after losing her father at a young age. Her resilience and determination led her to pursue a boilermaker apprenticeship at Bühler, where she has flourished despite the odds.

"I was drawn to the challenge and independence that this career offers," she shares. "It has pushed me beyond my limits and helped me grow every single day." Nosipho's biggest challenges have been overcoming stereotypes and self-doubt. "I remind myself that I am here to learn, and I push myself to not just meet expectations but exceed them."

She finds inspiration within herself, visualising the successful woman she aspires to become. "I have always considered myself my own role model. Every day, I work towards the best version of myself." Nosipho is proud of her perseverance in a male-dominated industry and is eager to continue climbing the ranks. "One day, I hope to become an expert in my field."



Building a More Inclusive Future

At Bühler, fostering diversity and inclusion is more than a corporate initiative, it is a commitment to empowering women in engineering, manufacturing, and beyond. Angelique, Lusanda, and Nosipho are living proof that with resilience, determination, and support, women can break barriers and lead the way for future generations.

As we celebrate International Women's Day 2025, let us continue to support and uplift the women around us. Through mentorship, advocacy, and creating inclusive workplaces, we can build a future where gender equality is not just an aspiration but a reality.

www.buhlergroup.com

#WASTE2WONDER

2024

Preparing to serve the #Waste2Wonder meal

Waste to wonder: How collaboration, innovation, and youth entrepreneurship can transform South Africa's food waste challenge

At the start of each new year, attention naturally shifts to education. Schools and universities open their doors, matric results are released, and questions emerge about preparing young people for the future. This year, an inspiring intersection is gaining momentum: the convergence of education, youth entrepreneurship, and food waste solutions.

Globally, the statistics on food waste are staggering. The United Nations Environment Programme (UNEP) estimates that 17% of total global food production is wasted annually, a figure that includes households, food services, and retail sectors. A 2021 WWF report, *Driven to Waste*, suggests the global total could reach 2.5 billion tonnes of wasted food each year.

Closer to home, the CSIR reported in 2021 that South Africa wastes approximately 10.3 million tonnes of food annually—roughly a third of the nation's production. Meanwhile, the youth unemployment rate exceeds 60% among South Africans aged 15–24, according to Stats SA's latest Quarterly Labour Force Survey.

These statistics underscore a powerful opportunity: equipping young South Africans to transform food waste into viable, scalable resources.

Academia and industry: A perfect match

Last year, the University of Pretoria's Department of Consumer and Food Sciences partnered with SA Harvest and other stakeholders for the second



UP student preparing for service

annual UP-Cycled Food Experience. Under the banner of #Waste2Wonder, university students showcased gourmet dishes and retail products crafted from surplus ingredients.

This initiative reveals the transformative potential of academia and the non-profit sector working in tandem. Converting food waste into marketable products, students gain practical skills and entrepreneurial insights. In a nation grappling with high unemployment, these lessons are more than academic; they are a pathway to job creation.

From theory to action

Led by Dr. Nadene Marx-Pienaar, whose research centres on food waste, students across disciplines—culinary science, retail management, and hospitality—developed innovative prototypes such as jam from gleaned grapes and snacks from bakery offcuts. These are not merely class projects; they are viable business models.



Margolite Williams from SA Harvest with Fashion students demonstrating their creative use of Blue Ribbons bags



Pinky Tshabalala with Ozzy Nel, COO of SA Harvest at the Up Cycled Dinner prepared by UP Hospitality Students

The Department of Small Business Development's 2024 policy statement emphasises youth entrepreneurship as a key strategy for tackling unemployment. By reframing food waste as a resource, young entrepreneurs can build businesses that address both environmental challenges and economic needs.

"It's in these collaborative ecosystems that true innovation thrives," says SA Harvest COO, Ozzy Nel. "When industry, academia, government, and non-profits unite, we unleash creativity that redefines value chains and creates jobs for our youth."

The power of collaboration

SA Harvest's mission to end hunger in South Africa hinges on multi-sector collaboration. "Our partnership with the University of Pretoria exemplifies how we mentor students, provide insights into food value chains, and connect them with networks that amplify their impact.

"Real-world projects such as reclaiming "ugly" produce for retail or designing upcycled products foster entrepreneurial thinking. These efforts equip young people to address social challenges while building sustainable businesses," he points out.

Building momentum for 2025

As the new academic year begins, initiatives like the UP-Cycled Food Experience and programs such as KidsCove Waste Warriors demonstrate the potential of empowering youth to lead. These programs are not just inspiring; these are critical strategies for addressing food insecurity and unemployment.

"At SA Harvest, our goal is to expand these efforts to more communities, particularly among marginalised youth. By transforming waste into wonder, we can cultivate innovative businesses, reduce environmental impact, and foster economic growth.

"Food waste is not an insurmountable problem; it is an untapped resource. Through the collective efforts of academia, industry, government, and young innovators, we can turn South Africa's food waste crisis into a genuine #Waste2Wonder movement that addresses hunger, creates jobs, and inspires a new generation of entrepreneurs," he concludes.

About the author:

Ozzy Nel is COO of SA Harvest

References:

- UNEP (2021). Food Waste Index Report (<https://www.unep.org/resources/report/unep-food-waste-index-report-2021>)
- WWF (2021). Driven to Waste: Global Food Loss on Farms (<https://www.worldwildlife.org/publications/driven-to-waste-global-food-loss-on-farms>)
- CSIR (2021). New estimates of food waste in South Africa (<https://researchspace.csir.co.za>)
- Department of Small Business Development (2024). Policy Statement on Youth Entrepreneurship.
- Stats SA (2023). Quarterly Labour Force Survey: Q3 2023.



Aquaponics Project empowers learners and community with sustainable food solutions

Engen is proud to announce the launch of an innovative Aquaponics project at Khanyisa Special School, in collaboration with Green Arch Innovations Pty Ltd.

Spearheaded by entrepreneur Luvo Gugwana, Green Arch Innovations' pioneering initiative introduces a sustainable, climate-smart food production system aimed at enhancing food security, nutritional education, and community empowerment.

The project, was launched at a celebratory event in Cala on February 26th, and represents Engen's commitment to sustainable development and educational upliftment.

Aquaponics combines aquaculture (fish farming) with hydroponics (soilless plant cultivation), providing a closed-loop system where fish and plants thrive symbiotically; an approach that not only conserves water but also allows year-round cultivation of organic produce, supporting the fight against food insecurity and malnutrition.

Explains Gugwana, "With Engen's support, we are implementing this project at Khanyisa Special School to empower students with hands-on skills in sustainable agriculture, instilling environmental awareness and fostering a culture of innovation and eco-responsibility.

"The project will integrate accredited training for teachers and students, equipping them with practical knowledge in aquaponics and sustainable farming practices. The aim is to nurture an eco-conscious generation that understands the value of climate-smart agriculture and the importance of self-sufficiency."

"The project will integrate accredited training for teachers and students, equipping them with practical knowledge in aquaponics and sustainable farming practices"

Olwethu Mdbula, Engen's CSI Manager, emphasises the broader impact of the initiative. "Aquaponics not only provides a vital educational platform but also strengthens the community by enhancing local food production and creating



Luvo Gugwana, Green Arch Innovations' pioneering initiative introduces a sustainable, climate-smart food production system aimed at enhancing food security



Aquaponics is a game changer in sustainable agriculture

opportunities for training and income generation. This is part of Engen's vision to drive meaningful, long-lasting change through strategic partnerships and community-driven projects."

The project at Khanyisa Special School is designed to serve as a model for future initiatives, expanding the reach of aquaponics to more schools and communities across South Africa.

Adds Mdabula, "By embedding sustainable agriculture within educational curricula, Engen and Green Arch Innovations hope to inspire students and community members to engage in practices that promote environmental stewardship and economic resilience."

Engen's commitment to investing in sustainable development aligns with several United Nations Sustainable Development Goals (SDGs), including No Poverty (SDG 1), Zero Hunger (SDG 2), and Clean Water and Sanitation (SDG 6). The water-efficient, eco-friendly nature of aquaponics addresses these critical areas, offering a viable solution for communities facing limited access to resources and fresh produce.



Nomvuzo Ntseke, Kanyisa SGB Member with Luvo Gugwana Green Arch Innovations Simlindlele Manqina and Olwethu Mdabula from Engen and Bukelwa Xipu, Department of Education

www.engen.co.za

Are you looking for suppliers for the food, beverage and packaging industries?

Our Supplier Directory is now available



Westfalia Fruit committed to upcycling avocado by-products

Westfalia Fruit, a global powerhouse in the avocado industry is committed to utilising all parts of the avocado across the supply chain. Avocados imported for retail, food service, and wholesale customers are carefully inspected and any unsuitable avocados are processed at Westfalia's facility into products like avocado pulp, smashed avocado, guacamole, and more.

Avocado skins and seeds from the process, which were previously typically used in low-value applications such as anaerobic digesters, are now finding new, innovative, higher value alternative uses.

Having partnered with Efficiency Technologies, the valorisation of the entire byproduct channel of avocado skins and stones is assessed to optimise use, with the most recent development being an innovative technology extracting a natural, sustainable dye from avocado stones, with SAGES London.

This marks a significant advancement in total crop utilisation; the process extracts perseoragin (a rare and sought-after natural pigment) from avocado stones collected at Westfalia's UK facility. The pigment offers eight distinct shades ranging from light yellow to rich reddish-brown, creating new opportunities for sustainable colouring solutions across multiple industries. The specialised extraction method isolates perseoragin, which constitutes approximately 3% of the avocado stone, and processes it into a dried powder form, offering extended shelf life.

"This breakthrough represents a significant step in our journey toward our total crop use strategy," says Andrew Mitchell, Head of Group Innovation at Westfalia Fruit. "By transforming what was once considered byproduct into a valuable resource, we're creating sustainable solutions that benefit multiple industries. The ability to produce eight distinct natural shades while maintaining our commitment to use the entire fruit demonstrates the potential of innovative thinking in sustainable agriculture."

Expanding technology across industries

Besides the dye extraction, remaining materials from the avocado skins and stones are also processed into additional valuable products – for example, starches are directed to paper manufacture as a precursor to

packaging production, whilst ground materials find applications in cosmetics as natural exfoliants, as alternatives to micro-plastics

The natural dye extraction process represents a significant advancement in sustainable practices, particularly as industries increasingly seek alternatives to synthetic dyes. The powder format ensures stability and ease of use across various applications, while the range of the eight distinct natural shades offers versatility for different product requirements. This innovation comes at a time when consumer demand for natural, sustainable products continues to rise across fashion, beauty and packaging sectors.

The commercial potential and versatility of the natural dye have already been demonstrated through several high-profile applications. The pigment's successful showcase at London Fashion Week highlighted its viability in sustainable fashion, while ongoing collaborations with industry leaders in cosmetics and packaging demonstrate its cross-sector appeal.

Away from the UK, the process shows scalability as plans are underway to understand how the technology could be expanded to additional Westfalia facilities where more avocado by product can be processed using the same techniques, clearly this same application could also be expanded to Westfalia's global operations.

The company's integrated operations ensure efficient collection and processing of avocado stones and skins from multiple production sites, which will help to maximise the sustainable impact of the initiative and builds upon Westfalia's commitment to sustainability and circular economy principles.

www.westfalia.co.za



Packaging

REPORTER

52 Mastering downtime with the InvisiPac Hot Melt system

Read the
latest
packaging
news here

46 Packaging News

48 Design innovation in
manufacturing of tethered
PET beverage caps

49 People-centric
packaging

50 ALPLA opens state-of-
the-art recycling plant
in South Africa

55 What's happening?

Improved recyclability of polyolefin-based packaging

Siegwerk, one of the leading global providers of printing inks and coatings for packaging applications and labels, has introduced the first nitrocellulose (NC) free ink series specifically designed for surface printing on polyethylene (PE) and polypropylene (PP) packaging solutions.

The new offering includes NC-free surface solutions for both flexo and gravure printing and has been developed to meet the latest packaging design guidelines, for example from RecyClass and CEFLEX, set to actively drive packaging design in the sense of a circular economy. With the launch of the first available solutions of their kind, Siegwerk once again underlines its innovation strength and technological expertise when it comes to developing pioneering solutions to support packaging circularity.

"We have already been offering NC-free inks for lamination for a long time," says Björn Ewig, Head of Technology Flexible Packaging EMEA at Siegwerk. Together with the company's newest generation of



NC-free solutions for lamination, these new surface ink systems will be part of the company's recently introduced NC-free toolbox for flexible packaging, initially available to customers in the EMEA region. "With our new NC-free toolbox we now enable printers and converters to better meet the demand for NC-free flexible packaging, ensuring excellent recycle quality that meets the latest Design for Recycling (D4R) guidelines without compromising on print or packaging performance" adds Ewig.

<https://www.siegwerk.com/en/home.html>

Partnership continues reducing food loss through sustainable packaging

Mondi Group, a global leader in sustainable packaging and paper, is proud to announce a three-year extension to its partnership with the UN World Food Programme (WFP), the world's largest humanitarian organisation providing food assistance to those recovering from conflict, disasters and the impact of climate change. Over the past few years, Mondi's technical expertise, R&D infrastructure, and financial contribution have supported WFP in improving and optimising packaging solutions to withstand difficult transport, storage and handling conditions in crisis-affected regions.

Between 2024-2027, the partnership aims to find more sustainable alternatives to existing packaging materials, supporting WFP food manufacturers in working with sustainable fibre – both virgin and recycled, optimising material use, and enhancing packaging quality.

These initiatives will support the fight against hunger by addressing packaging-related food losses across WFP operations. They will also contribute to global efforts to curb food loss and waste, which is vital considering every year one-fifth of food produced for human consumption is lost or wasted.



"Our partnership with WFP reflects Mondi's purpose of contributing to a better world through innovative and sustainable packaging and paper solutions. Leveraging WFP's exceptional humanitarian reach and expertise, we're promoting long-term resilience in emergency food supply chains, while supporting the transition towards a circular economy," states Andrew King, Group CEO, Mondi.

<https://www.mondigroup.com/>

Not all tethered closures are equal

Leading packaging solutions provider Berry Global says high performance, robust solutions and intuitive functionality will be crucial to achieving full consumer buy-in to tethered closures for plastic bottles, which have now become mandatory throughout the European Union and have been increasingly adopted in the UK.

Consumer research firm Watch Me Think

independently asked consumers to test a range of tethered closures and Berry's solutions stood out as user-friendly, functional and comfortable caps that consumers love.

The tethered closure legislation, which came into force in June last year and is part of the EU's Single Use Plastics Directive, requires plastic bottle caps to remain attached to containers up to three litres in size after opening. Although not a legal requirement in the UK, drinks manufacturers are adopting a



standard closure across all markets for ease of production and simplified logistics.

As one of Europe's largest plastics recyclers, Berry recognises the value of recovering the entire pack, since the cap represents a significant part of the total weight of the package. The adoption of tethered closures will therefore help to increase recycling and reduce littering and waste.

<https://www.berryglobal.com/en/>

Greiner Packaging's self-separating K3® r100 packaging

Seven of the UK's leading food retailers - Waitrose, Greggs, Morrisons, M&S, Tesco, Lidl, and Asda - have transitioned to Greiner Packaging's sustainable K3® r100 self-separating packaging solution for their own-brand instant porridges.

"We are excited to see so many UK retailers realising the benefits of our self-separating packaging solution, following Symington's which became the first UK food producer to move over to K3® r100 for its Oatburst instant porridge brand last July," says Rachel Sheldon, Sustainability and Innovation Manager at Greiner Packaging UK & Ireland.

Smart Recycling for Greater Sustainability

The K3® r100 represents a breakthrough in sustainable packaging, ensuring high recyclability rates of up to 98% without relying on consumer intervention. Unlike regular cardboard-plastic combinations, where consumers have to manually separate the cardboard wrap from the plastic cup, K3® r100's materials separate

automatically before reaching the recycling facility's near-infrared detection system. This guarantees proper detection, sorting, and recycling, optimizing the packaging's environmental impact.

From Innovation to Evolution

With the latest development, K3® r100, the materials separate themselves before they reach the near-infrared detection (NIR) system at the recycling facility, leading to proper detection, sorting and recycling. The K3® r100 therefore enables cardboard and plastic to be assigned to the correct material streams during the initial sorting process, before being recycled.

<https://www.greiner-gpi.com/en/Greiner-Packaging>



Design innovation in manufacturing of tethered PET beverage caps



Origin caps make recycling easier with “mono-material” containers, made with unmodified virgin PET plastic or 100% recycled PET plastic, enabling lighter packaging, and extending product shelf life



Origin Materials (“Origin”) a technology company with a mission to enable the world’s transition to sustainable materials, has revealed engineering and design innovations in its manufacturing of tethered PET caps.

“The EU Single-Use Plastic Directive, which came into effect near the end of 2024, mandates that caps stay connected to bottles throughout the European Union,” said John Bissell, Origin Co-Founder and Co-CEO. “Our PET cap innovations are perfectly suited for that regulatory environment—and frankly any environment. We expect many other regions to introduce their own tethered beverage cap requirements as well, following the example of the EU. With our leading PET cap technology and manufacturing systems, we are extremely well positioned to address a \$65 billion caps and closures market that consumes billions upon billions of caps per year which today cannot be recycled into new caps, only downcycled.”

Bissell added: “If you’re going to keep caps connected to bottles, the logical thing to do is make the cap and the bottle from the same material: PET. Otherwise recycling centers face the problem of separating tethered HDPE or polypropylene caps from PET bottles. With our solution, caps and bottles can be recycled together easily with no need to separate. That’s a real breakthrough for recycling circularity because it increases purity and keeps valuable, high-performing PET plastic in the loop.”

The tethered PET cap complements Origin’s previously announced PET closure, which is the world’s lightest CSD (carbonated soft drink) cap compatible with the PCO 1881 neck finish and the first PET cap produced with commercial-scale equipment. Origin’s PET caps can be made with any type of PET plastic, whether virgin PET, recycled PET (rPET), or bio-based PET.

“Our patent-pending tethered cap design is simple, clever, and user-friendly,” said Bissell. “We use the threads of the PET cap and bottle to lock the cap into place, angled away from the mouth, not toward it. We are combining the performance and sustainability advantages of our PET caps – recyclability, shelf-life extension, lightweighting, ability to use recycled PET, and enablement of mono-material packaging – with an excellent user experience. We have already seen extremely strong interest in this welcome addition to our PET cap product line.

@Origin’s PCO 1881-compatible caps are commercially available, with PCO 1881-compatible tethered caps to follow afterward. In conjunction with world-class partners, we are solving the most difficult sustainability challenges, in alignment with our core mission to help transition the world to sustainable materials.

www.propakafrika.co.za

People-centric packaging

Packaging design is not only about the brand; it's about serving the consumer and improving the customer experience. By understanding consumer behaviour, preferences, and pain points – and focusing on usability, accessibility, and emotional connection – agencies can create designs that appeal to consumers while also fulfilling client briefs.

Here are some of the key consideration brands need to be thinking about in 2025.

Ensure branding and messaging are clear, well-defined and benefits oriented

Customers' attention spans are getting shorter, and their expectations, higher. So, how you show up at point-of-purchase is more important than ever before. Simultaneously, we need to balance this practicality and disruption – standing out in a positive way will ensure immediate shelf stand-out. In the UK, Cadbury got people talking about their classic milk chocolate slab simply by getting innovative with their packaging.

Tell a story

Make an emotional connection with the consumer through engaging storytelling – copywriting, illustrations, photography, and colours that are unique yet authentic to your brand personality can be used to craft a narrative.

Embrace eco-friendliness and sustainability

Sustainable packaging used to be a nice-to-have. Today, with consumers becoming ever more eco-conscious, having packaging that puts sustainability front-and-centre may unlock a whole new audience.

With the growth of ecommerce comes higher volumes of packaging (protective and otherwise). Studies suggest that most of these consumers believe brands have a social responsibility to deliver sustainable packaging, are willing to pay more for it, and even choose brands that prioritise sustainable, recyclable, and minimalist packaging over those that don't.

In addition to reducing waste, clean lines, fewer graphics and eco-friendly materials always win over cluttered, over-packaged designs.

Eliminate enragers

Enticing customers with attractive packaging, only to have them struggle to open the product when they're hungry / thirsty / in a hurry is exactly how you lose friends and alienate people.



Great packaging achieves a balance between eye-catching design and ease of use – such as easy opening, reseal ability, and ergonomic considerations. It's a complex task, but an important one.

Design for the likes

Never underestimate the importance and reach of innovative packaging. Social media channels like TikTok, YouTube and Instagram have popularised unboxing videos – a vehicle for a first impression that can drive thousands of followers towards your brand.

Today's consumer expects a more personalised and engaging unboxing experience. This requires designers to create packaging that can be easily customised, whether through limited editions, region-specific designs, or digital interactions like augmented reality, motion graphics, or QR codes. By introducing clients to innovative ideas, agencies can differentiate brands in the marketplace while also satisfying consumer desires for novel and engaging experiences.

Packaging finishes also present an opportunity to produce an unexpected experience that deepens brand connection. As consumers associate the touch and feel of a package with the quality of the product

Continued on page 51

ALPLA opens state-of-the-art recycling plant in South Africa



Approximately one and a half years after the start of construction, ALPLA the packaging and recycling specialist has opened a state-of-the-art plant in Ballito. The company has invested 60 million euros in the new plant in the province of KwaZulu-Natal.

Setting the course for the future

The Ballito recycling plant will have an initial output capacity of 35,000 tonnes of rPET flakes, of which 16,000 tonnes will be processed into rPET pellets. A state-of-the-art extrusion line has been installed for this purpose. Once all processes have been qualified and the flakes and pellets have been approved by the customer, ALPLA will start production in early 2025. 'Our plant will increase the supply of rPET in the national market. The country's beverage industry will benefit in two ways: it will receive high-quality material and it will be able to meet the legal requirements,' explains Dietmar Marin, Managing Director of ALPLArecycling.

Under South Africa's Extended Producer Responsibility (EPR) regulation, which came into force

in 2021, PET drinks bottles have had to contain 10 per cent recycled material since 2022. The legislation requires this to double to 20 percent by 2026. 'With our expertise and experience in recycling and processing, we are a reliable partner for sustainable solutions. At the same time, we are promoting the circular economy in South Africa and reducing waste through close cooperation with regional collection programmes,' says Plant Manager Gerhard Meyringer. The recycling plant is already designed to increase the proportion of pellets and can accommodate a second

extrusion line for this purpose. An additional 30,000 square metres of space is available at the site for further expansion. ALPLA will process the high-quality recycled material into PET preforms for the production of drinks bottles at the Lanseria plant, which opened in 2022.

Opening ceremony

At the opening ceremony ALPLA Chairman Günther Lehner, together with Dietmar Marin, Managing Director of ALPLA recycling, and Plant Manager Gerhard Meyringer, welcomed around 180 guests from the worlds of business and politics including representatives from the South African Ministries of Trade, Industry and Competition and Forestry, Fisheries and the Environment, representatives from the province of KwaZulu-Natal, the eThekweni Metropolitan Municipality and the iLembe District Municipality, as well as Austria's Ambassador Romana Königsbrun.

'South Africa is a strategically important market for us and one in which we want to continue to grow. Together with our customers and partners, our aim is to provide safe, affordable and sustainable packaging solutions to our customers and to continue improving standards of living. With our investments in Ballito and before that in Lanseria, we have laid the foundation for a successful future,' says ALPLA CEO Philipp Lehner.

'ALPLA's involvement does not only accelerate the industrialisation of iLembe District Municipality, but ensures investing in projects that support UN Sustainable Development Goals, attracting other



companies along the value chain and creating several thousand jobs in the collection infrastructure,' states Sihle Ngcamu, CEO of Trade & Investment KwaZulu-Natal.

<https://www.alpla.com/en>

Continued from page 49

inside, consider what this tactile interaction feels like. Unboxing should be a multi-sensory experience – the look, the feel, the smell. A unique opening ritual can be disruptive and memorable for your brand (think of the Grolsch beer top). Tactile innovation is rare, but its rarity may make it even more desirable than digital innovation.

Be consistent across platforms

With the rise of e-commerce, packaging must be consistent across both physical and digital platforms. Ensuring that a brand's identity is maintained, whether a product is purchased online or in-store, is crucial for cohesive customer experience.

Stay up to date with regulatory compliance

Packaging design in South Africa is regulated by a combination of national laws, industry standards, and

specific guidelines that ensure safety, environmental sustainability, and consumer protection. Designers must stay up to date with these regulations and ensure that packaging meets all legal requirements, as non-compliance can lead to penalties, product recalls, and damage to brand reputation.

Customers do judge a product by its cover.

By getting the packaging right, brands can win customers' hearts before they've even tried what's inside.

About the author:

By Brandon Head, Creative Director at The Hardy Boys, a VML company



Mastering downtime with the InvisiPac Hot Melt system

In the fast-paced world of manufacturing today, downtime is not merely an inconvenience, but rather a costly setback that can have a significant impact on productivity, profitability, and customer satisfaction.

Each minute of halted production translates into lost revenue and wasted resources. However, the InvisiPac Hot Melt System offers a revolutionary solution that goes beyond mere possibility and transforms downtime into a thing of the past.

This cutting-edge adhesive application technology is designed to minimise interruptions and maximise uptime, enabling businesses to maintain seamless operations and gain a competitive edge. In this article, we will delve into how the InvisiPac Hot Melt System can effectively eliminate downtime and revolutionise your production processes.

1. On-Demand Adhesive Melting (No glue Build-Up, No Burns) Technology Overview

Hot melt adhesives are versatile materials that are

utilised in various industries for bonding, sealing, and packaging purposes. Unlike traditional solvent-based adhesives, hot melt adhesives are solid at room temperature and transform into a liquid state when heated. Here are some important points to consider regarding on-demand adhesive melting:

1. Invisipac Hot Melt System: One notable technology in this field is the Invisipac Hot Melt System.

Developed by industry leaders, this system offers several advantages:

- **No Glue Build-Up:** The Invisipac system ensures a consistent and controlled flow of adhesive, eliminating the common issue of glue build-up. This helps to avoid disruptions in production lines and maintain product quality.
- **Reduced Risk of Burns:** Traditional hot melt systems involve handling molten glue, which can pose a risk of burns to operators. In contrast, the Invisipac system minimises this risk by keeping the adhesive in a solid state until it is precisely needed.
- **Efficient and Precise:** The on-demand melting feature allows for efficient adhesive application. The system only heats the necessary amount of adhesive, reducing energy consumption and minimising waste.

2. Applications in Packaging and Beyond:

- **Hot melt adhesives** are extensively used in case sealing, carton sealing, and tray sealing applications. Their superior seal quality ensures tamper-evident packaging, as hot melt glue seals cannot be easily opened and resealed.
- **Case Sealing:** Hot melt adhesives are widely employed for sealing corrugated cardboard boxes. Their exceptional bonding quality ensures secure closures, preventing tampering and maintaining product integrity.
- **Carton Sealing:** Hot melt glue provides reliable adhesion, ensuring that packages remain sealed during transit and storage.

"Each minute of halted production translates into lost revenue and wasted resources. However, the InvisiPac Hot Melt System offers a revolutionary solution that goes beyond mere possibility and transforms downtime into a thing of the past".

**2. Cost-Saving Advantages
Enhancing Adhesive Optimisation**

The InvisiPac Hot Melt System offers numerous benefits that not only improve safety but also result in cost savings:

- 1. Enhanced Precision:** By melting adhesive as needed, this system ensures precise application. This precision significantly reduces excess glue usage, leading to cost savings. Unlike traditional systems that are prone to glue build-up, the InvisiPac guarantees a consistent and controlled flow of adhesive. This reliability enhances production efficiency.
- 2. Decreased Downtime:** The absence of glue build-up minimises downtime required for cleaning and maintenance. Production lines can operate smoothly without interruptions. With no residue from glue build-up, production lines experience minimal downtime due to cleaning. This allows operators to focus on production rather than maintenance.
- 3. Energy Efficiency:** The InvisiPac system only heats the necessary amount of adhesive, conserving energy and lowering operational costs. The

reduced energy usage directly impacts operational costs, making the InvisiPac a cost-effective choice.

- 4. Long-Term Savings:** Efficient adhesive usage over time translates into substantial savings for businesses. By minimising waste and optimising resource utilisation, the InvisiPac contributes to sustainable cost management.

3. Programmable and Reliable: Wake and sleep function and Pattern Controller

Harnessing the capabilities of programmability and reliability, the wake and sleep function of InvisiPac, combined with its pattern controller, transforms the adhesive application process. Say goodbye to manual adjustments and unpredictable results. These cutting-edge features elevate precision and control to unprecedented levels.

1. Wake and Sleep Function:

The wake and sleep function is an intelligent feature that optimises energy usage in the InvisiPac system. Here's how it functions:

- **Precise Activation:** The system wakes up precisely when needed for adhesive application, eliminating unnecessary energy consumption during idle periods.
- **Power Conservation:** During periods of inactivity, the system enters a low-power sleep mode, ensuring energy efficiency and cost savings.
- **Operational Advantages:** Reduced energy consumption directly impacts operational expenses, making the InvisiPac system a cost-effective solution.

2. Pattern Controller:

The pattern controller operates in the following manner:

- **Tailoring:** Users have the ability to customise adhesive application according to their specific needs. Whether it involves complex patterns, uniform coatings, or distinctive designs, the pattern controller provides operators with the necessary tools.
- **Accuracy:** Manual adjustments and uncertain results are a thing of the past. The pattern controller ensures precision and consistency in every application.
- **Improved Product Quality:** Through precise control of adhesive flow, manufacturers can attain consistent outcomes, ultimately enhancing the overall quality of their products.

4. Heating Chamber

The heating chamber plays a crucial role in expediting plant startup, minimising delays that could hinder productivity.

InvisiPac's innovative design ensures a swift and seamless transition into operation, reducing unnecessary downtime and allowing for efficient production processes to begin promptly. With its rapid heating capabilities, the heating chamber guarantees that the adhesive reaches the ideal viscosity quickly, enabling operators to apply it without any unnecessary waiting time.

Whether it's the start of a new production run or a shift change, the InvisiPac facilitates smooth operations by swiftly kickstarting processes with its efficient heating system.

5. Enhanced Efficiency: Non-Clogging Nozzles

In order to maintain a continuous production process, it is crucial to have equipment that can withstand the demanding conditions of high-demand environments. With the implementation of InvisiPac's non-clogging nozzles, the need for frequent maintenance and downtime becomes a thing of the past. These innovative nozzles have been specifically designed to ensure a consistent flow of adhesive, even when dealing with challenging formulations.

By bidding farewell to frequent nozzle cleanings, you can welcome seamless production runs. InvisiPac's time-saving capability guarantees that your operations will remain on track, allowing for maximum uptime and minimal disruptions. Whether you are operating a large-scale manufacturing facility or a smaller operation, you can rely on the unmatched reliability of InvisiPac to keep your production lines running smoothly and efficiently.

6. Exploring InvisiPac's Scalability

InvisiPac's Hot Melt System is distinguished by its scalability, allowing your production to adjust and grow based on demand. Whether you are facing an increase in orders or expanding your operations, this advanced system is able to adapt effortlessly to fulfil your needs.

Enhancing Velocity while Maintaining Effectiveness:

No longer do we need to make compromises between speed and efficiency. The InvisiPac Hot Melt System allows you to enjoy the advantages of both. By utilising its scalability, you can increase production speed as required, guaranteeing prompt delivery without compromising product excellence or process reliability.

Adapting to Changing needs:

In today's dynamic market environment, the ability to swiftly adapt to changing needs is essential. The InvisiPac Hot Melt System enables your business to achieve just that. Whether encountering seasonal

variations, unexpected market demands, or evolving consumer preferences, this flexible system offers the capability to adjust production levels accordingly, ensuring efficient resource management and cost-effectiveness.

Unlike traditional solvent-based adhesives, hot melt adhesives are solid at room temperature and transform into a liquid state when heated.

Maximising Operational Efficiency:

Achieving maximum operational efficiency involves more than just boosting productivity; it entails optimising your entire production ecosystem to achieve optimal performance. The InvisiPac Hot Melt System seamlessly combines scalability and efficiency.

By adapting production levels to meet demand, you can minimise unproductive periods, decrease wastage, and optimise throughput, ultimately enhancing profitability and competitiveness within your industry.

In the relentless pursuit of operational excellence, minimising downtime is a crucial priority. The InvisiPac Hot Melt System is a symbol of reliability and efficiency in the manufacturing industry, providing a solution that not only reduces downtime but also turns it into an opportunity for enhanced productivity and profitability. Through the utilisation of advanced technology, efficient processes, and exceptional performance, companies can reduce the risks associated with interruptions and enhance their operations to achieve greater success.

With the support of the InvisiPac Hot Melt System, manufacturers can effectively manage downtime challenges, secure in the knowledge that they have a reliable partner in their journey towards continuous improvement and sustainable growth.

AxFlow AQS Liquid Transfer is the sole distributor of the Graco InvisiPac Hot Melt System.

If you're keen to minimise downtime in your production processes with the revolutionary InvisiPac, reach out to our knowledgeable team today for personalised advice and support tailored to your specific operational needs. Let us help you transform your production line with efficiency and reliability.

www.aqliquidtransfer.co.za

What's happening?



AFRICA LABTECH EXPO

✓ UGANDA ✓ KENYA ✓ NIGERIA

AFRICA'S NO.1 LABORATORY EQUIPMENT, SUPPLIES, FOOD TESTING, QUALITY MANAGEMENT, ACCREDITATION AND CONSULTANCY SERVICES TRADE SHOW

SIGN UP TO ATTEND

A SPECIAL SECTION AT **AFMASS FOOD MANUFACTURING**

ORGANIC & NATURAL
PRODUCTS EXPO AFRICA

Cape Town International Convention Centre
28-30 March 2025

GOOD LIFE SHOW
Africa's premier food, drink and conscious living event.
30 MAY - 1 JUNE 2025
Cape Town International Convention Centre

In association with

PLANT BASED | NATURAL & ORGANIC | FREEFROM | SUSTAINABLE LIVING | HEALTH BEAUTY FITNESS & WELLNESS | smile 90°4



VALUABLE BUSINESS CONTACTS

Iran agrofood

- agro
- food + bev tec
- food ingredients
- food + hospitality

32nd International Trade Show

19-22 May 2025

Tehran International Permanent Fairgrounds



food & beverage REPORTER

Subscribe to our monthly magazine and stay informed of the latest news, insights and issues facing the food, beverage and packaging industry

Follow us on



DOWNLOAD HERE
to receive your **FREE**
copy each month



Contact: wendy@fbreporter.co.za or features@fbreporter.co.za

www.fbreporter.co.za