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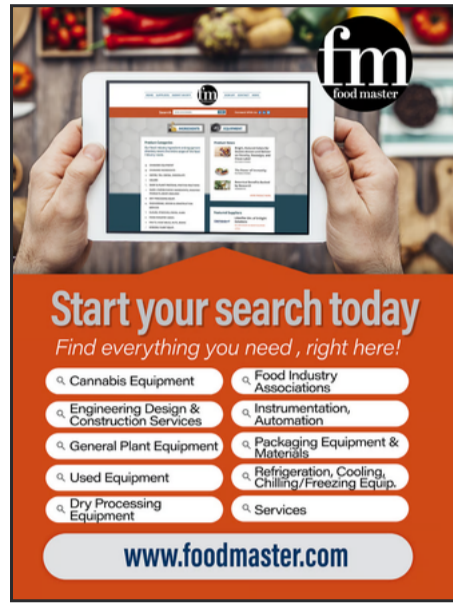
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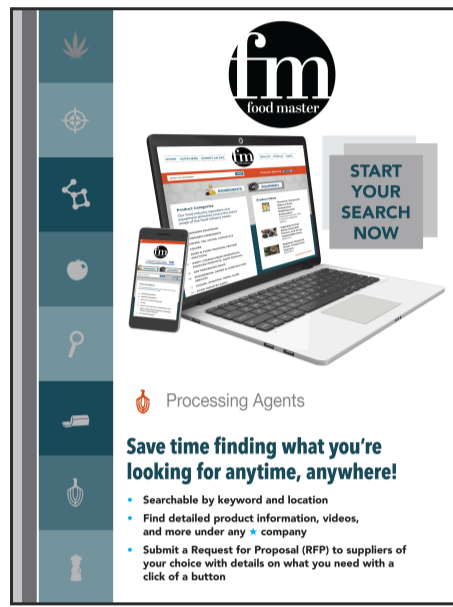
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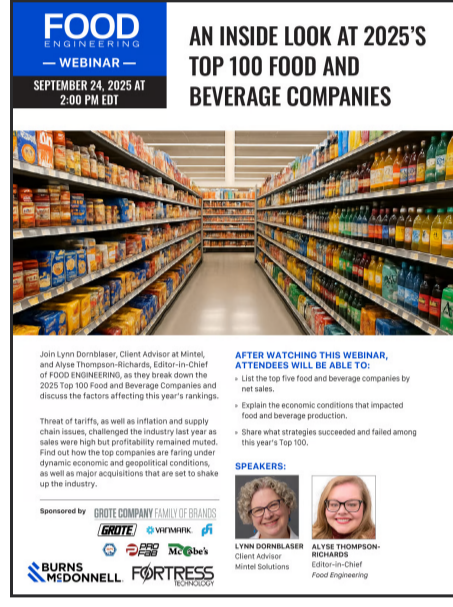
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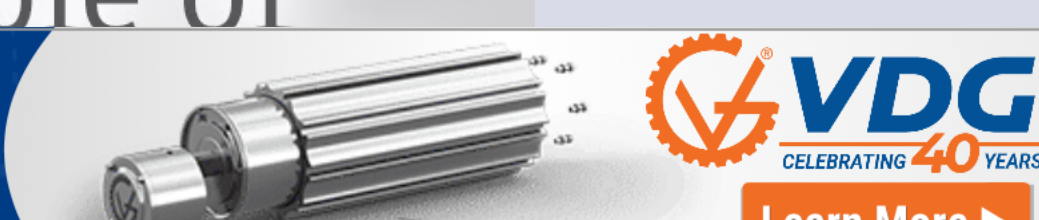
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FOOD
ENGINEERING

— WEBINAR —

SEPTEMBER 24, 2025 AT
2:00 PM EDT

AN INSIDE LOOK AT 2025'S TOP 100 FOOD AND BEVERAGE COMPANIES



Join Lynn Dornblaser, Client Advisor at Mintel, and Alyse Thompson-Richards, Editor-in-Chief of FOOD ENGINEERING, as they break down the 2025 Top 100 Food and Beverage Companies and discuss the factors affecting this year's rankings.

Threat of tariffs, as well as inflation and supply chain issues, challenged the industry last year as sales were high but profitability remained muted. Find out how the top companies are faring under dynamic economic and geopolitical conditions, as well as major acquisitions that are set to shake up the industry.

AFTER WATCHING THIS WEBINAR, ATTENDEES WILL BE ABLE TO:

- » List the top five food and beverage companies by net sales.
- » Explain the economic conditions that impacted food and beverage production.
- » Share what strategies succeeded and failed among this year's Top 100.

SPEAKERS:



LYNN DORNBLASER
Client Advisor
Mintel Solutions



ALYSE THOMPSON-RICHARDS
Editor-in-Chief
Food Engineering

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FOOD ENGINEERING

SEPTEMBER 2025

Vol. 97, No. 9

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COVER STORY



FOOD ENGINEERING'S 2025 Top 100 Food and Beverage Companies

While sales were largely down under dynamic economic and geopolitical conditions, some of the world's top food and beverage manufacturers experienced revenue growth.

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How Continuous Moisture Monitoring Supports Food Manufacturing

Moisture monitoring has become an integral part of the production line, helping manufacturers safeguard product quality, boost efficiency and meet compliance targets.



Top 5 Strategies for Ensuring Hygiene and Food Safety in Food Processing

For food processing professionals, the challenge lies in integrating safety seamlessly into high-speed, high-volume operations. Here are the top five strategies to help safeguard manufacturers' facilities and products.

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Backed Into a Corner, Alternative Protein Gets Creative

State legislative bans are targeting ingredients, dyes and cultivated products in 2025. Therefore, the market is forcing OEMs and alternative protein suppliers to get creative in manufacturing, lowering ingredient costs, and even going to market.

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Today's filling machines can achieve extremely accurate and precise fills, and real-time monitoring and maintenance prevent wasteful overfills, underfills, and sporadic and inaccurate fills.

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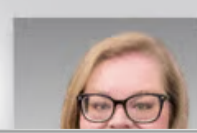
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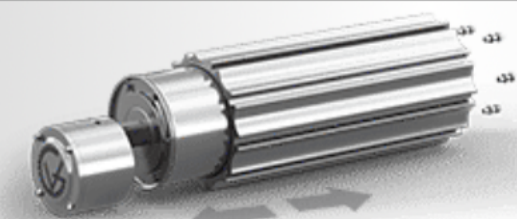
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A Look at How Smart Manufacturing Is Addressing Operational, Economic Challenges

For its 10th annual State of Smart Manufacturing Report, Rockwell Automation surveyed 1,560 manufacturing leaders about the internal and external challenges they face and how they're using technology to address them.

THE TERM "SMART MANUFACTURING" COVERS A MULTITUDE OF TECHNOLOGIES AND STRATEGIES, but what does it mean to the people and organizations actually doing the manufacturing? And how are they using it to overcome challenges? Rockwell Automation aims to find out.

For its 10th annual *State of Smart Manufacturing Report*, the company, with help from Sapio Research, surveyed 1,560 manufacturing leaders from 17 countries. Nearly 3 in 5 (58%) work with companies generating more than \$1 billion in revenue. About one-tenth (8%) of respondents were from CPG companies.

Respondents point to several internal and external obstacles that hamper competitiveness. For the third year, manufacturers say inflation is the biggest external obstacle, but workforce issues, supply chain disruptions and cybersecurity also made the list.

Internally, manufacturing professionals across job roles cite five major concerns:

1. Deploying and integrating new technology
2. Balancing quality and profitable growth
3. Integrating smart manufacturing technology
4. Internal budget constraints
5. Attracting employees with desired skillsets

With these concerns in mind, 81% of manufacturers are accelerating their digital transformation. However, Rockwell Automation zeroed in on cybersecurity and quality.

Specifically, nearly half (49%) of surveyed manufacturers are planning to use artificial intelligence and machine learning (AI/ML) in the next 12 months to support cybersecurity — up from 40% last year. Additionally, 38% say they are using data for cybersecurity protection, up from 31% in 2024.

Almost half (48%) of manufacturers say they plan to use AI/ML to improve quality — but it goes beyond that. Improving quality, safety and efficiency with AI/ML can support their sustainability goals.

As manufacturers contend with increasing costs, labor concerns and escalating cybersecurity threats, they must turn to technology to improve speed, productivity and reliability — and remain competitive under demanding economic conditions. It's encouraging to see many manufacturers are doing just that, and it is likely next year's results will indicate even more adoption. **FE**

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MOISTURE MONITORING

Moisture monitoring has become an integral part of the production line, helping manufacturers safeguard product quality, boost efficiency and meet compliance targets.

How Continuous Moisture Monitoring Supports Food Manufacturing

Unchecked moisture threatens product quality, consumer safety and brand reputation. Image courtesy of MoistTech

BY SARAH HAMMOND, MARKETING MANAGER, MOISTTECH CORP.

MOISTURE CONTENT IS ONE UNDERESTIMATED VARIABLE THAT CAN MAKE OR BREAK A PRODUCTION LINE.

Whether it's food, pharmaceuticals, paper or plastics, even slight fluctuations in moisture levels can lead to inconsistency, reduced shelf life, material degradation or costly rework.

The solution? Implementing continuous, in-line moisture monitoring systems that offer real-time data insights and more precise process control.

As industry expectations rise and product quality standards become more stringent, moisture measurement is no longer a step reserved for lab testing. Instead, it has become an integral part of the production line, helping manufacturers safeguard product quality, boost efficiency and meet compliance targets.

Why Moisture Monitoring Matters

Moisture plays a key role in determining a product's texture, weight, stability, shelf life and chemical composition. Left unchecked, moisture can compromise product quality, consumer safety, and as a result, brand reputation. In industries where moisture levels can trigger microbial growth or accelerate spoilage, the stakes are particularly high.

Traditional moisture management methods, such as batch sampling and off-line lab testing, introduce critical delays to the production process. These approaches provide only intermittent, retrospective data that may not accurately reflect the full scope of process variability. As a result, deviations in moisture content may go undetected until well after affected products have progressed through multiple stages of production, leading to costly rework, scrap or even recalls. To avoid this outcome, manufacturers can tend to overcompensate when moisture levels are detected in the lab, scrapping product that may not have been impacted by the moisture variability.

Continuous moisture monitoring offers immediate, real-time data that empowers operators to make precise, on-the-fly adjustments. By identifying and correcting moisture variations as they occur, manufacturers can isolate and address only the impacted portion of a production run. This targeted response dramatically reduces material waste and ensures that overall quality standards are consistently met.

Additionally, real-time monitoring minimizes energy consumption by helping to optimize drying times and temperatures. Instead of running dryers longer "just in case," facilities can fine-tune their processes with confidence, conserving both energy and resources. By eliminating unnecessary production steps and reducing time-to-market, continuous moisture monitoring shifts moisture management from a reactive quality assurance measure to a proactive, strategic tool that drives efficiency across the board.

The Hidden Costs Of Poor Moisture Management

When moisture management is reactive instead of proactive, the consequences ripple across operations. High energy usage during drying, rework due to off-spec batches, supply chain bottlenecks caused by spoilage or delays, and lost product from moisture-induced defects all contribute to ballooning operational costs.

In some cases, seemingly minor moisture fluctuations can have outsized effects. For example, a 1% increase in moisture content in a pelletized product can raise the amperage load on equipment, reducing throughput or causing a complete equipment shutdown. In high-volume production environments, these deviations compound quickly, impacting both the bottom line and customer satisfaction.

Industry Focus: Food Manufacturing

In food manufacturing, moisture levels directly affect texture, taste, safety and shelf life. Too much moisture promotes microbial growth, mold formation and premature spoilage. Too little, and products become dry, brittle or nutritionally compromised. Additionally, moisture inconsistencies can lead to product clumping, affect batch uniformity and interfere with critical processes such as drying and curing. These issues not only harm product quality but can also trigger compliance failures in regulated markets.

Continuous moisture monitoring allows food processors to stabilize conditions in real time, maintaining tight control over product quality and reducing recall risk. By managing moisture proactively, companies also reduce energy costs associated with drying and extend shelf life, ensuring products reach consumers in optimal condition.

Common Misconceptions Around Moisture Monitoring

A major misconception is the belief that all moisture sensors are created equal. While many companies have adopted near-infrared (NIR) technology to track moisture levels, they often overlook the significant performance differences between sensor models, particularly when it comes to long-term accuracy. Older or less sophisticated sensors tend to suffer from calibration drift over time. Much like an analog clock that gradually loses precision, these sensors slowly deviate from their original baseline, delivering increasingly unreliable data as time goes on.

To address this, manufacturers must schedule regular recalibration visits from service technicians, an added layer of maintenance that can interrupt production. Even brief periods of inaccurate moisture readings can lead to substandard product quality, inefficient drying processes or equipment wear. That's why advanced continuous moisture monitoring systems that resist calibration drift offer such a distinct operational advantage. These systems are engineered for stability and reliability, maintaining accurate performance over years of operation without the need for consistent recalibration. This not only reduces the burden on maintenance teams but also ensures that real-time data can be trusted when making critical process decisions.

Real-Time Consistency, Site To Site

For companies operating multiple facilities, maintaining product consistency across production sites is a constant challenge. Moisture variability between raw material batches, environmental conditions or processing parameters can easily introduce inconsistencies that undermine brand integrity. With continuous in-line moisture monitoring, manufacturers can standardize moisture levels across sites. By automating adjustments based on real-time data, operators can ensure uniform product quality, reduce waste and shorten drying cycles regardless of location.

Making Moisture Detection Work For You

In an era where manufacturing efficiency and quality assurance are inseparable, continuous moisture monitoring offers one of the most actionable, cost-effective upgrades for your production line. Whether you're trying to extend shelf life in a food product, ensure regulatory compliance in pharmaceuticals, or simply reduce drying costs, managing moisture in real time gives your operation the agility it needs to stay competitive.

The path forward is clear: move from batch testing to continuous monitoring. Equip your facilities with the tools to detect small changes before they become big problems. When moisture is monitored consistently, quality becomes predictable — and that predictability builds trust, performance and profitability. **FE**

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Top 5 Strategies For Ensuring Hygiene And Food Safety In Food Processing

For food processing professionals, the challenge lies in integrating safety seamlessly into high-speed, high-volume operations. Here are the top five strategies to help safeguard manufacturers' facilities and products.

Photo courtesy: Getty Images / passorn santiwiriyanon

BY JORGE IZQUIERDO, VP OF MARKET DEVELOPMENT, PMMI

Maintaining rigorous hygiene and food safety standards in food processing isn't just a regulatory obligation — it's the bedrock of operational integrity and consumer trust. A single failure in protocol can halt production, damage brands and jeopardize public health. For food processing professionals, the challenge lies in integrating safety seamlessly into high-speed, high-volume operations. Here are the top five strategies to help safeguard your facility and your product.

1. STRENGTHEN HACCP SYSTEM WITH A FOCUS ON HYGIENIC EQUIPMENT DESIGN

A robust, well-structured Hazard Analysis and Critical Control Points (HACCP) plan is the foundation for food safety. But as the [One Voice for Hygienic Equipment Design for Low-Moisture Foods](#), a work product from PMMI's *OpX Leadership Network*, emphasizes, the effectiveness of HACCP is heavily influenced by equipment design. According to their work on low-moisture food safety, equipment must be built to minimize harborage points, allow complete access for cleaning and support effective dry cleaning where appropriate.

Design features such as sloped surfaces, self-draining structures and non-porous materials aren't cosmetic — they're critical to preventing contamination in both wet and dry processing environments. Aligning equipment selection with these hygienic principles ensures that the physical infrastructure supports your food safety plan.

But it's not enough to create the plan — it must be rigorously implemented and embedded into the daily rhythm of production. Processing lines involve numerous CCPs, from thermal processing to metal detection. These control points need constant calibration and verification.

Moreover, as automation and product innovation evolve, so too must the HACCP plan. Cross-functional teams — including QA, maintenance and production — should review the plan regularly to adapt to process changes and ingredient variations. This ensures that food safety controls are not static, but a living part of plant operations.

2. PRIORITIZE WORKFORCE HYGIENE AND TRAINING GROUNDED IN STANDARDS

In high-throughput environments, every team member plays a role in food safety. That's why continuous education and enforcement of personal hygiene protocols are critical. This includes proper use of personal protective equipment, hand hygiene and clear policies around illness and reporting. Multilingual and visual training tools help reinforce practices for facilities with diverse workforces.

Regular training should go beyond “what to do” and focus on “why it matters.” Engaged employees are more likely to report anomalies, correct deviations and adhere to procedures under pressure. Make food safety part of onboarding and refresh it quarterly to maintain sharp awareness.

Moreover, global harmonization of food safety standards — highlighted in [The Impact of Global and Local Standards on OEMs & Suppliers](#), a report from PMMI, The Association for Packaging and Processing Technologies — requires processors to train teams to navigate both domestic and international regulatory landscapes. Understanding how the Food and Drug Administration's Food Safety Modernization Act (FSMA) rules interface with the Global Food Safety Initiative (GFSI) schemes, such as Safe Quality Food or British Retail Consortium, gives teams the tools to maintain compliance and enhance audit readiness.

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3. ENFORCE SANITATION SOPs BASED ON HYGIENIC DESIGN PRINCIPLES

Sanitation is not just about frequency — it's about effectiveness. The OpX Leadership Network guidance underscores the value of designing sanitation standard operating procedures (SSOPs) that are equipment-specific and risk-based. For instance, in low-moisture environments, water use must be tightly controlled to avoid promoting microbial growth. The hygienic design framework encourages dry cleaning as the primary approach and only introduces wet cleaning when scientifically justified.

Design for cleanability also reduces the time and labor required for sanitation, thus enhancing operational efficiency. The OpX Leadership Network promotes collaborative engagement between OEMs and end users to create SSOPs that reflect real-world production constraints.

In processing environments, where machinery, conveyors and enclosed systems dominate, sanitation is complex — but non-negotiable. Implementing thorough, validated SSOPs ensures all surfaces and equipment are cleaned effectively without risking cross-contamination or chemical residues.

Tools such as clean-in-place (CIP) systems and color-coded sanitation zones improve consistency for processors. Cleaning schedules should align with production cycles, allergen changeovers and maintenance windows. Don't forget to validate cleaning effectiveness using adenosine triphosphate (ATP) swabs and microbial testing — and to document every cleaning activity for traceability.

4. TIGHTEN SUPPLIER AND INCOMING MATERIAL CONTROLS

The quality and safety of finished goods begin with the ingredients and packaging materials received. Implement a robust supplier approval and verification program that includes GFSI-recognized certifications, audit results and periodic certificate of analysis (COA) reviews. As PMMI's standards report outlines, multinational processors increasingly use global and local standards to benchmark and audit supplier practices. OEMs are encouraged to align with industry-standard checklists, many of which incorporate hygienic design requirements, allergen controls and traceability protocols. Suppliers that conform to these shared standards streamline onboarding and reduce risk.

For processors, the key is creating robust documentation trails and incorporating third-party certifications as part of the raw material approval process. Inspection of incoming goods is also key and may incorporate defined sampling plans, temperature checks and sensory evaluations of raw materials. If your facility uses rework or bulk handling, ensure traceability systems are in place to prevent the introduction of undeclared allergens or expired stock.

5. UTILIZE DIGITAL TOOLS TO MONITOR AND DOCUMENT COMPLIANCE

Technology is transforming food-safety monitoring. Processing plants are ideally positioned to benefit from technology that reduces human error and increases visibility. Digital monitoring systems can track critical parameters — such as temperature, pH, flow rates and cleaning cycles — in real time. These tools help staff respond immediately to deviations, avoiding product loss or recall. From sensors that track CCPs in real time to cloud-based documentation platforms, processors now can automate many compliance tasks. The OpX Leadership Network document encourages leveraging these tools to capture data and inform continuous improvement through analytics.

Automation also streamlines documentation. Many modern food-safety standards require evidence of process verification, not just outcomes. Instead of paper logs, which can be incomplete or illegible, cloud-based recordkeeping ensures everything from sanitation logs to corrective actions is easily auditable. Forward-thinking processors are even integrating predictive maintenance and AI to preempt failures that could compromise food safety. Systems that digitally track cleaning intervals, employee hygiene compliance and preventive maintenance help bridge that requirement. By embedding digital solutions into your operations, you align with both regulatory and customer expectations for transparency.

Food processors are constantly pressured to produce more with less without compromising safety. By adopting hygienic design principles and harmonizing practices with global safety requirements, processors can future-proof their facilities while delivering safe, high-quality food to market. Let these five strategies serve as your operational blueprint, because in food safety, excellence is not optional; it's essential.

To see the future of food safety and sanitation in action, visit PACK EXPO Las Vegas, taking place Sept. 29–Oct. 1. As the largest packaging and processing event of the year, 35,000 professionals from more than 40 vertical industries are expected to attend the 30th year of the show, featuring 2,300 exhibitors across 1 million net sq. ft. of exhibit space.

Processing professionals will find dedicated zones such as the Processing Zone and Healthcare Packaging Pavilion, along with robust programming on hygienic practices and sustainability at Sustainability Central and Innovation Stage. Whether you're seeking smart sanitation systems, CIP advancements, or tools to support FSMA compliance, PACK EXPO Las Vegas offers real-world solutions that align with industry standards and future-forward innovation. **FE**

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FOOD ENGINEERING'S 2025 Top 100 Food and Beverage Companies

While sales were largely down under dynamic economic and geopolitical conditions, experience **SSV Series Drum Motors** **ers**
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Video credit: danez / Getty Images

BY ALYSE THOMPSON-RICHARDS

FOOD AND BEVERAGE MANUFACTURERS CONTINUED TO FACE A GAUNTLET OF ECONOMIC AND GEOPOLITICAL CHALLENGES IN 2024, but for some, growth was still possible.

In their annual reports — from which FOOD ENGINEERING pulls annual sales data to compile our ranking — manufacturers pointed to uncertainty in their operating environment, including fluctuating consumer demand, supply chain constraints, weather events, high interest rates, tariffs and other trade relations concerns, and political instability and unrest, including the ongoing conflict in Ukraine.

Manufacturers also cite inflationary pressures, which balloon operational costs and heighten competitiveness. According to the U.S. Bureau of Labor Statistics' **Producer Price Index (PPI)**, final demand for goods and service rose 3.3% from the end of December 2023 to December 2024. Specifically, prices for processed goods rose 0.2% over the same period, while prices for unprocessed goods rose 5.1%.

Meanwhile, the **Consumer Price Index (CPI)** rose 2.9% from December 2023 to December 2024, with overall food prices increasing 2.5%. Food at home prices increased by 1.8%.

While sales were largely down under these dynamic conditions, some of the world's top food and beverage manufacturers experienced revenue growth.

See the List of the Top 100 Food & Beverage Companies

RANKING REVIEW

PepsiCo and Nestlé — our leaders from previous rankings — have traded places, with PepsiCo taking the top spot. The company generated \$91.8 billion in 2024, with 2% organic revenue growth for the year. Ramon L. Laguarta, CEO and chairman of the board, cites portfolio evolution and geographic diversification as drivers for growth.

"As we look ahead, we believe the runway for growth remains vast," Laguarta said in PepsiCo's annual report. "We operate in two large and attractive categories — global beverages and convenient foods — which represent a \$1.3 trillion global opportunity. Roughly 60% of our business comes from geographies with 5% of the global population, which means we have a massive opening to expand in geographies covering the other 95% of the population."

PepsiCo also initiated and completed two major acquisitions last year. The company acquired the Strauss Group's 50% ownership in Sabra for \$241 million in December 2024, making it PepsiCo's wholly-owned subsidiary. The beverage and snacking giant also announced its acquisition of Garza Food Ventures LLC, dba Siete Foods, for \$1.2 billion. The acquisition closed in January 2025.



Photo courtesy of PepsiCo, Inc.



Citing product innovation and international growth, other beverage manufacturers experienced growth, rising several spots in the ranking. For example:

- Diageo jumped from 23 to 18
- China's Kweichow Moutai rose from 24 to 20
- Keurig Dr. Pepper moved from 33 to 30
- Mexico's Femsa Coca-Cola jumped from 37 to 33
- Kirin Holdings jumped from 64 to 52
- Monster Beverage Corp. moved from 77 to 71

Confectionery companies also reported revenue growth in 2024. Ferrero posted just over \$19 billion in annual revenue, rising in the ranking from 28 to 26. The company notes product innovation and international growth contributed to its approximately 9% increase in annual revenue.

Ferrero opened its first U.S. chocolate processing facility in Bloomington, Illinois in May 2024, building on the company's existing manufacturing campus. A \$214 million Kinder Bueno facility followed in October 2024.

"This new project will help us increase Ferrero's incredible momentum and innovations here in the U.S. market," Michael Lindsey, president and chief business officer of Ferrero North America, said in October 2024. "Kinder Bueno quickly became an American favorite after being introduced just five years ago, and with the support of leaders in Illinois, the Bloomington community, and our valued retail partners like Walmart, the brand will continue to grow and thrive."

The Hershey Company missed its revenue target of \$11.5 billion, but it earned \$11.2 billion in 2024, achieving 0.3% net sales growth. The company, which acquired the Sour Strips brand founded by social media personality Maxx Chewning last year, aims to satisfy shifting consumer preferences, elevate better-for-you snacking and adapt to new shopping behaviors.

Barry Callebaut reported a nearly 23% increase in net sales from the 2022/2023 fiscal year, jumping from 59 to 46 in the ranking. However, the company experienced a 0.3% increase in global chocolate volume sales and a 1.4% decrease in global cocoa volume sales. While the chocolate and cocoa products supplier is impacted by fluctuating cocoa bean prices, it says it passes on those increases through its cost-plus model.

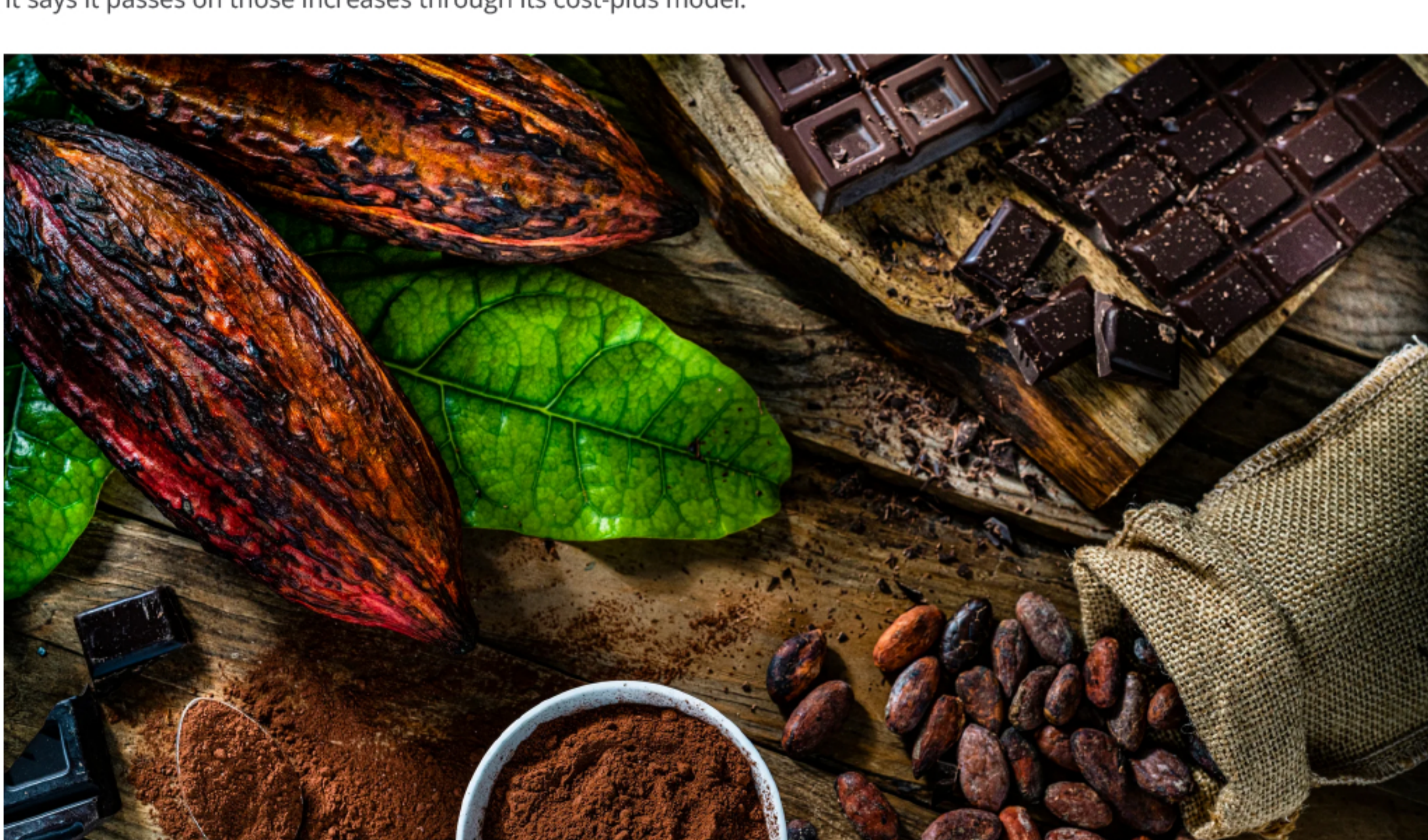


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Olam International also experienced a double-digit revenue increase driven by "unprecedented highs" in commodity prices, especially for coffee and cocoa. The ingredient supplier earned \$56 billion (\$41 billion), marking the first time it crossed the \$50 billion threshold since 2022. With these results, Olam rose four places to crack the Top 10 of our ranking.

Other Acquisitions and Divestitures

Several other notable acquisitions and divestitures were initiated and completed in 2024:

- The Campbell's Company completed its acquisition of Sovos Brands, Inc. for \$2.1 billion.
- Lakeview Farms, a portfolio company of CapVest Partners LLP, announced plans to acquire the noosa yogurt brand from The Campbell's Company.
- General Mills announced plans to sell its North American yogurt business for \$2.1 billion
- Furlani Foods announced plans to acquire Cole's Quality Foods, joining to garlic bread makers
- The J.M. Smucker Co. opted to sell its Voortman cookie brand to Second Nature Brands, a creator of premium snacks and treats controlled by CapVest Partners LLP.
- Hain Celestial Group has completed the sale of its ParmCrisps snack brand to independent snacks company Our Home.
- Mount Franklin Foods, LLC, manufacturer of branded, contract and private label confectionery, nuts, snacks and foodservice products, acquired the assets of Stuffed Puffs, LLC
- Tilray acquires Hop Valley Brewing Company, Terrapin Beer Co., Revolver Brewing and Atwater Brewery from Molson Coors

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FOOD ENGINEERING'S 2025 Top 100 Food and Beverage Companies

While sales were largely down under dynamic economic and geopolitical conditions, experience **SSV Series Drum Motors** The Most Hygienic Conveyor Belt Drives  **VDG** CELEBRATING 40 YEARS Learn More ▶

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BY ALYSE THOMPSON-RICHARDS

LOOKING AHEAD

At least three planned acquisitions have the potential to shake up our 2025 ranking of the Top 100 Food and Beverage Companies.

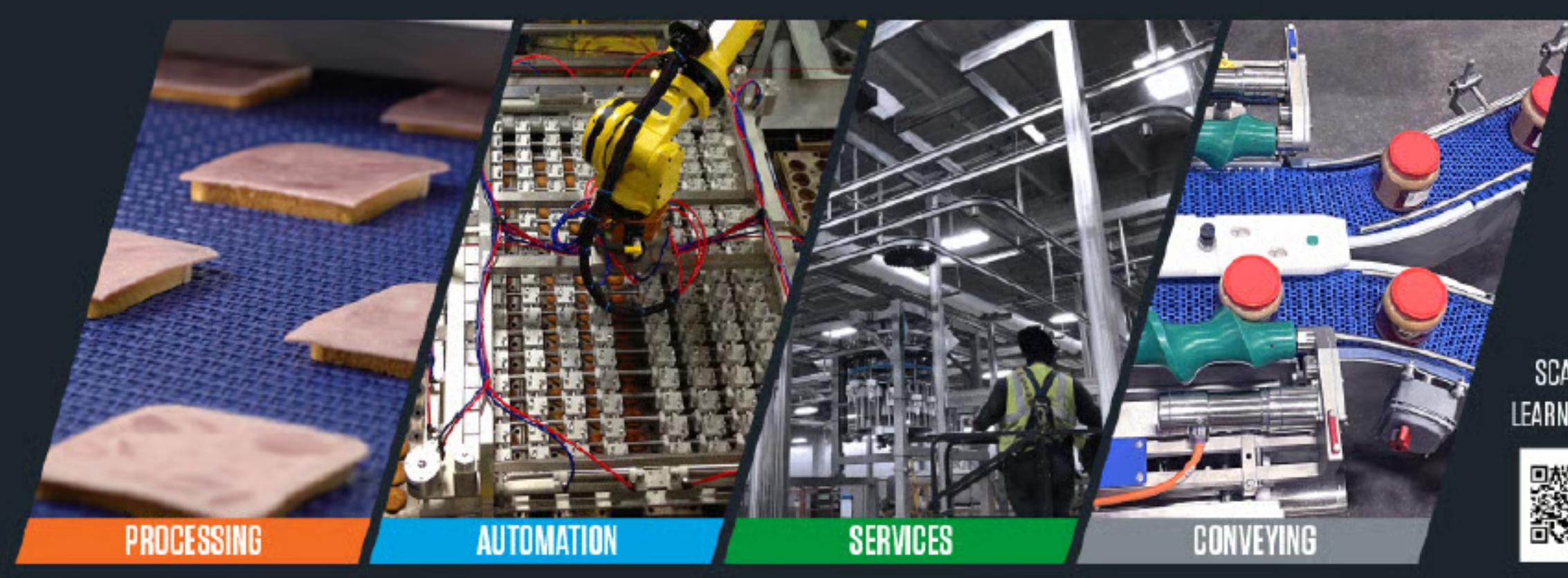
In May 2025, PepsiCo completed its acquisition poppi, a fast-growing prebiotic soda brand for \$1.95 billion, including \$300 million of anticipated cash tax benefits for a net purchase price of \$1.65 billion. *Fortune* reports poppi earned \$500 million in revenue in 2024.

[See the List of the Top 100 Food & Beverage Companies](#)



PepsiCo has acquired prebiotic soda brand poppi for \$1.95 billion. Image courtesy of PepsiCo, Inc.

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"poppi represents a compelling strategic fit within our short- and long-term vision for the future of beverages," says Ram Krishnan, CEO of PepsiCo Beverages U.S. "Its rapid growth, strong consumer engagement, and differentiated functional positioning make it a dynamic addition to our portfolio. We are excited to scale poppi's momentum and unlock new growth through our capabilities — we're just getting started."

Meanwhile, Mars announced plans in August 2024 to acquire Kellanova, the snack and plant-based food spinoff of Kellogg's, for \$36 billion. Kellanova, which generated \$12.7 billion in 2024, offers Mars an opportunity to expand its snacking portfolio, says Poul Weihrach, CEO and office of the president, Mars, Inc.

"We will honor the heritage and innovation behind Kellanova's incredible snacking and food brands while combining our respective strengths to deliver more choice and innovation to consumers and customers," Weihrach says. "We have tremendous respect for the storied legacy that Kellanova has built and look forward to welcoming the Kellanova team."

The proposed acquisition has cleared antitrust review by the U.S. Federal Trade Commission, but it remains under investigation by the European Commission. The European Commission has until Oct. 31 to complete its investigation and issue a decision. With all approvals, Mars and Kellanova expect the transaction to close toward the end of 2025.

In July, Ferrero announced it would snap up WK Kellogg Co., the North American cereal spinoff of Kellogg's, for \$3.1 billion. The acquisition, set to close sometime this year, represents the latest in Ferrero's decade-long push to acquire North American food brands.



Aligning with its decade-long acquisition strategy, Ferrero is set to acquire WK Kellogg Co. for \$3.1 billion. Photo courtesy of WK Kellogg Co.

"Over recent years, Ferrero has expanded its presence in North America, bringing together our well-known brands from around the world with local jewels rooted in the U.S.," says Giovanni Ferrero, executive chairman of the Ferrero Group. "Today's news is a key milestone in that journey, giving us confidence in the opportunities ahead."

Last month, Keurig Dr Pepper (KDP) announced it would acquire JDE Peet's for roughly \$18 billion. Once the transaction is complete, KDP plans to split into two companies: a refreshment beverage company, with estimated annual net sales of \$11 billion, and a global coffee company with annual net sales of \$16 billion.

"Through the complementary combination of Keurig and JDE Peet's, we are seizing an exceptional opportunity to create a global coffee giant," says KDP CEO Tim Cofer. "This is the right time for this transaction, with KDP in a position of operational and financial strength, momentum across our evolved portfolio, and increasing coffee category resilience. By creating two sharply focused beverage companies with attractive and tailored growth propositions and capital allocation strategies, we are poised to generate significant shareholder value in both the near and long term."

The PPI for final demand has dropped from 3.8% in January to 3.3% in July, with the 12-month increase for the foods index dropping from 5.9% in February to 4.2% in July. Meanwhile, the CPI has come down from 3% in January to 2.7% in June and July.

This helps, but food and beverage manufacturers continue to contend with the same challenges this year. In their FY25 second quarter results, many companies point to their ability to remain flexible during periods of difficulty.

"We remain confident in our ability to deliver against our commitments amid a challenging environment, powered by the resiliency of our categories, our advantaged global footprint and the strength of our brands and capabilities," says Dirk Van de Put, chair and CEO, Mondelez International. **FE**

NEXT ARTICLE



NEW SSV-XP Drum Motor
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Accurate And Precise Filling Saves on Giveaways

Today's filling machines can achieve extremely accurate and precise fills, and real-time monitoring and maintenance prevent wasteful overfills, underfills, and sporadic and inaccurate fills.

Photo courtesy: coffeekai/Getty Images

BY WAYNE LABS

Whether bottle/carton filling liquids or pouch filling of powder, slurry products and sauces, overfilling gives away product, and in some cases, may cause problems with closing/sealing the container. This article looks at sources for filling errors — especially overfilling — and the steps processors can employ to reduce overfilling. It also looks at how more recent machines make it easier for operators to troubleshoot filling problems.

The FDA states in its *Food Labeling Guide*: “The net quantity of contents (net quantity statement) is the statement on the label which provides the amount of food in the container or package. It must be expressed in weight, measure or numeric count. Generally, if the food is solid, semisolid or viscous, it should be expressed in terms of weight. If the food is a liquid, it should be expressed in fluid measure (e.g., fl. oz). 21 CFR 101.105(a)(b)(c).”

So, if a processor promises 16 fl. oz. of orange juice on the label, then the actual fill volume must be at least 16 fl. oz. Underfilling is simply not an option; it's against the law. Therefore, most food and beverage companies figure it's better to err on the plus side than the minus side, so they set their filling equipment on the plus side to compensate for errors in measurement or spillage. Yet too much of a good thing winds up being not so good — for several reasons.

“Overfilling containers in production can result in increased product waste and giveaway, but increased line downtime and compromised food safety are also serious consequences,” says Jim Toman, MES engineer at Grantek, a Control System Integrators Association (CSIA) certified member. For example, if bottles are overfilled, caps may not seal properly, resulting in spoilage during storage or transit, and even where spoilage doesn't occur immediately, reduced shelf life can be a factor. If cartons or pouches are overfilled, the extra contents may distort the shape of the containers, making them difficult to pack into shipping cartons, which can result in jams and lost production time, plus culminating in missed schedule attainment. Cross contamination from spilled contents is also a risk, especially if multiple products are packed together.

“Product residue in the sealing area can prevent proper sealing, leading to spoilage and potential health risks for consumers,” says Renee Benson, CRB packaging engineer. Even if the seal remains intact, trapped product or residue can foster mold or bacterial growth. Upon opening, this contamination may come into contact with the product, affecting its safety and quality.

In addition, visible signs of mold or bacteria can erode consumer trust and damage the brand's reputation, Benson says.



For processors who need to fill cans by predetermined quantities of a liquid rather than by weight or height, TechniBlend's ProFill V volumetric can filler runs at speeds of 100 to 600 or more cans per minute. The filler handles carbonated soft drinks, beer, seltzers, ciders, juices, etc. Photo courtesy of TechniBlend, a ProMach brand.

Besides Intentional Settings, What Causes Overfilling?

If a processor intentionally sets a slight overfill — maybe it's 1% for a 16-oz. (473 ml) bottle — what can cause overfilling above and beyond that setting? Keep in mind that even that 1% overfill can add up to significant loss over large production runs, especially if the filler errs on overfilling.

The most common cause of consistent overfilling tends to be sensor calibration issues, Toman says. This can happen for a variety of reasons, such as product consistency, recipe changes, worn nozzles or valves, etc. Modern filling machines typically have instrumentation that measures sensor data and reports it for logging. These machines can be integrated with manufacturing execution systems (MES) to track sensor drift versus tolerances and alarm or notify operators when the fillers trend too far out of specification, based on the results of real-time, online statistical process control software. When the filler is out of tolerance, the MES can schedule maintenance as needed. After maintenance is complete, the MES can validate that the filler is performing correctly again.



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The root cause of consistent overfilling depends on the type of filling technology in use, which is why a strong preventive maintenance program is essential, says CRB's Benson. For instance, net weight fillers may require load cell recalibration, piston fillers might need stroke setting adjustments, and gravity fillers could be affected by valve wear. Many of today's filling systems and post-fill inspection tools provide data that can help identify trends or pinpoint failures. Operators should follow a clearly defined SOP to guide troubleshooting steps, starting with calibration verification, which is often the simplest and most effective way to identify assignable causes. While adjusting machine control software to reduce fill volume might seem like a quick fix, it's important to first confirm that sensors and calibration are functioning properly to avoid masking underlying issues.

“A better approach,” Toman says, “is to let the system detect the issue and respond with appropriate maintenance. Doing so will result in less downtime, fewer overfilling events and higher quality.”



In China, Mengniu's Ningxia dairy factory is one of 22 sites newly awarded 'lighthouse' status by the World Economic Forum, joining a community of 172 leading facilities recognized for their technology-enabled transformation. One of the world's most intelligent dairy factories, Ningxia has leveraged cutting-edge Tetra Pak filling/packaging equipment and technology, reducing operational costs by 32% and delivery lead time by 55%. Photo courtesy of Tetra Pak

Inconsistent Overfilling Calls For Maintenance

Inconsistent overfilling can stem from a variety of causes, which is why a strong preventive maintenance program is essential, Benson says. These inconsistencies may be linked to sensor calibration issues, mechanical wear or even components like solenoids sticking or parts needing lubrication. Having a clear plan of action to identify assignable causes and implement corrective measures is key to helping operators resolve these issues effectively and maintain consistent fill performance.

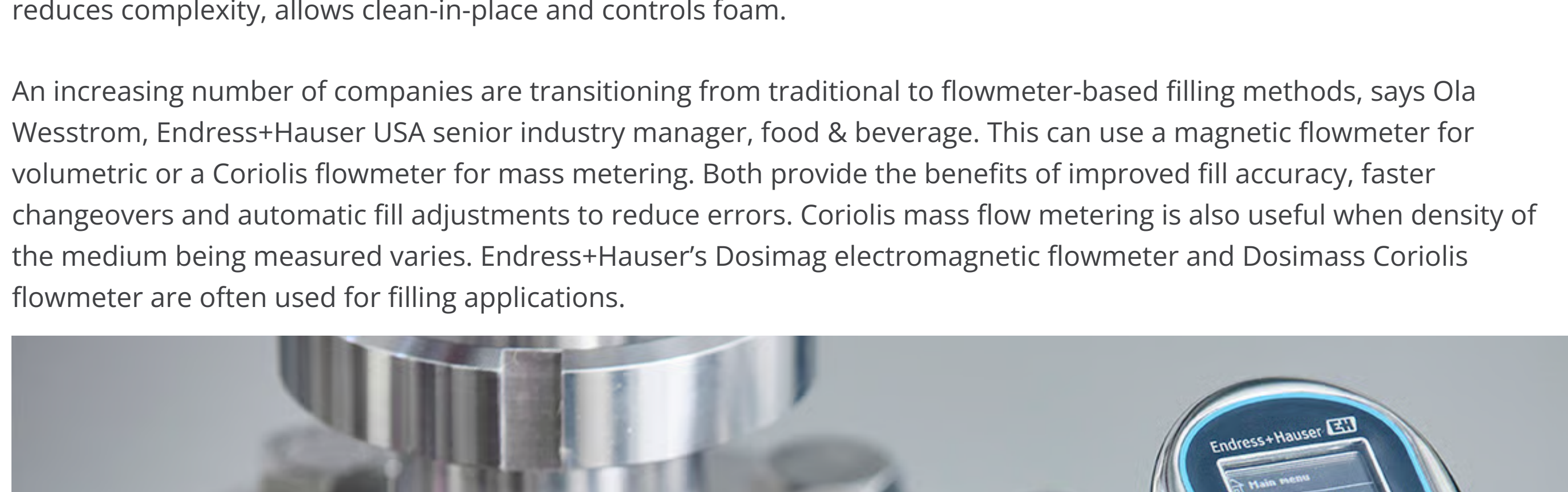
Sporadic or inconsistent overfilling can be due to worn parts such as nozzles or valves, lubrication loss, sticking solenoids, etc., Toman says. Typically, these will be mechanical issues rather than calibration or settings issues related to product changes. Often, these types of issues will present toward the latter end of a maintenance cycle. One of the challenges presented by high-volume filling equipment is ensuring that preventive maintenance is performed frequently enough that product quality issues and unplanned equipment downtime are avoided. Modern MES systems can track the performance of the equipment and produce alerts when performance drifts below a set target. Likewise, MES systems with appropriate instrumentation can capture in real time patterns related to sporadic overfilling, including fill quantity, valve and solenoid status and others. Artificial intelligence tools can be used to sift through these patterns, helping to identify root cause prior to maintenance — before problems become frequent or significant enough to cause unplanned downtime and quality issues.

Weight/Mass Versus Volumetric Filling

On one hand, weight or mass-based filling is typically used when the product is sold by weight (regardless of whether it's a low- or high-viscosity product) to ensure compliance with label claims, says CRB's Benson. Volumetric filling, on the other hand, is preferred when products are sold by volume and is especially common for higher-viscosity products where precise volumetric dispensing is critical. The choice between the two depends on the product characteristics and how it's marketed, rather than one method being universally more accurate than the other.

Weight/mass filling may make more sense in some applications than others, says Grantek's Toman. In general, weight/mass filling can be more accurately controlled by newer digital systems employing a higher product mix because they are typically integrated to MES systems, which automatically adjust fill parameters — including speed and fill weight or mass — to ensure the correct amount is dispensed into each container. Sensor feedback and alarming let operators know when measured values trend out of specification. In high-speed, low product mix applications, aseptic packaging and in some beverage applications such as carbonated beverages, volumetric filling may still be preferred because it reduces complexity, allows clean-in-place and controls foam.

An increasing number of companies are transitioning from traditional to flowmeter-based filling methods, says Ola Wesstrom, Endress+Hauser USA senior industry manager, food & beverage. This can be a significant efficiency for volumetric or a Coriolis flowmeter for mass metering. Both provide the benefits of improved fill accuracy, faster changeovers and automatic fill adjustments to reduce errors. Coriolis mass flow metering is also useful when density of the medium being measured varies. Endress+Hauser's Dosimag electromagnetic flowmeter and Dosimass Coriolis flowmeter are often used for filling applications.



The Endress+Hauser Microplot FMR43 free space radar level sensor for hygienic measurement ensures reliable measurement under rapidly changing or turbulent process conditions. In addition to the proven 80 GHz technology, a 180 GHz frequency option provides additional flexibility for use in particularly small process tanks. Photo courtesy of Endress+Hauser.

Role Of End-Of-Line Checkweighing

While end-of-line checkweighers can provide valuable data, it's more effective to design quality into the filling process rather than rely solely on inspection after the fact, Benson says. Checkweighers are better used to monitor trends and performance across filling operations, rather than making real-time adjustments based on individual data points. Random checks at the filler itself are important, as they can help identify issues early — before they reach the check weigher at the end of the line.

End of line check weighing is primarily a final-weight verification tool used to ensure that significantly underweight product is not shipped to the customer, says Grantek's Toman. While it can also be used to detect overweight product, the detection occurs late in the production process, meaning a large quantity of out-of-tolerance product may already have been produced and packaged by the time it is detected, leading to waste and/or rework. Perhaps the most significant drawback of using EOL check weighing to provide online feedback is that it can only illuminate that a problem exists, but it cannot determine the source of the problem. In applications where the filling operation is somewhat simple, such as volumetric filling, this may be a reasonable approach. However, in applications where filling is more complex, or a high product mix exists, better solutions involving MES-enabled control recipes and sensor monitoring at the filling operation may significantly reduce the amount of nonconforming product reaching the checkweigher, resulting in lower scrap rates and higher productivity.

Connecting Shop Floor Systems With Filling Machines

Modern filling machines offer a range of data collection options that can be integrated with supervisory systems like MES, PdM, SPC and ERP, Benson says. When specifying a new filler, it's important to collaborate with plant operations, quality and IT teams to ensure the selected data outputs are compatible with existing infrastructure. This alignment allows for seamless integration and real-time visibility across systems, helping drive process control and continuous improvement.

Today's filling machines present a variety of data points that may be used in shop floor control systems — including MES systems — such as fill weights, fill volumes, flow rates, valve/gate timing, pressure, temperature, cycle time, vibration levels, motor and pump performance, sensor health, product characteristics, fault codes, batch and lot data and ambient environmental conditions, among others, Toman says. All of these data points may be historized and collected by MES systems to enable applications such as:

- Recipe management and variance monitoring
- Performance management including OEE and downtime root cause analysis
- Mass balance, statistical process control (SPC) for filling and product weights/volumes
- Scrap/reject measurement
- Quality verification and many others

Today's MES systems feed on visible, accurate data; of the more types of contextualized data available, the more smart manufacturing applications may be enabled.

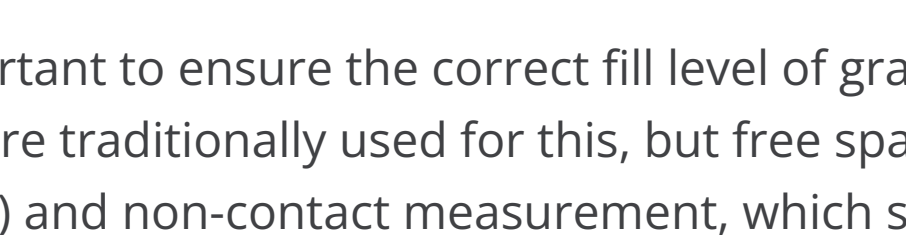
Other Key Issues And Applications

Consistent operating conditions and proper equipment maintenance are essential to minimizing overfilling issues, Benson says. Ensuring that both operators and maintenance staff are thoroughly trained on the filling equipment and its software helps build confidence and accuracy in the process. When teams understand how to identify and respond to fill inconsistencies, they're better equipped to maintain product quality and reduce waste.

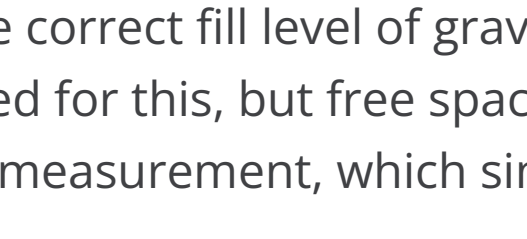
Measuring level in the filler bowl is important to ensure the correct fill level of gravimetric fillers, says Endress+Hauser's Wesstrom. Capacitance level sensors were traditionally used for this, but free space radar keeps up better with faster level changes, offering better accuracy (1 mm) and non-contact measurement, which simplifies cleaning. An example is the new Endress+Hauser Microplot FMR43 radar sensor.

In the realm of food and beverage production, multiple challenges may be present, including operator errors, equipment failures, incorrect packaging, incomplete records, etc., says Grantek's Toman. Each of these may be addressed by MES systems. Operator errors may be detected by automatically collected, historized and contextualized data, leading to alarms or automated corrections that can prevent product loss. Additionally, real-time data may be used to identify operator training needs. Equipment failures may be detected by performance management applications, leading to condition-based preventive maintenance. Incorrect packaging may be detected by vision-based label verification systems, preventing undeclared allergen recalls. Finally, automated traceability of product manufacturing steps may allow rapid, narrow identification of problem sources, leading to dramatically reduced recall, or even detecting problems quickly enough that compromised product never leaves the production facility. **FE**

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ALTERNATIVE PROTEIN



Backed Into a Corner, Alternative Protein Gets Creative

State legislative bans are targeting ingredients, dyes and cultivated products in 2025. Therefore, the market is forcing OEMs and alternative protein suppliers to get creative in manufacturing, lowering ingredient costs, and even going to market.

Mission Barns' aims to scale high-quality cultivated fat with commercial efficiency. Image courtesy of Mission Barns

BY GRANT GERKE

THE FOOD INDUSTRY HAS BEEN TURNED ON ITS HEAD. In recent months, state bans have attempted to usurp science-based federal regulations by the U.S. Food and Drug Administration (FDA) and drastically alter the system.

"I would encourage everyone to look at all the state laws," said Martin J. Hahn, partner at Hogan Lovells U.S., at the recent **IFT 2025** show in Chicago. "Do we have consistency? No. [The new laws] are subject to [court] challenges, but they are [banning] the ingredients du jour that Make American Healthy Again (MAHA) has decided they don't like. You can anticipate more regulations. These are very challenging times, stay tuned."

While Hahn is referring to bans primarily targeting synthetic dyes and additives, West Virginia made news in 2024 by imposing labeling restrictions on plant-based and cultivated meat products. Hahn believes that a concerted multi-state effort to scale labeling restrictions by MAHA is happening.

To push back against these developments, alternative protein and fat cultivation suppliers are getting creative.

"We will be licensing our proprietary bioreactor and fat cultivation technology to help scale impact faster," says Cecilia Chang, chief business officer at Mission Barns. "By sharing not just our technology, but also our regulatory and U.S. market know-how, we're enabling other companies to bring cultivated pork products to market more efficiently and affordably. This is how we accelerate adoption — not alone, but together."

The regulatory component involves the U.S. Department of Agriculture (USDA) and FDA. In late July, Mission Barns secured approval from the U.S. Department of Agriculture (USDA) for its cultivated fat, allowing its products to enter the U.S. market. Details of the approval include a grant of USDA inspection for its pilot facility and label sign-off of its cultivated fat ingredient, which received FDA approval earlier this year.

"The distinction of having both USDA and FDA matters," Chang says. "Other regulator jurisdictions look to the U.S. as a benchmark for novel food safety, so our dual-agency approval significantly reduces regulatory uncertainty in other markets as well."

The company's mission includes a creative go-to-market approach, scaling production and encouraging food manufacturers and original equipment manufacturers (OEMs) to use its bioreactor technology now.

"Equipment manufacturers and food producers each play a distinct role in scaling this category," Chang says. "OEMs are critical in helping replicate and manufacture our bioreactor systems at scale, especially if they can co-develop or customize equipment for cultivated meat applications."

The company also wants large food producers to manufacture its cultivated fat and incorporate it into their existing products or launch new lines.

"We believe the strongest partnerships will be cross-disciplinary, combining the technical expertise of equipment manufacturers with the market reach and formulation capabilities of food producers," Chang says.



Mission Barns is trying multiple avenues for market adoption, including straight-to-consumer by way of Fiorella restaurant and Sprouts Farmers Market in San Francisco and Oakland, respectively. Image courtesy of Mission Barns

New business strategies are afoot across the industry. At the 2025 Future Food Tech conference in San Francisco, Thomas Creswell, chief business officer at Swedish-based Melt&Marble, addressed the alternative protein market.

"The food industry is at a turning point, and precision fermentation is taking center stage," Creswell says. "As the industry seeks cost-effective, high-impact solutions, precision fermentation stands out for its strong scalability potential, making it a key focus for the future of food innovation."

The urgency for scalability is palpable across the industry. In July, GEA Group opened its \$20 million Food Application and Technology Center in Janesville, Wisconsin. "The food industry is at a crossroads. To feed future generations sustainably, we must turn vision into a scalable reality," says Stefan Klebert, CEO of GEA Group.

The innovation center's focus is on high-volume production, lowering costs and demonstrating pilot-scale bioreactors to prospective customers. The facility provides pilot-scale bioreactors for precision fermentation and cell cultivation, simulating industrial conditions to enable companies to validate and optimize production processes early.



GEA recently opened an innovation center for precision fermentation and cell cultivation in Janesville, Wisconsin. Image courtesy of GEA.

"With this investment, we are helping our customers scale up the production of novel foods such as precision-fermented egg white and cultivated seafood," Klebert says. "At the same time, we are strengthening our North American footprint, where our 1,600 employees at 16 locations support manufacturing, sales, service, training and testing."

Other applications at the center include thermal processing, aseptic filling, membrane filtration, spray drying and centrifugation support for downstream separation and formulation — critical steps to achieving product quality, texture and cost-efficiency.

During the ribbon-cutting, GEA highlighted the convergence of traditional agriculture, advanced biotechnology and sustainable manufacturing as a perfect fit for the Janesville location. "Our new center in Janesville is a key milestone on our shared journey — both for our customers and for us as a company," Klebert adds.

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Ramping Potato Protein Production for the U.S. Snack Industry

Israel-based PoLoPo it has developed a bio-engineered potato with up to three times the protein content of conventional potatoes. The technology can be integrated into any potato variety and supports clean-label food applications, the company says.

"We elevate the protein content in the tuber, the part we actually eat," says Dr. Maya Sapir-Mir, CEO of PoLoPo, in a recent interview with the BBC. "We are commercializing our protein to snack chip brands in the U.S."

According to the company, food manufacturers will be able to use existing slicing and production equipment to create chips products. "This is not another highly processed protein with a long ingredients list," Sapir-Mir says. "We make the best potatoes in the world, allowing snack makers a faster, cleaner way to meet rising demand for high-protein products."

The company is expected to have USDA clearance by the end of 2025.

Turning Food Processing On Its Head

While innovative, plant-based products are making inroads in specific segments, a step change in manufacturing for alternative proteins is underway. In 2024, **FOOD ENGINEERING** reported that plant-based chicken manufacturer Rebellious Foods had combined multiple batch steps into a continuous system using the Mock 2 system, which features a chilled dough substrate processing application. The Mock 2 produces a range of plant-based meat products at volumes of 2,500-5,000 lbs. per hour on a single processing line.

"Rebellious' Mock 2 is the culmination of years of research to convert batch processing of plant-based meat ingredients into a continuous process and address the temperature control and specific processing steps that aren't typically done in a continuous process," said Christie Lagally, founder and CEO of Rebellious Foods, in October 2024.

Based in the Netherlands, Dutch Structuring Technology (DST) is currently employing manufacturing innovations and moving away from traditional processing of plant proteins using older, heat-intensive extrusion technologies.

Traditional extrusion processing has many drawbacks with alternative proteins:

- Quality fluctuations due to machine and parameter variations
- High-energy consumption that adds to the end-product's costs
- Degradation of ingredients due to high pressure and temperature
- And, in some cases, polysaccharides and antioxidants are added to address any flavor changes.

To address these challenges, DST created the SHEARTEX process, co-developed with Sobatech, which reduces energy costs by three times compared to High-Moisture Extrusion Cooking (HMEC). "SHEARTEX can create products with fibers that exhibit particular lengths and strengths, so they can more closely match the specific animal meat products they are replacing," explains Julian Lekner, co-founder of DST.

Moreover, like Rebellious Foods' Mock 2, Sheartex is a continuous process application, and the OEM opted for Allen-Bradley Kinetix servo-driven motors and variable speed drives (VSDs). This combination reduces energy costs while providing precise control of the micro-dosing in the application.

"The micro-dosing of the ingredients in the continuous process can only be achieved with servo motors, as it is crucial to keep the tare weight of the dosing hopper as low as possible," says Clint op den Buijsch, sales engineer at Routeco Netherlands. "The servo-controlled dosing hoppers must achieve a dosing accuracy of within one percent when dispensing what can be expensive and strong-flavored micro-powders." **FE**

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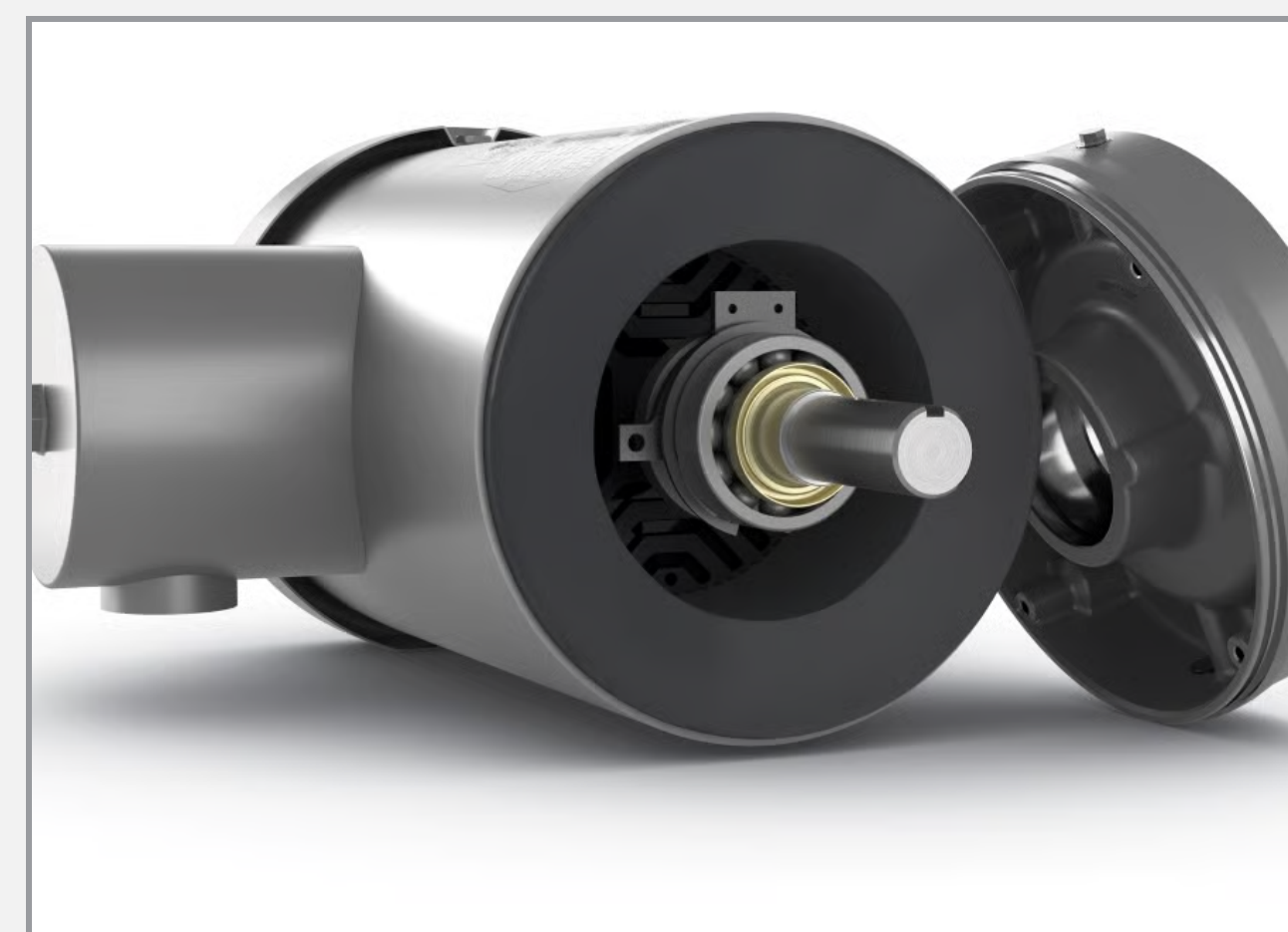
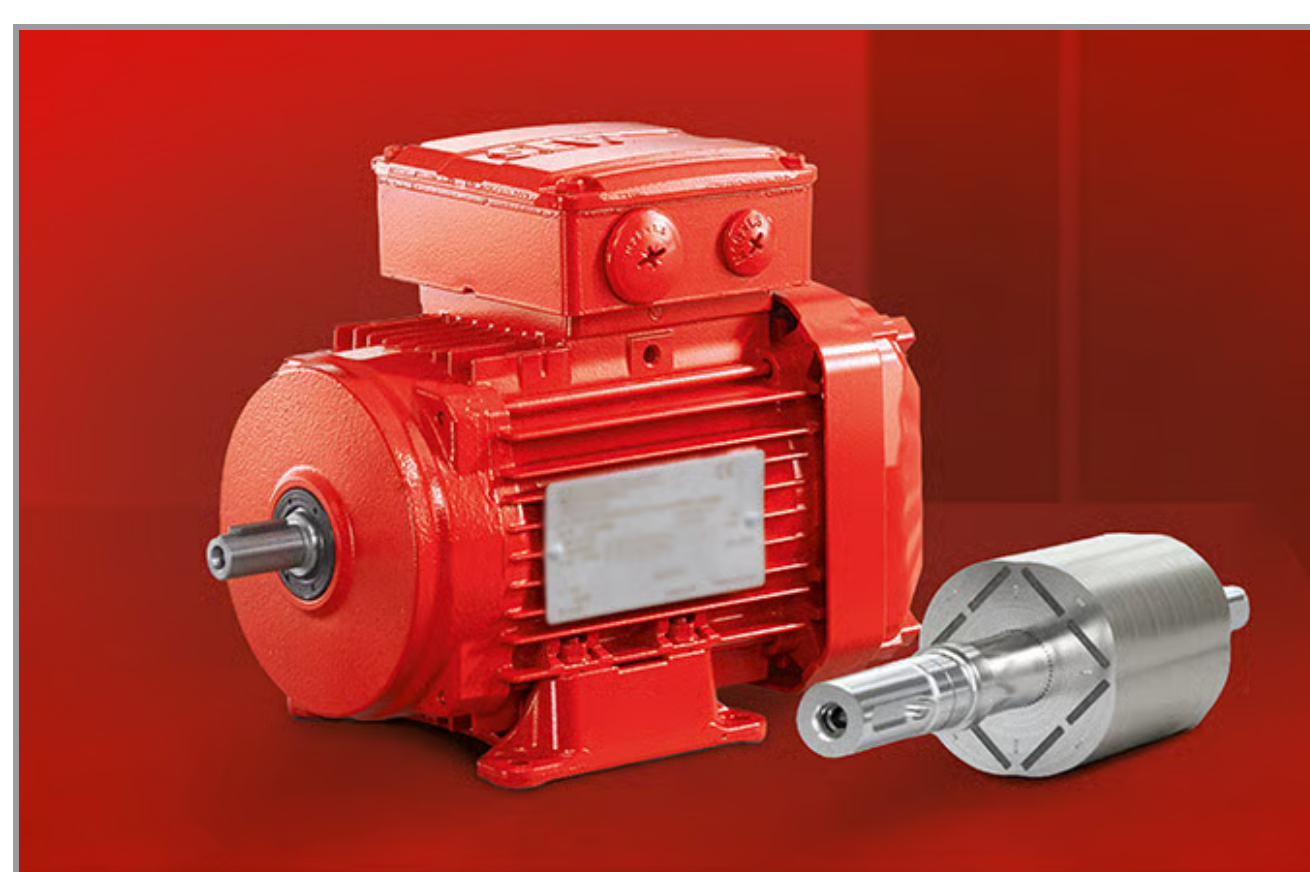
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All SP5+ motors feature an energy-efficient design that leverages rotor technology to reduce energy consumption and optimize performance. Meeting or exceeding IE5 efficiency standards, the SP5+ motor offers sustainability when paired with a required variable-speed drive. Built for food and beverage applications, the motor's IP69-rated stainless-steel construction is engineered to endure high-pressure washdowns, steam cleaning and exposure to dust. Fully compliant with NSF and Meat Institute hygiene standards, it's ideal for facilities requiring rigorous sanitation practices.

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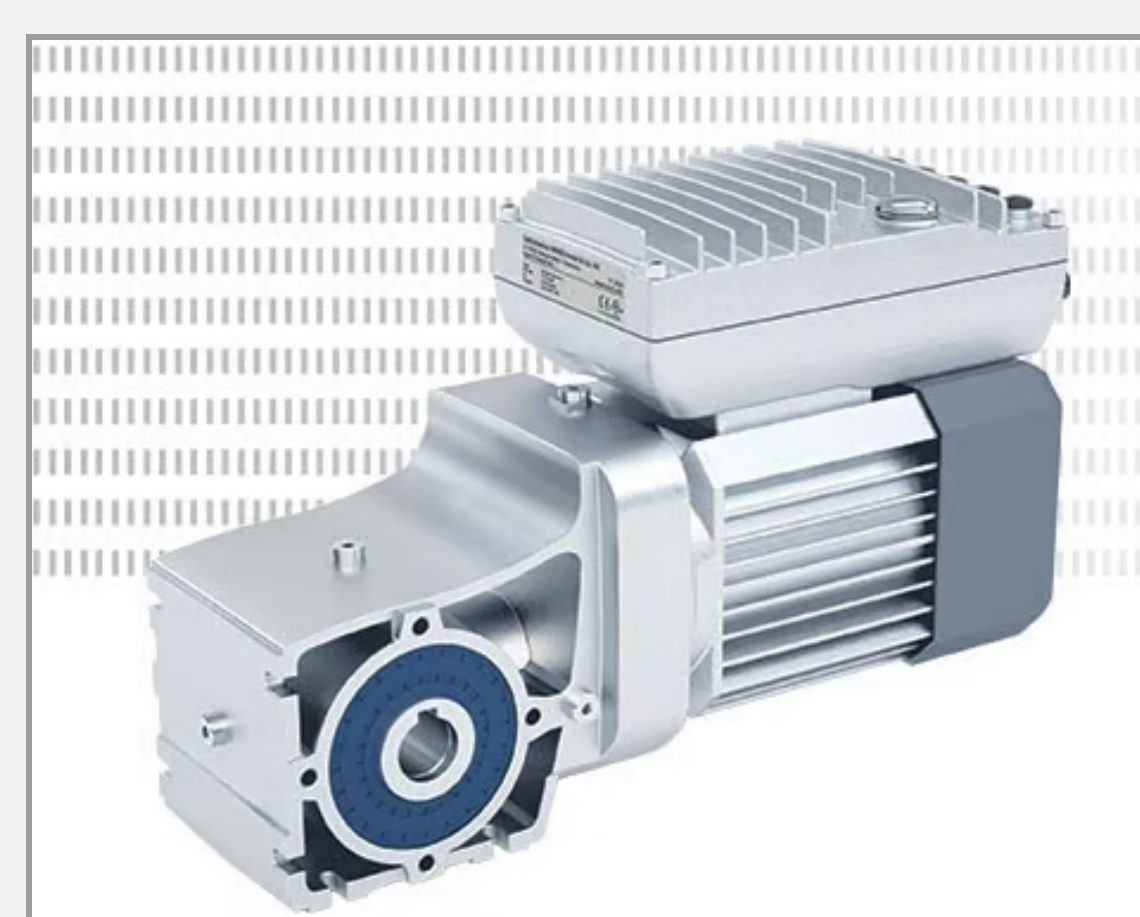
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M100 Electronic Motor Starter

The M100 Electronic Motor Starter integrates into intelligent motor control setups, boosting productivity and minimizing downtime. It serves as a cost-effective, space-efficient option. The M100 incorporates point-on-wave (POW) switching technology. It offers zero stacking with no derating up to 55C, providing flexibility in installation without compromising performance. Removable terminal blocks, available in both screw and push-in variants, add convenience and adaptability. The M100 also supports direct-on-line (DOL), reversing, and safety capabilities in the same form factor.



NORD

IE5+ Permanent Magnet Synchronous Motors

The new generation of NORD IE5+ synchronous motors feature permanent magnet technology for reduced energy loss, consistent high-efficiency even at partial loads and low speeds, and high-power density. Their constant torque over a wide speed range enables fewer system variants. A smooth surface, non-ventilated variant (TENV) is available for hygienic wash-down environments, while a ventilated variant (TEFC) offers optimized heat dissipation for applications with heavy traffic.

YASKAWA AMERICA, INC.

GA800 Drives

Designed to control traditional and emerging motor technologies, the GA800 handles applications ranging from simple fans and pumps to high-performance test dynamometers requiring precise regulation. In addition to its powerful design, the GA800 provides flexible network communications, embedded functional safety and easy-to-use tools featuring mobile device connectivity. The line has been expanded to include:

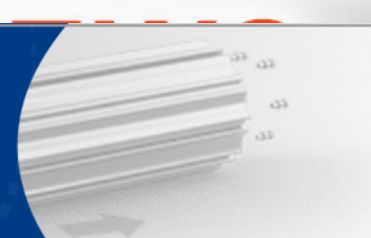
- GA800 frame 12 standard drives - 480V, 700 to 1000 HP
- GA800 480V, 700 to 1000 HP Configured Packages - Types 1, 12, and 3R
- GA800 480V, 400 to 600 HP Configured Size Reduction **FE**



NEXT ARTICLE

Manufacturing

Motor
Profiled Sleeve



REGULATOR

FDA, USDA Request Information on Ultra-Processed Foods



Photo courtesy of Getty Images Plus / carotur



The U.S. Food and Drug Administration and U.S. Department of Agriculture have launched a joint request for Information (RFI) to establish a federally recognized, uniform definition for ultra-processed foods.

"Ultra-processed foods are driving our chronic disease epidemic," says HHS Secretary Robert F. Kennedy, Jr. "We must act boldly to eliminate the root causes of chronic illness and improve the health of our food supply. Defining ultra-processed foods with a clear, uniform standard will empower us even more to Make America Healthy Again."

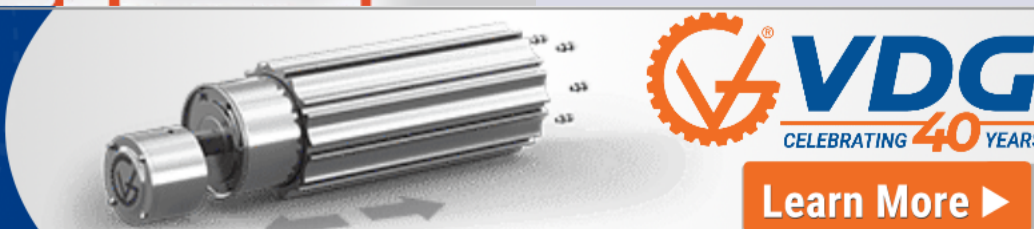
Currently, there is no single authoritative definition for ultra-processed foods for the U.S. food supply. The FDA and USDA say a uniform definition of ultra-processed foods will allow for consistency in research and policy.

The agencies estimate approximately 70% of packaged products in the U.S. food supply are foods often considered ultra-processed, and that children get over 60% of their calories from such foods. They say scientific studies have found links between the consumption of foods often considered ultra-processed with health outcomes including cardiovascular disease, Type 2 diabetes, cancer, obesity and neurological disorders.

The RFI became available on the [federal register](#) on July 24 and seeks information on what factors and criteria should be included in a definition of ultra-processed foods. The public comment period is set to end Sept. 23. **FE**

NEXT ARTICLE

NEW SSV-XP Drum Motor
Exchangeable Profiled Sleeve



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