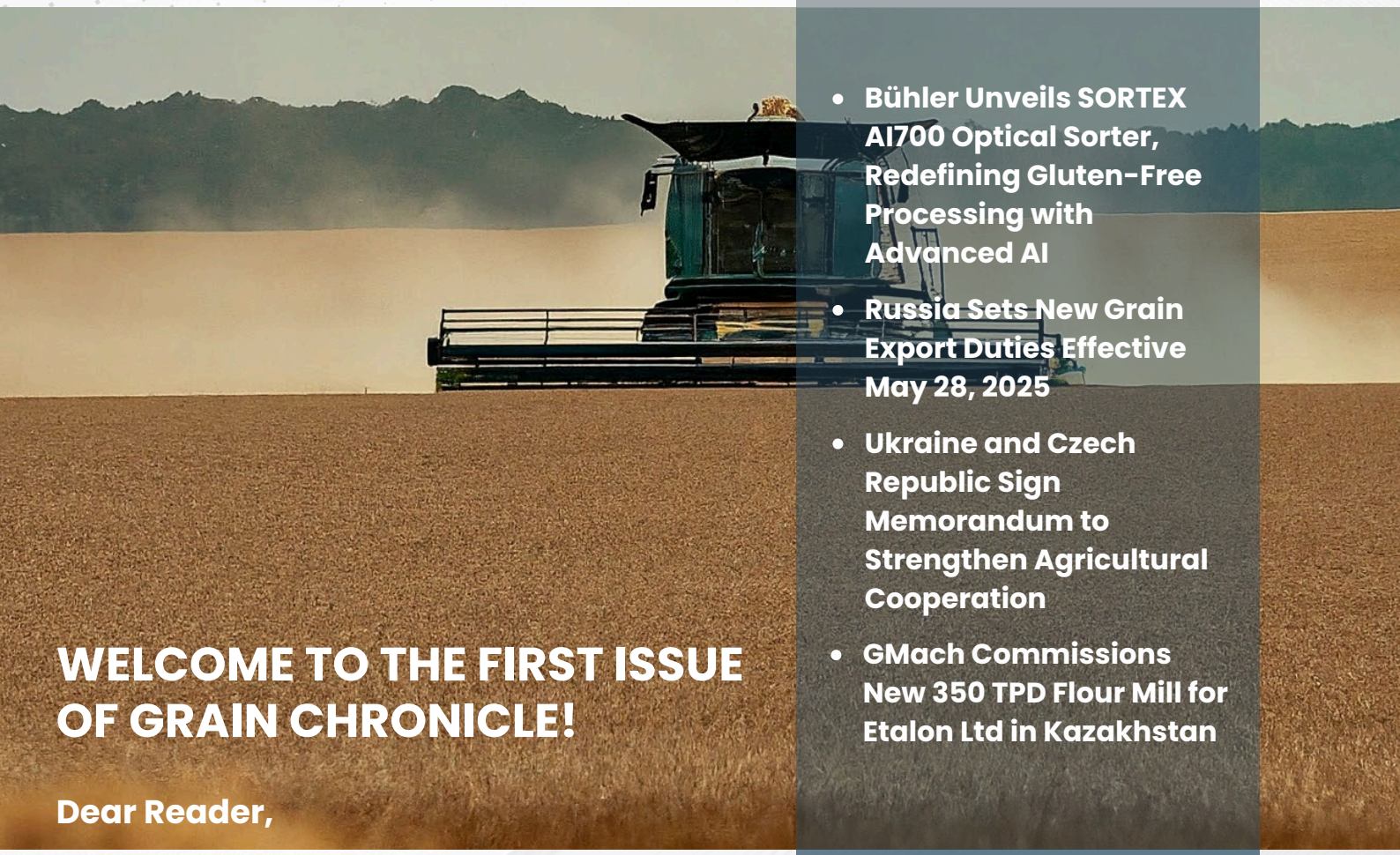
Monthly

Newsletter

Monday 2nd June, 2025

GRAIN CHRONICLE



- Bühler Unveils SORTEX AI700 Optical Sorter, Redefining Gluten-Free Processing with Advanced AI
- Russia Sets New Grain Export Duties Effective May 28, 2025
- Ukraine and Czech Republic Sign Memorandum to Strengthen Agricultural Cooperation
- GMach Commissions New 350 TPD Flour Mill for Etalon Ltd in Kazakhstan

WELCOME TO THE FIRST ISSUE OF GRAIN CHRONICLE!

Dear Reader,

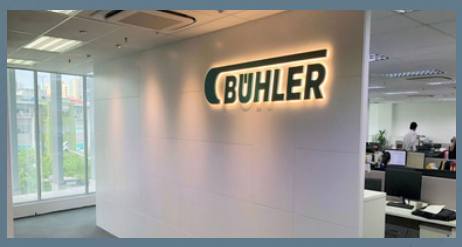
We're happy to welcome you to the inaugural edition of Grain Chronicle newsletter, your new source for news, insights, and developments from across the grain, milling, and feed industries.

Our goal is to inform, connect, and inspire professionals like you—whether you're in production, equipment manufacturing, trade, or research.

Thank you for joining us at the beginning of this journey. We look forward to growing together with you—issue by issue, grain by grain.

Warm regards,

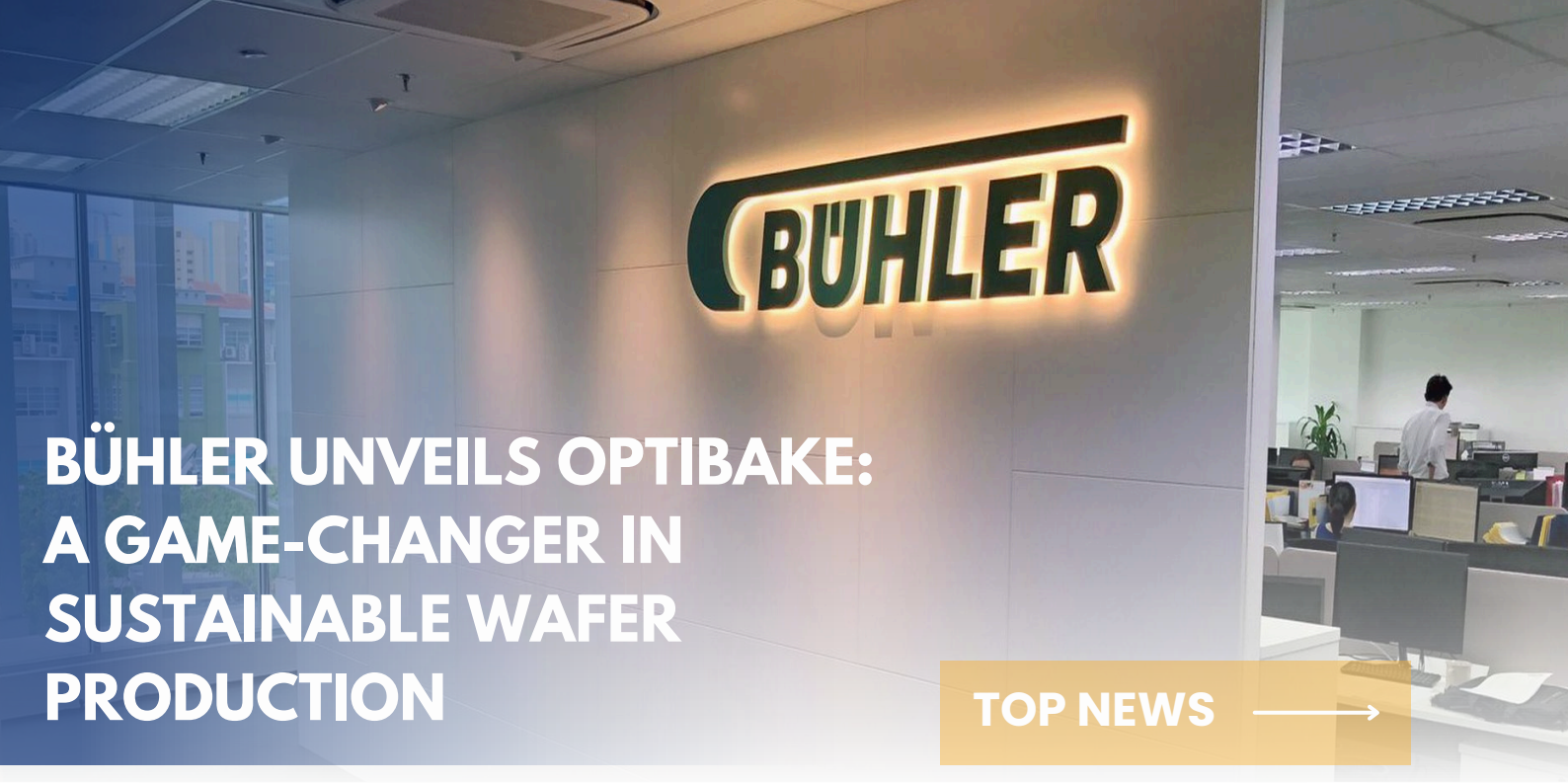
The Grain Chronicle Team



TOP NEWS

Bühler unveils OptiBake: A game-changer in sustainable wafer production

Global technology leader Bühler Group has introduced a revolutionary advancement in industrial baking with the launch of OptiBake.



BÜHLER UNVEILS OPTIBAKE: A GAME-CHANGER IN SUSTAINABLE WAFER PRODUCTION

TOP NEWS

Global technology leader Bühler Group has introduced a revolutionary advancement in industrial baking with the launch of OptiBake, the world's first inductively heated wafer oven. This innovation marks a milestone in wafer production by significantly reducing energy consumption, enhancing product quality, and supporting a more sustainable and flexible manufacturing process.

OptiBake stands apart from conventional gas-fired or electric wafer ovens through its innovative use of electric induction heating technology. The system uses electromagnetic fields to generate heat directly in the baking plates, eliminating the need for combustion and significantly cutting emissions. This breakthrough allows up to 50% energy savings, with no direct emissions of CO_2, CO, or NOx. The system not only supports environmental sustainability but also helps manufacturers benefit from reduced energy costs, carbon taxes, and potentially increased subsidies.

"As we developed OptiBake, our mission was to go beyond conventional improvements," said Sandra Lutz, Head of Business Unit Wafer at Bühler Group. "We aimed to achieve unmatched wafer quality and operational flexibility while providing a tool for our customers to make meaningful contributions to sustainability."

The environmental impact of the OptiBake oven can be further minimized when operated using low-carbon energy sources, making it an ideal fit for companies working toward decarbonization and energy security. The elimination of natural gas dependency is another step towards resilient and future-ready production lines.

Industry Recognition and Pilot Partnership

Bühler's innovation has already received industry recognition, winning the Lower Austrian Innovation Award 2025. Out of 80 submissions and nearly 30 finalists, OptiBake claimed the prestigious Karl Ritter von Ghega Prize, awarded for pioneering industrial innovation. "This award underlines the strength of our innovation and the collaboration behind it," said Sandra Lutz, emphasizing the teamwork and partnerships that fueled the development.

One such key partner is Loacker, the iconic South Tyrolean confectionery brand known for its premium wafers and chocolate products. Since 2020, Loacker has collaborated with Bühler to pioneer zero-emission wafer production.

"This project aligns perfectly with our family company's long-term sustainability goals," said Andreas Loacker, Vice Chairman of the Board. Markus Valersi, Project Manager Engineering at Loacker, added:

"OptiBake supports our transition toward zero-emission baking while maintaining our high product standards. It's a vital step in reducing our environmental footprint."

Shaping the Future at the Wafer Innovation Center

Bühler's Wafer Innovation Center in Leobendorf, Austria, continues to be a hub for development and collaboration. As the global leader in industrial wafer production systems, Bühler offers tailored solutions for a diverse range of products, including flat and hollow wafers, wafer snacks, ice cream cones, and more.

At the center, customers can test solutions with Bühler's experts, refine recipes, and explore energy-efficient technologies like OptiBake. Combined with Bühler's comprehensive global service in sales, maintenance, and spare parts, the center plays a crucial role in driving progress and excellence in wafer production.

RUSSIA SETS NEW GRAIN EXPORT DUTIES EFFECTIVE MAY 28, 2025

The Russian Ministry of Agriculture has announced updated export duty rates for key grain commodities, effective from May 28, 2025. The new rates reflect ongoing efforts to balance domestic market stability with international trade competitiveness.

According to the Ministry, the export duty on wheat will be set at 17.16 USD per metric ton, calculated based on an indicative price of 248.4 USD per metric ton. Meanwhile, barley exports will remain exempt from any duty, with the indicative price established at 204 USD per metric ton.

The export duty on corn has been set at 7.62 USD per metric ton, based on an indicative price of 220.9 USD per metric ton, the Ministry confirmed.

The duty rates are calculated weekly using a formula that considers global market trends and average export prices, in line with Russia's grain export regulation mechanism introduced to

stabilize the domestic grain market and curb inflationary pressures.

These adjustments come as part of the government's broader agricultural policy aimed at ensuring food security and supporting domestic producers, while maintaining Russia's strong position in global grain markets.

Russia remains one of the world's largest grain exporters, with wheat being its most significant commodity on the global market. Market analysts will closely watch how the updated export duties influence trading activity and pricing trends in the weeks ahead.

ANDRITZ TO DELIVER COMPLETE FEED PLANT TO ALWADI POULTRY FARMS, SAUDI ARABIA

International technology group ANDRITZ has received an order from Alwadi Poultry Farms Company, based in Riyadh, Saudi Arabia, to deliver a complete, high-capacity feed mill for the production of poultry and ruminant feed.

This order is a significant step in ANDRITZ's expansion in the feed industry in the Middle East and Africa (MEA) region.

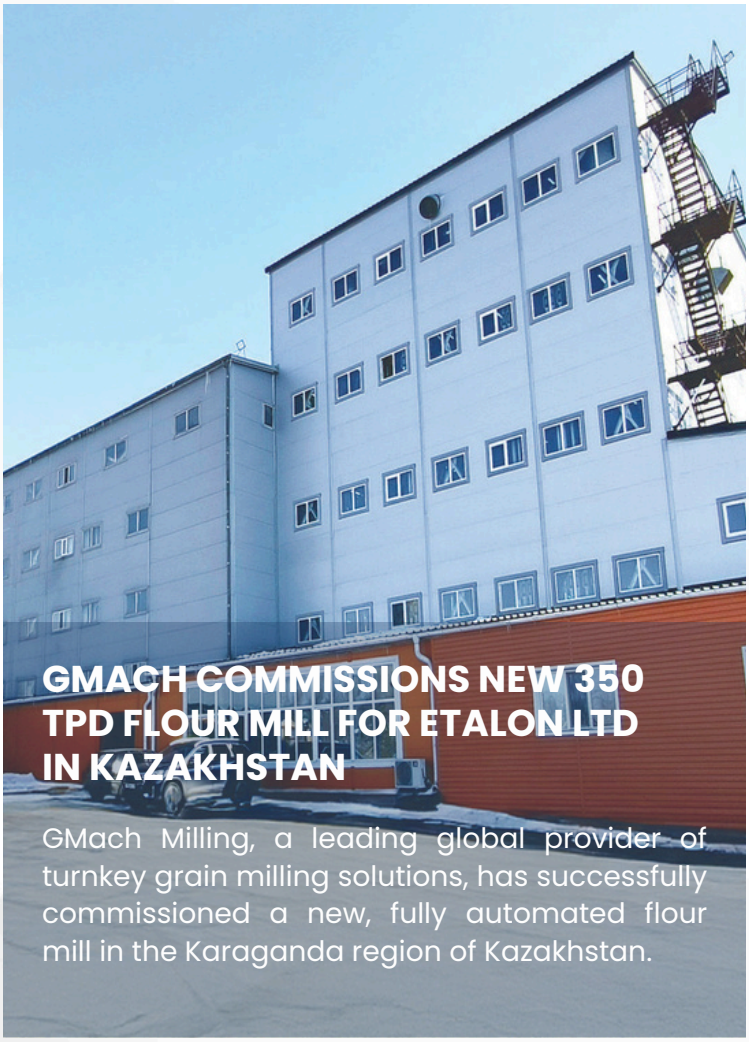
ANDRITZ will supply the complete process lines – from raw material intake to finished product – including key machinery such as hammer mills, mixers, pellet mills, and crumblers, with major components coming from manufacturing facilities in Europe. The order also includes installation supervision, commissioning, and local after-sales support by ANDRITZ. With ANDRITZ's advanced technology, the plant will offer high efficiency and flexibility as well as robust process control – all tailored to provide high-performance animal feed solutions for the Saudi market.

Established in 1975, Alwadi Poultry Farms Company is one of the leading poultry producers in Saudi Arabia, with integrated operations spanning chicken breeding, hatcheries, feed production, and poultry processing. The investment in this new plant underlines the company's strategy to enhance its production capacity, feed quality, and market position.

Mr. Khalid Alsanie, General Manager of Alwadi Poultry Farms Company says: "With our long and distinguished history in the poultry sector, Alwadi Company has gained unparalleled experience. This experience has earned us the trust of our partners and consumers, and for many generations, our company has been a cornerstone of the poultry industry, built on a legacy of quality and a steadfast commitment to excellence. We are pleased to announce our collaboration with ANDRITZ in the field of feed mills and congratulate them on securing this contract with one of the largest and oldest poultry companies in the Saudi market. When the idea of establishing a new feed mill for Alwadi Company was conceived, a working team was formed consisting of the Production, Quality, Maintenance, and Technical Departments to study the price offers. After a thorough analysis, the team recommended choosing ANDRITZ for its quality, ease of maintenance, and outstanding technical presentation of the project."

Michael Lierau, Senior Vice President ANDRITZ Feed & Biofuel, adds: “We are honored to partner with Alwadi Poultry Farms Company on this significant project. With over 186 years of experience, advanced technology, and a strong presence in the region, we are committed to delivering excellence. This state-of-the-art, high-capacity facility sets a new benchmark in the region, and we’re proud to contribute to Saudi Vision 2030 and its goal of achieving full self-sufficiency in the poultry sector by 2030.”

This order demonstrates ANDRITZ’s growing presence in the MEA region and reinforces its position as a complete plant solutions provider for the feed industry.



GMACH COMMISSIONS NEW 350 TPD FLOUR MILL FOR ETALON LTD IN KAZAKHSTAN

GMach Milling, a leading global provider of turnkey grain milling solutions, has successfully commissioned a new, fully automated flour mill in the Karaganda region of Kazakhstan.

The state-of-the-art facility, developed for Etalon Ltd, boasts a processing capacity of 350 tonnes per day and marks the latest in a growing series of GMach’s projects across the country.

Designed with a steel-structured layout, the new mill is part of GMach’s ongoing efforts to meet rising investor demand for high-efficiency, low-maintenance production facilities in Kazakhstan’s agricultural sector. The facility’s advanced technological and structural components were fully delivered by GMach as part of the turnkey solution.

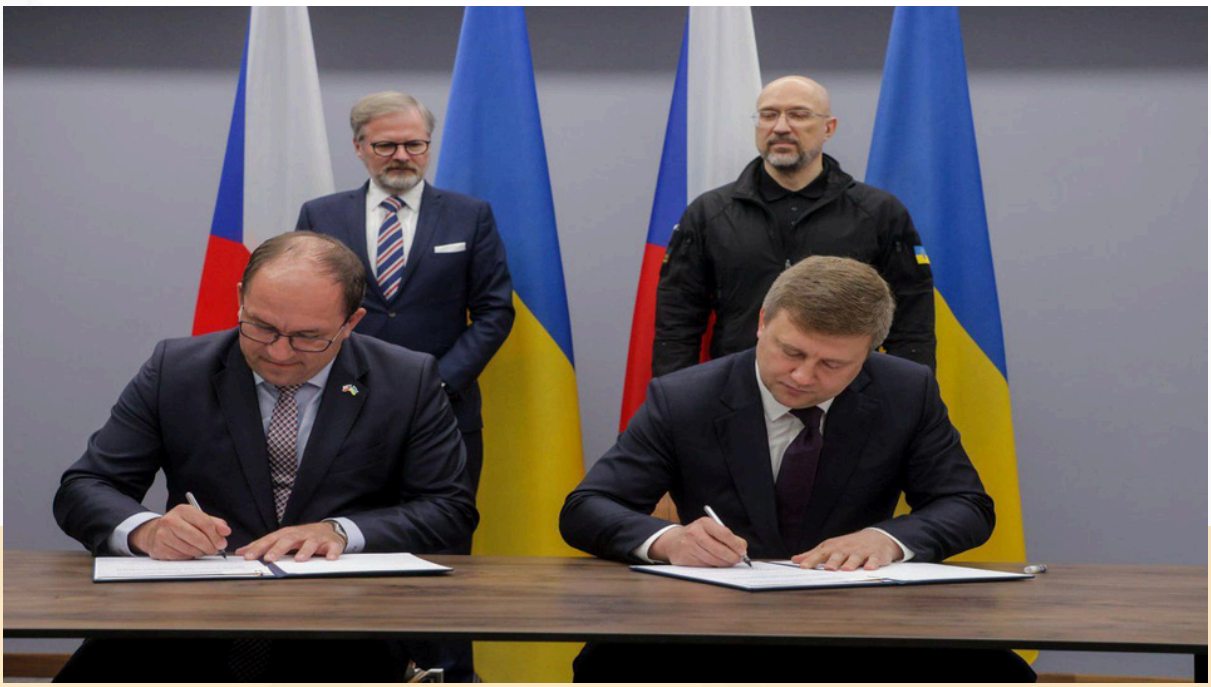
Equipped with a comprehensive automation system, the plant significantly reduces labor and operational costs. It features specialized equipment for cleaning and sorting grains prior to milling, including trieurs and tempering machines that ensure optimal grain preparation. In line with sustainability goals, the facility also includes by-product management systems, converting separated light grains into valuable animal feed.

The mill incorporates energy-efficient electric motors to lower power consumption and enhance overall environmental performance. GMach has also prioritized product quality and food safety, installing compliant sifters to guarantee hygienic and secure flour production.

This new Karaganda mill forms part of a broader industrial complex, which includes production, administrative, and logistics units. The facility supports the manufacture of flour in multiple formats to cater to diverse market requirements.

With nearly 60 turnkey milling projects and silo and machinery systems deployed in approximately 30 enterprises across Kazakhstan, GMach has established itself as a key player in the region's grain processing industry. The company maintains two local branches, offering comprehensive support and after-sales services to clients throughout the country.

The successful delivery of this latest project underlines GMach's long-term commitment to supporting Kazakhstan's agricultural development through innovative milling technologies and localized service.



UKRAINE AND CZECH REPUBLIC SIGN MEMORANDUM TO STRENGTHEN AGRICULTURAL COOPERATION

In a significant step toward deeper international collaboration, the Minister of Agrarian Policy and Food of Ukraine, Vitaliy Koval, has signed a Memorandum of Understanding with the Minister of Agriculture of the Czech Republic, Marek Výborný. The signing ceremony took place in the presence of the Prime Ministers of Ukraine and the Czech Republic, Denys Shmyhal and Petr Fiala, underscoring the high-level commitment of both nations to advancing agricultural cooperation.

The memorandum sets the foundation for enhanced bilateral collaboration in a wide range of areas within the agricultural and food sectors. Notably, the agreement emphasizes support for Ukraine's integration into the

Key areas of cooperation outlined in the memorandum include:

- Harmonization of agricultural laws and regulations with European norms
- Development of animal husbandry, crop production, and aquaculture
- Improvement of veterinary and phytosanitary controls
- Strengthening food safety frameworks
- Promotion of bilateral trade in agricultural products
- Scientific, educational, and innovation exchanges
- Joint participation in exhibitions, fairs, and research projects

In addition, the agreement includes the establishment of a dedicated working group to coordinate the implementation of joint initiatives and ensure effective progress.

“This is not just a declaration of intent. It is a clear signal that Ukraine is moving forward towards a sustainable, competitive and European agricultural sector. And we are grateful to our Czech partners for their willingness to be part of this journey,” said Minister Koval following the signing.

strategy, offering new opportunities for knowledge sharing, innovation, and market expansion. It also reflects the Czech Republic’s continued support for Ukraine’s reform and integration efforts in the face of ongoing challenges.

With this agreement, both countries reaffirm their commitment to building a resilient, modern, and mutually beneficial agricultural partnership.

Bühler Unveils SORTEX AI700 Optical Sorter, Redefining Gluten-Free Processing with Advanced AI

Bühler has launched its most advanced optical sorting solution to date, the SORTEX AI700, in London. Leveraging deep learning and artificial intelligence (AI), the new machine sets a new benchmark in impurity detection, with its first application focused on removing gluten-containing grains—such as barley, wheat, and rye—from oats. This development plays a vital role in safeguarding the integrity of gluten-free food production.

The SORTEX AI700 represents a major technological leap, moving beyond traditional machine learning systems. Previous models, such as those in the SORTEX SpectraVision range, relied on algorithmic refinement guided by engineer input. In contrast, the AI700 employs Convolutional Neural Networks

(CNNs) trained on millions of labelled images. This allows it to differentiate materials with unmatched accuracy by analyzing color, shape, and texture.

“This is my most exciting project yet,” says Melvyn Penna, Product Manager for the SORTEX AI700 and a key leader in Bühler’s optical sorting advancements. “We’ve moved from engineer-driven adjustments to systems that learn and adapt through deep learning. This breakthrough enables unparalleled accuracy in identifying both acceptable and rejectable product.”

For food processors, the commercial advantages are substantial. Enhanced defect detection translates into higher product quality and increased yields. “We’ve seen a significant improvement in removing unwanted grains while reducing false rejects,” Penna explains. “This not only reduces waste but also boosts profitability. Real-world analyses show that even a 5–10% increase in reject concentration accuracy can deliver revenue gains worth hundreds of thousands of dollars annually.”

The SORTEX AI700 arrives at a critical time for the food industry. Rising raw material costs, more frequent crop defects due to climate change, stricter regulatory standards, and growing consumer expectations have amplified the demand for precision in food processing. Bühler’s AI-driven technology offers a timely and powerful solution to these emerging challenges.

“Bühler plans to expand the AI700’s capabilities to a broader range of commodities in the near future.”

The machine's first application addresses a pressing issue in allergen control. While oats are naturally gluten-free, they are often contaminated with gluten-containing grains during harvesting and processing. Traditional sorters meet basic standards but struggle with precise gluten removal. “With the AI700, we've achieved an unprecedented level of gluten grain removal, ensuring safer, high-integrity gluten-free oat products,” Penna notes.

While the initial launch is exclusively focused on oats, Bühler plans to expand the AI700’s capabilities to a broader range of commodities in the near future. The release of this innovative sorter underscores Bühler’s long-standing commitment to food safety, innovation, and sustainable production efficiency.

The SORTEX AI700 marks a transformative moment in food sorting technology—offering processors new tools to improve quality, reduce waste, and meet the highest safety standards through the power of artificial intelligence.