



We stand by you

to FRY

Countless appetizing and delicious ideas to get innovative, tasty dishes.

to BAKE

These light and tasty dishes may be prepared in few minutes, and feature supercool recipes along with recipes from the Italian tradition.

VegeTiAmo!
il cuore verde del gusto

Products of vegetal proteins-base for those who wish to propose a vegetarian menu without giving up the taste of classical snack foods.

GRAND'OR
Gourmet
IL SURGELATO RAFFINATO

The recipes signed by Chef Enrico Mazzaroni are dedicated to the restaurateurs who care for quality offering fancy and elaborate products and are continuously searching for new culinary approaches.



CGM s.r.l. 62010 Pollenza (MC) Rione Pollenza Scalo, 85 - ITALY - Tel. +39.0733 201025 (r.a.) - info@cgmsurgelati.it

www.cgmsurgelati.it



> Frozen Pizza

> Nutrition & Ingredients

> Frozen Snacks & Pastry

6 BUSINESS PERSPECTIVES

GETTING COLD QUICKLY

THE MARKET IS CONSTANTLY DIVERSIFYING



We preserve nature's gifts

Barley

Ancient grains mix - mixture of white and red quinoa, brown and black rice and buckwheat



Bulgur



Grains, a must-have in every kitchen!

- **Highly nutritious:** low in fat and carbohydrates; high in fibre, minerals and vitamin B.
- **A wide range:** variety is an asset!
- Some grains and “pseudograins” are also **gluten-free**.
- **Al dente pre-cooked**, which saves a lot of time in the kitchen. All you need to do is heat them up to enjoy hot or cold.
- **Easy to portion:** use just the right amount to reduce food waste.
- **No salt or other flavourings**, so they can be used to rustle up all sorts of meals.
- Perfect for creative dishes, and suitable for **vegetarians, vegans and flexitarians**.

#ardolicious

Visit www.ardo.com and discover our range and delicious recipes!

Brown rice





MAY - JUNE 2023
VOLUME 35 ISSUE 3

REGULARS

04 COMMENT
Should Sustainability Be a Shared Responsibility?

06 NEWS
News from Around the World

48 FAIR REVIEW:
INTERPACK
A Higher Level of Innovation



50 PRODUCT UPDATES
Latest Innovations Within the Industry

FEATURES



10 FROZEN SNACKS & PASTRY
The Market is Constantly Diversifying

16 FROZEN PIZZA
The Frozen Pizza Market: 6 Business Perspectives



22 FROZEN FINGER FOODS
A Great Fit for Modern Consumers

26 INGREDIENTS FOR THE FROZEN FOOD INDUSTRY
Getting Cold Quickly

30 TECHNOLOGY FOR FROZEN PIZZA
A Focus on Precision and Consistency

34 DEEP FREEZING TECHNOLOGIES
A Race for Innovation the Benefits All Parties



38 OPTICAL SORTING
A Crucial Step Towards a Perfect Product

40 FROZEN FOOD IN ITALY
Practicality as the Main Reason for Purchase



42 FROZEN PASTA & SAUCES MARKET
Adaptability as a Key Element for Success

46 MULTIFUNCTIONAL COOKING DEVICES
Multifunctionality: A New Dimension?



By **Bogdan Angheluta**,
Editor in Chief



SHOULD SUSTAINABILITY BE A SHARED RESPONSIBILITY?

Sustainability is of course a wide term, covering many segments. But energy efficiency is something that most food producers thrive to achieve, and that means that (at least) part of those efforts will be transferred to manufacturers of technology equipment. Still, the question is: where do you draw the line between being sustainable and being efficient? Or better even, should that line even be drawn? As technology equipment sums up so many parts, it's sort of difficult to pinpoint exactly where those small gains should be made, because even if you manage to create a highly efficient motor, that still has to be cased inside parts designed by a different division. Another issue that springs up in virtually every conversation about sustainability is food waste. Here, the responsibility lies with even more parties, as transport and the whole supply chain, in general, play their part. Figures by The World Counts show that greenhouse gas emissions are released into the atmosphere throughout every stage of the food supply chain. Energy is consumed during the cultivation, storage, processing, transportation, and cooking of food. Moreover, the disposal of discarded food in landfills also contributes to emissions. Notably, meat production, particularly beef, generates substantial amounts of methane gas due to the digestive process of cows, which results in them releasing methane through flatulence. Methane is an extremely potent greenhouse gas, with a global warming potential 84 times higher than that of CO₂ over a 20-year period. The global food system is responsible for as much as 30% of total greenhouse gas emissions. Within this system, food waste plays a significant role. It is estimated that food waste alone contributes to the release of 3.3 billion tons of CO₂ equivalents into the atmosphere annually, further exacerbating the carbon footprint. So, it does seem that sustainability must be seen as a shared responsibility, and all parties involved should acknowledge this, even more than they have so far. ■



Another issue that springs up in virtually every conversation about sustainability is food waste. Here, the responsibility lies with even more parties, as transport and the whole supply chain, in general, play their part.



Editor in Chief:
BOGDAN ANGHELUTA
bogdan.angheluta@trade.media



Advertising Sales Manager:
ALEXANDRU JINGA
alexandrujinga.pro@gmail.com



Production Manager:
MARIAN CILIBEANU
production@trade.media



Circulation Manager:
SIMONA ARDELEANU
simona.ardeleanu@trade.media



Worldwide contributors:
EUROMONITOR INTERNATIONAL
LEATHERHEAD FOOD RESEARCH
MINTEL GROUP LTD
JONATHAN THOMAS
MARKETS AND MARKETS
IGD
DIETER MAILÄNDER (Germany)
ANN MARIE FOLEY (Ireland)



Printing:
Sothis



Published by:
Trade Media Solutions



Executive Director:
RALUCA MIHAELA CANESCU
raluca.canescu@trade.media



Managing Director:
NICOLETA MARASESCU
nicoleta.marasescu@trade.media



Publishing office:
1 G-ral. David Praporgescu St.,
2nd floor, sector 2, Bucharest,
Romania
Tel./fax: **+40 21 315 90 31**
E-mail: **office@mediatrade.ro**
Web: **www.frozenfoodeurope.com**



Distribution:
Frozen Food Europe is a bi-monthly controlled circulation magazine, mailed to major frozen food buyers who operate in the retail, foodservice, catering and private label areas, and also major further processing buyers and institutional buyers around Europe. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording or any information, storage or retrieval system, without the publisher's written permission.

ISSN 1473-3382

FROZEN FOOD EUROPE



An omnichannel communication PLATFORM

Frozen Food Europe Magazine
www.frozenfoodeurope.com
Weekly Newsletter
Frozen Food Dossier
Frozen Food E-blast

Facebook: [FrozenFoodEuropeMagazine](https://www.facebook.com/FrozenFoodEuropeMagazine)
Twitter: [@FrozenFoodMag](https://twitter.com/@FrozenFoodMag)
LinkedIn: [Frozen Food Europe](https://www.linkedin.com/company/frozen-food-europe)

Get the
hottest news
straight from
the heart of the
frozen food
industry!



US

WICKED KITCHEN ACQUIRES CURRENT FOODS

Wicked Kitchen, a 100% plant-based, flavor-forward global food brand announced the purchase of Current Foods, a plant-based seafood supplier to fine dining and food service establishments in the US and Europe. Good Catch, a similar CPG brand, was bought by Wicked Kitchen last fall, expanding the company's multi-category retail approach into the alternative seafood sector. With more than 40 products in the US and more than 150 products in the UK, Wicked Kitchen provides the industry's widest selection of chef-crafted, animal-free consumer packaged goods.

ITALY

REDEFINE MEAT LAUNCHES ITS 'NEW-MEAT' IN ITALY

Redefine Meat, creators of New-Meat, announced the commercial launch of its product in Italy. The company's New-Meat range of premium plant-based products is now available to restaurants nationwide via Redefine Meat's strategic distribution European partner, Giraudi Meats, with a select group of launch restaurants serving New-Meat on their menus. Suitable for vegans, vegetarians, and meat lovers alike, Redefine Meat has a diverse range of plant-based premium cuts, pulled meats and minced-based products.

GLOBAL

VINCENT MORETTI TO RETIRE FROM ASHWORTH INC., PAUL NUNES TO SUCCEED

The board of directors of Ashworth International, Inc. recently announced that Vincent Moretti plans to retire as President and Chief Executive Officer effective June 21, 2023. The board intends to elect Paul Nunes to succeed Moretti. "I want to extend my sincere thanks to Vincent for his dedication and contributions to Ashworth over the last 35 years with the last 16 years as President and Chief Executive Officer," said David Marotta, Ashworth's presiding Chairman of the Board. "We are pleased to announce the appointment of Paul Nunes as President and Chief Executive Office upon Vincent's retirement. Paul has been with Ashworth for over 28 years which will provide leadership continuity. He offers extensive knowledge of Ashworth, its products, and the markets we serve," said Marotta. "Paul's leadership and exceptional rapport with employees at all levels of the business will help maximize Ashworth's potential and accelerate the company's future profitable growth." Nunes has been with Ashworth since 1994. During his time at the company, he has served in several roles including Controller and Vice President Finance. "I am honored to be appointed the upcoming President and Chief Executive



Officer and sincerely thank the board for their trust and confidence," said Nunes. "I would also like to thank Vincent for his insight and leadership guidance that has left Ashworth with a solid foundation to ignite continued innovation and growth. I will continue to work closely with Vincent over the next few months to ensure a smooth transition." Ashworth International, Inc., is a global company whose portfolio consists of Ashworth Bros, Inc., Ashworth Belts B.V., Ashworth Europe, Ltd., Jonge Poerink Conveyors, and Ashworth Factory Service Corp. Best known for revolutionizing the future of conveyor belts and internal transport systems, Ashworth continues to lead the market across industries from food processing to logistics. Ashworth Factory Service offers a full range of engineering services, including system refurbishment, troubleshooting, and conveyor belt installation.

EUROPE



ASC PIONEERS DIGITAL TRACEABILITY FOR SHRIMP

The Key Data Elements (KDE) project of the

Aquaculture Stewardship Council (ASC) has made digital supply chain traceability of shrimp products with ASC certification possible. Retailers will have a better level of program assurance through increased farm origin and supply chain data transparency by leveraging the power of technology to improve visibility of each product's journey to market.

Through processing, packing, and transportation to retailers, the groundbreaking project has created software that can digitally capture and transmit critical data from ASC certified farms and feed suppliers. Using a special code, the data is digitally sent from one company to the next when the product is transported around the supply chain. Scientific names of species, stock sizes and volumes, broodstock sources, production techniques, countries of origin and farm locations, date of freezing, and other information are all pertinent KDEs that are recorded.

GLOBAL

ANRITSU INTRODUCES NEW INSPECTION EQUIPMENT

Anritsu Ltd has launched a line of brand-new class-leading inspection equipment which significantly improves contaminant detection and surpasses strict worldwide hygiene protocols. XR75 DualX+ is a next generation Photon Detector technology, with specific algorithms for fish and poultry too - the images are meaningfully sharper, delivering superior detection capabilities and lower false rejection rates. Another new Anritsu invention to be launched is the IP69K sanitary x-ray.

UK

FROZEN FOOD MARKET RETURNED TO VOLUME GROWTH IN Q1



The volume of frozen food sales has returned to growth in the first quarter of 2023, according to new Kantar data from the British Frozen Food Federation (BFFF). The 12-week figures to March 19 show that volume sales of frozen food grew by 2,572,000 tons, compared to the same period last year. The value of the retail frozen food sales also continued to increase in the same period, up +9.5% (GBP273m) largely driven by inflation across the entire food supply chain. Frozen vegetables, meat & poultry, potato products, ready meals and savory foods have all seen a jump in volume in the 12 weeks, whilst more indulgent products such as ice cream and confectionery have seen a drop in sales volume in the same period. The news of growth in the frozen food market comes as Kantar also reports a decrease in the volume sales of fresh and chilled foods by -5.0% in the same period, showing that more consumers have recognized frozen food as a tasty,

nutritious, and affordable choice for helping them deal with the cost-of-living crisis. "I am delighted to see that the frozen food market has returned to growth in the first quarter of 2023. Our members have been working incredibly hard under huge pressure of rising costs to make sure that consumers can still find the best quality products with unrivalled value for money in the frozen aisle of their supermarket," according to Rupert Ashby, chief executive of the British Frozen Food Federation. "The cost-of-living crisis has had a significant impact on consumer spending habits over the winter months, which has likely driven sales of frozen food. However, I am confident that many consumers will now regularly return to the frozen aisle during their weekly shopping as more people experience the exceptional quality and taste of frozen food. Innovation is at the heart of the frozen food market, with exciting new products regularly hitting supermarket freezer shelves. I am always impressed with the products which are being brought to the market by our members, so I would encourage all consumers to make friends with their freezer and visit the frozen aisle during their next shop."

GERMANY

NEW BOARD MEMBERS AT DTI

During the conference FROZEN CONFERENCE 2023, held in May in Berlin, the members of the German Frozen Food Institute e. V. (dti) unanimously elected new representatives to the board of the association: Doris Abeln, member of the management, Dr. August Oetker Nahrungsmittel KG; David Krause, managing director, Agrarfrost GmbH & Co. KG; Jan-Peer Laabs, board spokesman, apetito AG; and Sebastian Schlag, managing director category management, bofrost – Dienstleistungen GmbH & Co. KG. All four had already been co-opted to the board.

GLOBAL

MEAT MARKET TO GROW BY USD190.29BN

The meat market is poised to grow by USD190.29bn during 2021-2025, progressing at a CAGR of almost 4% during the forecast period. According to a recent Technavio report, the industry is primarily driven by new product launches, with pork being the top category when segmented by product. Growth will be hampered, though, by rising outbreaks of cattle diseases. Additionally, during the projection period, APAC will account for 33% of market growth. The market is fragmented, and during the forecast period, the level of fragmentation will increase.

US

BW FLEXIBLE SYSTEMS UNVEILS NEW MINNESOTA FACILITY

BW Flexible Systems, a global maker of flexible packaging machinery for BW Packaging, unveils its new Brooklyn Park production plant. For the company's Minnesota-based package brands Thiele, SYMACH, and Streamfeeder, the site at 9360 West Broadway Avenue, Suite 100 was created as a dynamic workplace, research and development facility, and innovative production facility. More than 135 local team members of BW Flexible Systems, have relocated to the business's new Brooklyn Park location.

GLOBAL

READY MEALS MARKET TO RECORD SINGLE-DIGIT CAGR

Over the next five years, the ready meals market is anticipated to grow at a CAGR of 4.62%. The market is primarily driven by the convenience offered in terms of time savings, reduced cooking effort, and simplicity of handling and storage. In recent years, there has been a huge demand for frozen and chilled meals. Throughout the forecast period, the market is anticipated to be driven by the rising demand for its enormous range of ready meals with a long shelf life. People are eager to sample diverse foods from other nationalities, such as Indian, Thai,



and Italian, due to the current trend of embracing a western lifestyle and consuming quick meals. Therefore, when it comes to ethnic ready meals, frozen pizza is the most popular and widely consumed frozen ready meal globally, accelerating the market.



US

CARL BACHMANN NAMED CEO OF BURGERFI INTERNATIONAL

BurgerFi International, owner of leading fast-casual brand BurgerFi and the casual dining pizza brand Anthony's Coal Fired Pizza & Wings, recently named industry veteran Carl J. Bachmann as CEO for their organization. Bachmann, who will start with the company on July 10, is a career restaurant professional with extensive experience in both the burger and pizza spaces. He has served in various leadership roles and has an established record of growing brands and helping them remain competitive.

EUROPE

ARYZTA REPORTS STRONG GROWTH ACROSS THE GROUP

ARYZTA, a global food business with a leadership position in convenience bakery, has reported on its Q3, 2023 results, showing growth across multiple sectors. Despite stronger quarterly growth comparatives, organic growth was broad based across the group with France, Switzerland, Poland, and Germany performing well in Europe. Rest of World continued its strong performance trend evident in recent quarterly updates. Channel performance trends remain unchanged across all channels led by Foodservice and QSR.

GLOBAL

FROZEN POTATO MARKET ON THE RISE

From 2023 to 2033, the size of the worldwide frozen potato market is predicted to rise significantly. Future Market Insights' study report predicts that the global market will be worth more than USD60.8bn in 2023. By 2033, it's estimated to be worth USD104.3bn. From 2023 to 2033, the industry is expected to grow at a startling CAGR of 6%. Urbanization, expansion, and changing lifestyles are key market growth drivers. The widespread demand for processed and convenience foods has increased because of changing lifestyles and urbanization. Frozen potatoes are a part of this trend because they are regularly used as a component in many processed food items, such as snacks, appetizers, and ready-to-eat meals. Additionally, overseas markets are seeing an increase in demand for frozen potatoes. Producing countries for potatoes commonly export and freeze their surpluses to reduce waste and boost profitability. The global demand for frozen potatoes has increased because of this trend. Frozen potatoes have a longer shelf life than fresh ones. They can be stored in the freezer for several months without noticeably losing quality or nutritional value. Therefore,



they make sense for customers who want to stock up on potatoes without having to worry about them going bad. The food service industry, which includes restaurants, fast-food chains, and catering services, is typically responsible for the increase in demand for frozen potatoes. These eateries usually rely on the uniformity, practicality, and affordability of frozen potatoes to meet the enormous demand for potato-based meals like French fries, hash browns, and mashed potatoes. From 2018 to 2022, the size of the worldwide frozen potato market grew at a CAGR of 2.4%. The size of the world market in 2018 was USD53.3bn. The market increased significantly over the ensuing years, reaching USD58.4bn in 2022. Foods like French fries and wedges have become more and more popular over the past few years, especially with kids and young adults.

EUROPE

ANUGA, EIT FOOD ENTERPARTNERSHIP



The largest program for food innovation in the world, EIT Food, is now a partner of Anuga. The goal is to advance communication and interdisciplinary collaboration to realize a sustainable food system, in keeping with the central idea of Anuga, "Sustainable Growth." Innovative concepts and fresh sustainable advances in the food business will have a

platform thanks to the collaboration between EIT Food and the top international trade show for food and drinks. "We are delighted to have the experts of EIT Food and its network on board in the scope of this new, strategic partnership. New ways towards an improved, global food system will be highlighted during different event formats and subsequently there will be an opportunity to engage in a direct exchange with an international trade audience and the trade media," explained Bastian Mingers, vice president Food.

GLOBAL

MINEBEA PRESENTS NEW DETECTOR FOR FOREIGN OBJECT

Users may now detect foreign objects at a completely new level thanks to the metal detection system Mitus. The inspection solution from Minebea Intec successfully detects contaminated items of a wide range of sizes, shapes, and compositions thanks to its adjustable modulation feature MiWave, preventing unnecessary wrong rejections. This guarantees the highest level of product safety and production line effectiveness. The metal detector's range of models, which ensures that it can be easily integrated into existing systems, is another noteworthy feature.



Delicious Veganism!

Vegan products made with
high quality plant-based
ingredients

- > Koulouri
- > Bougatsa
- > Country Pies
- > Mini Country Pies
- > Mini Rolls
- > Twirled Pies



*We bake
History*
Since 1974

MICHAEL ARABATZIS S.A.
INDUSTRIAL AND COMMERCIAL FOOD COMPANY
1ST ROAD, BLOCK 24, INDUSTRIAL AREA OF THESSALONIKI,
GREECE, P.C. 570 22, P.O. BOX 1238, T: +30 2310 723440,
F: +30 2310 795351, E: INFO@ELZYMI.GR

WWW.ELZYMI.GR

**ARABATZIS**[®]
HELLENIC DOUGH



THE MARKET IS CONSTANTLY DIVERSIFYING

The sweet frozen snacks and pastry market has become incredibly diverse throughout Europe. This feature examines existing trends and the performance of three distinct products: the Palmier, Pastel de Nata, and doughnuts, as well as some of the challenges facing the bakery sector

For regional specialties such as Palmiers and Pastel de Nata, the ability to easily freeze such products and distribute them across Europe – whilst maintaining the taste and quality of the finished product – provides a wealth of opportunities for manufacturers and retailers alike. There is a clear, growing demand in northern European countries for both Palmiers and Pastel de Nata. In the last twelve months for example, volumes of Palmiers sold to customers in Germany by Baker & Baker have grown by 19% in comparison to pre-pandemic numbers, in a market where artisanal bakeries and traditional pastries are an established part of food culture. Market data also demonstrates that there has been a strong uptick in Palmiers sales in both France and the UK, with consumers readily accepting of different regional specialties. In its native Spain, the Palmier remains at the forefront of the pastry category, with innovation and NPD key drivers. New ready-to-eat and XXL formats, and seasonal products targeting specific dates such as Valentine's and Mother's Day featuring different flavor and color combinations have all proved popular. The simple Palmier is also extremely popular with younger demographics, with market data suggesting that almost 50% of consumption of the Palmiers is amongst shoppers 30 or younger. As a flexible product that lends itself to a range of flavor and topping

combinations, it creates opportunities for bakeries and foodservice to experiment and entice consumers.

PASTEL DE NATA

Pastel de Nata – a traditional Portuguese pastry, filled with egg custard tart – has demonstrated strong growth with retail and food service customers in recent years in the UK and continental Europe. Despite its origins in Portugal, the growth in Pastel de Nata is now almost solely in other European markets. Pastel de Nata is made by many small bakeries in the artisan tradition in Portugal, however only a few large manufacturers are producing it authentically. Last year, Baker & Baker acquired a leading European Pastel de Nata manufacturer – Peipen – in Peniche, Portugal to strengthen the business's in-house manufacturing capabilities and to grow distribution of the product throughout Europe. The launch of clean label variants for northern European markets has had a positive impact, with France and the Benelux countries all seeing sharp increases in volume growth. For Baker & Baker, sales of Pastel de Nata to the Netherlands doubled between 2019 and 2022. Although a Portuguese bakery specialty, Pastel de Nata has resonated strongly with European consumers, some of whom will have undoubtedly tried the product from bakeries in Portugal. However, its relatively low price point, ease of serve and distinctive taste has made Pastel de

30%
of consumption of the
Palmiers is amongst
shoppers 30 or younger.

Nata an attractive proposition as a bakery staple for retailers and food service operators.

DOUGHNUTS

Within American Sweet Bakery, doughnuts offer clear standout for operators as well as being an established, value-driving category within in-store bakery and food service. Whilst many bakery categories have experienced volume declines, the performance of doughnuts throughout the major European markets has held up, or even grown slightly in some cases. The ease of serve combined



Photos: Baker & Baker

23%
of UK consumers say they actively follow a flexitarian diet.

with the ability to deliver value for the consumer makes doughnuts a clear choice for retailers and food service. Doughnuts are a popular option for consumption on the move, at home or at a range of social occasions. Even when delivered frozen and then thawed in-store, doughnuts are a straightforward product for retailers or food service outlets to execute well. The vast assortment of colors, toppings and flavor combinations create endless possibilities for operators to develop a standout offering that can entice consumers. In several markets, seasonality is a key factor in delivering

genuine innovation and NPD. Halloween has proven to be a popular occasion for manufacturers and brand owners to introduce new flavors, colors, and styles, alongside an appetite to be more adventurous within the category, almost becoming a doughnut event. The trading landscape in Germany and several continental European countries is quite fragmented and this provides a breadth of opportunities for doughnuts. In Germany particularly, the large number of artisanal bakeries can lead to a significantly differentiated product offering. Many smaller bakeries stock a

limited doughnut range, which are often hand decorated, and feature more creative finishes. The visual impact of doughnuts can't be understated within artisanal bakeries; colorful, exciting displays are a great sales tool. At the same time, licensed branded American Bakery provides artisanal bakeries with off-the-shelf solutions that do not require a separate product development cycle, giving them the opportunity to test and learn about American Bakery with limited risk and exposure. Given brands also come with established high awareness and consumer trust, and tailored marketing support; this creates an additional value stream.

GROWTH OF VEGAN BAKERY

Throughout Europe, the growth of vegan products across all categories has continued apace. Pastry and frozen snacks are no exception, and there has been clear consumer demand for greater choice and options. Research conducted by Baker & Baker in the UK as part of a series of 'Bakery Bites' reports supports this assertion, with more than one in three UK shoppers now avoiding or moderating their consumption of animal-based products. Furthermore, 23% say they actively follow a flexitarian diet. Consumers have offered a clear rationale behind their attraction to vegan products.



NAVIGATING INFLATION & THE COST-OF-LIVING CRISIS

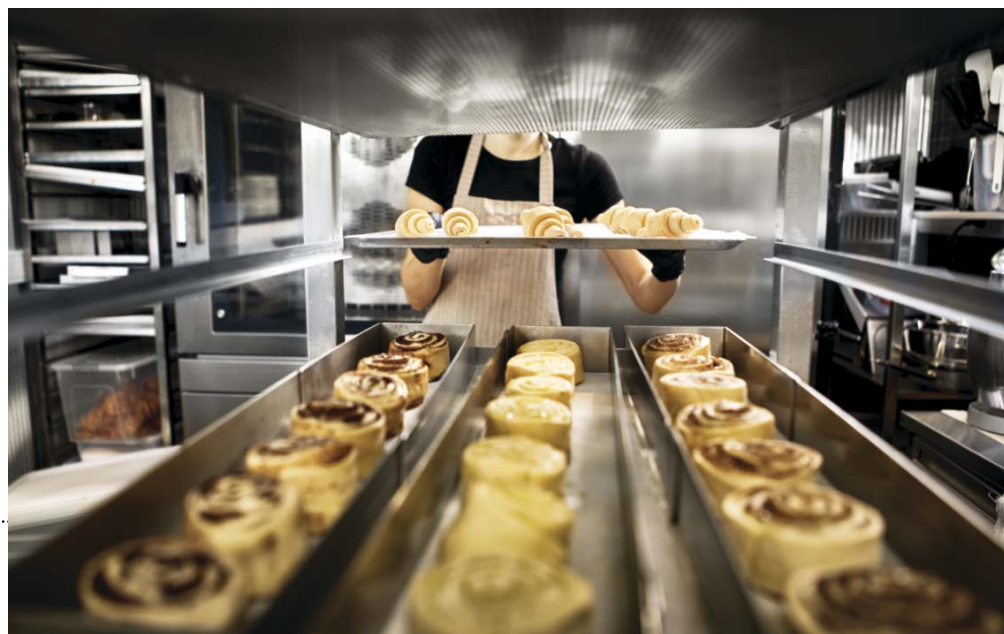
The cost-of-living crisis and inflationary pressures have had a significant impact across all continental Europe. Whilst food inflation has hit a record high of 16.8% in the UK, the situation has been arguably more severe on the continent, with Germany seeing an 18.7% year-on-year rise. Research undertaken earlier this year by Baker & Baker on the impact of the cost-of-living crisis in the UK showed that four in five shoppers had altered their spending decisions and priorities in the last year. So more than ever, retailers and food service operators are having to make stark choices on the price points of all sweet bakery products, to strike a careful balance to deliver sales. Despite these challenges, many key sweet bakery categories such as doughnuts have at least retained volume share, demonstrating that consumers continue to see fresh bakery as an accessible and affordable treat. A growing trend that is likely to persist for the remainder of this year at least is shoppers relentlessly seeking out perceived value. With consumer spending squeezed, retailers and manufacturers must consider how they can deliver genuine value throughout their bakery portfolio. Sweet bakery remains a category where affordable price points are within reach for all consumer segments. Shoppers may also not be cutting back entirely, but they are making different choices, frequently moving across different product categories. The cost-of-living crisis is also not affecting everyone throughout society equally. It's clear

18.7%
was the year-on-year increase in food inflation in Germany.

that inflation and rising costs affect lower income families disproportionately, and here again bakery lines can play an important part with relatively accessible price points – offering a well-earned affordable treat. This is also an important consideration for operators around pricing, and ensuring their offering includes different price points to meet varying budgets. One positive is that across most European markets, the food service and hotel sectors appear to have largely recovered from the worst effects of the COVID-19 pandemic. As consumers have returned to food service – albeit a smaller market than 2019 – this provides welcome relief to operators who must consider how sweet bakery can once again be front-of-mind with consumers. In some markets such as Spain, the out of home market for fresh bakery items such as pastries continued to grow throughout 2022, long after the initial jump in sales following the relaxation of COVID-19 restrictions. This demonstrates the long-term potential for products such as the Palmier and Pastel de Nata. At the same time, a considerable shopper segment still wants to trade up and consume bakery products at the premium end of the market, so it's important for operators to understand their customer base and offer the choice of indulgence – but not at the expense of perceived value. ■

More than one in two stated

that vegan products are better for the environment, contain fewer bad ingredients and are less processed. These are all compelling reasons behind the growing purchases of vegan bakery products. But at the same time, it's also apparent that broader consumer acceptance of vegan bakery remains tentative, with 45% of consumers who don't purchase vegan bakery products stating that concerns around the taste represent the biggest barrier to purchase, followed closely by price. Pastry and bakery manufacturers have sought to address this with the creation of specific vegan product ranges that look and taste extremely like non-vegan bakery, to drive acceptance of the concept. This includes regional specialties, such as the vegan franzbrötchen, which is popular in northern Germany and is available in both artisanal bakeries and larger retailers. Vegan ranges also offer retailers and food service the same simplicity of serve as non-vegan products. For example, vegan doughnuts and muffins can be simply thawed and served, whilst cookies can be baked from frozen. This removes a key barrier for operators, however, it's also equally important to consider customer trial and how to encourage shoppers to set aside their preconceptions around the taste of vegan products, as there is strong evidence of repeat purchase amongst consumers who try vegan bakery products for the first time.





La Pinsa

It's not a Pizza, it's a PINSA



SVILA
100%
CEREALI
italiani

Alla Gricia

CON PANCETTA AFFUMICATA, PECORINO E PEPE NERO.



LIEVITATA
25 ORE



STESA
A MANO



COTTA SU
PIETRA



PRODOTTA
IN ITALIA

UNA RICERCATA MISCELA DI FARINE DI FRUMENTO E CEREALI L'ACQUA DEI MONTI SIBILLINI, LA LUNGA LIEVITAZIONE E LA STESSURA MANUALE RENDONO LA NOSTRA PINSA SOFFICE E CROCCANTE.

Ecco il nostro percorso di qualità alla scoperta di ingredienti e tradizioni.



9/11 min

305g e
SURGELATA

La Pinsa

Inspirata alla ricetta originale
nata nell'Antica Roma

www.svila.it

Discover the goodness of its ancient recipe, the lightness of its taste and our mix of wisdom and creativity in making it!



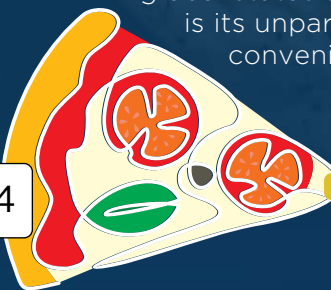
The Frozen Pizza Market:

BUSINESS PERSPECTIVES

Pizza, once an Italian specialty, has transformed into a beloved global staple of food. In recent years, the pizza industry has witnessed a notable shift towards healthier options, accommodating various dietary preferences and catering to a more health-conscious audience. With the rise of gluten-free crusts, vegan cheese alternatives, and an abundance of fresh vegetable toppings, pizza has become a versatile dish that can be enjoyed by a wide range of people. This shift towards healthier options has allowed pizza to maintain its popularity and adapt to the evolving tastes and preferences of consumers worldwide. One of the reasons pizza has achieved its global status as a food staple is its unparalleled convenience. In our

fast-paced modern world, where time is often limited, pizza offers a quick and satisfying meal option. The availability of pizza delivery services, both from traditional pizzerias and fast-food chains, has made it incredibly convenient for people to enjoy a hot and delicious pizza without the hassle of cooking or dining out. This convenience factor has contributed significantly to the widespread popularity and accessibility of pizza, making it a go-to choice for busy individuals and families alike.

Another fascinating aspect of pizza is its adaptability to different culinary traditions and tastes around the world. While the traditional Italian-style pizza with its thin crust and classic toppings remains popular, various regional variations have emerged, each reflecting the unique flavors and ingredients of the respective cultures. From the deep-dish Chicago-style pizza to the spicy and flavorful Indian-inspired





Daniela Schultze,
Managing Director, Point of Food
Lebensmittelvertriebs GmbH



Michela Guarnieri,
Export Sales Representative,
Matteo Srl



Alberto Di Marco,
CEO,
Di Marco Corrado Srl



Roberto Savarese,
CEO,
Sorrento Saponi e Tradizioni Srl



Giuseppe Lombardi,
Head of the Foreign Trade Office,
Mediterranea Quality Food Srl



Mauro Parretti,
Managing Director,
Svila Srl

pizzas, and even sushi pizzas in Japan, the versatility of pizza has allowed it to seamlessly integrate into different culinary landscapes. This adaptability has played a crucial role in its global success, making pizza a familiar and comforting food that transcends cultural boundaries and brings people together over a shared love for good food. And frozen pizza makes all these even simpler, bringing the convenience side of things to a whole new level. In figures, between 2022 and 2027, the market for frozen pizza is anticipated to rise at a CAGR of 5.5%. According to projections by Technavio, the market will grow by USD6,38bn. The introduction of new products, the rise of retail locations selling frozen food, and packaging advancements are just a few of the elements that influence market growth. The rise of the frozen food retail market is mostly driven by this expansion. Around the

world, there are more supermarkets, hypermarkets, and specialty shops, which indicates that the organized retail sector is growing significantly. As more retail businesses carry frozen items, including frozen pizzas, consumers have easier access to them. Therefore, manufacturers and suppliers of frozen pizza may experience an increase in sales and revenue as a result of such retail expansions. To understand more about the processes behind frozen pizza and the seamless integration of new trends into the manufacturing of these processes, we've interviewed several key people in the industry, which you can read in the following pages.

By Bogdan Angheluta





Daniela Schultze, Managing Director,
Point of Food Lebensmittelvertriebs GmbH

What recent trends in the frozen food industry have you noticed and how have they impacted Point-of-Food products manufacturing?

We noticed that even though frozen food is implemented more in more in foodservice and restaurant kitchens because of its obvious advantages, it is expected to maintain a home-made, crafted style. That is why we produce a range of products with texture and taste just like hand-made. We can ensure this quality because we produce and hand top our pizza products in our own facility. Another trend from last years that is now absolutely implemented into mainstream is plant based products. That is why we offer a vegetarian or vegan option in all of our product lines.

How do you approach product development to stay ahead of the competition and meet the evolving tastes of consumers when it comes to toppings?

We continuously evaluate what is a hype and what is a trend. In the age of social media there is constantly a “next big thing” especially concerning food trends. So, in order not to waste resources on short lived hypes, we rather take a look at the whole picture – what values are important to guests in this age? We feel that a back-to-the-roots movement as well as a critical view on production and ingredients have been important for a long time now and if we’re developing innovative products along with these values, we will be ahead. We also care about intense contact with our customers and their guests to fully understand what is needed in different gastronomy systems because we want our products to solve problems that occur. That is how we came up with our pre-cut pizza, to minimize the workload at the counter to give just one example.

How do you ensure that your products are of high quality and meet the expectations of customers who are increasingly looking for healthier and more natural options?

We are IFS certified on a higher level, which also reflects the fact that we know our suppliers very well – the local mill that we get our flour from being an example. Since we’re also offering products for school catering and healthy options for business and university catering, we have expertise on healthy pizza products: our

FitPizza was developed together with nutritional scientists. It is lower in fat and higher in fibre than regular pizzas and comes in different flavors and meets the criteria for a balanced meal without lacking taste! We have also developed a protein pizza dough to offer a high protein option to all restaurants who make high protein dishes from scratch.

With the rise of plant-based diets, how are you incorporating vegan and vegetarian options into your pizza offerings?

As pizza producers, we’re in the lucky position that our dough and bases are naturally plant-based. Since we’re offering products in every convenience level, we also developed tasty topping combinations with veggies and cheese, as well as with vegan cheese, so that every product line includes at least one vegetarian and/or vegan option! With our plant-based toppings we try different approaches. We know that veggie toppings are super delicious, but we have also topped our products with supplements like jackfruit or artificial plant-based meat alternatives in the past.

What steps are you taking to reduce the environmental impact of your manufacturing processes and packaging?

We use heat recovery systems that allow us to heat our buildings with energy that is a by-product of our cooling houses. And as we always look for ways to pack our products as efficiently as possible, we use packaging that is fully recyclable. Whenever we can, we use recycled paper in office and for marketing purposes.

Please list new product launches or innovations.

We just launched brand new pizza components for restaurants and catering: the 11 cm small pizza base Piccola Rossa which is fanatstic as finger food and caters to the snack hype we’re witnessing, as well as pizza dough and pizza bases with sourdough, called Nonna – as we’re thinking they taste like fresh from Nonna’s bakery! The flavor of the sourdough products is incredibly delicious and the look is perfect for everyone who serves handmade style or crafted products. Our customers receive the Nonna products very well, so we are now beginning to offer them with toppings as finished pizzas, too.

Are there any new markets or customer clusters that you are targeting with Point-of-Food's frozen products? If so, how are you tailoring your products and marketing strategies to reach these groups?

Every country has its specific taste profile and customer structure. We see a strong development in the out-of-home market for ready topped pizzas in different sizes. The lack of personal has a crucial impact on this development. The new way of working in the majority of offices (more home office hours for employees) leads to a change of thinking as far as the canteen structure is concerned. These are the fields where Point of Food sees the future development for the frozen pizza products. •



Michela Guarnieri,

Export Sales Representative, Matteo Srl



What recent trends in the frozen food industry have you noticed and how have they impacted your products manufacturing?

The trends we have seen in the pizza market are the research of the customer for crispiness and lightness in the base and in Matteo Srl we believe that the Pizza Romana is the perfect product to match the new trends, due to the high hydration of the product, the double fermentation, and hand stretch process. Matteo Srl keeps an eye on the continuous requests from the market and always develops new handcrafted products that are able to satisfy those requests.

How do you approach product development to stay ahead of the competition and meet the evolving tastes of consumers when it comes to toppings?

We have a double way to research and develop new products: one is internal and is focused in finding new trends from the market by applying them on our products and processes, while the second one comes directly from the market through the long relationship we have with our customers and new requests coming from them, that lead us to discover new tastes and evaluate new product, also including using raw materials that are not commonly used. This is a challenge that our company meets without worries and in complete transparency.

How do you ensure that your products are of high quality and meet the expectations of customers who are increasingly looking for healthier and more natural options?

The high quality of our products is granted by our international standard BRC and IFS that have become, for quite a while now, a norm for us. During the R&D process our team also looks for healthier raw materials, so that we are able to bring forward special projects based on finding the best way to balance good taste with healthier products. This is also possible because we have selected our suppliers with accuracy. Our customers can always find an open channel with us, exploring the artisanality of our products but including something tailor-made for them.

With the rise of plant-based diets, how are you incorporating vegan and vegetarian options into your pizza and focaccia offerings?

We believe both the vegan and vegetarian will increase as new trends; the vegetarian one has similarities to Mediterranean ingredients and is closer to our eating. That's why our Focaccia Romana, due to the raw materials used, is already a vegetarian product really well appreciated by customers which have taken it in their diets as a vegetarian meal. The vegan offer is still a work in progress, in order to find good raw material and ingredients for a good quality proposal. We faced this trend doing some tests with vegan products and found something really interesting, so hopefully it will soon become a reality for all.

What steps are you taking to reduce the environmental impact of your manufacturing processes and packaging?

One of the major steps that our company is taking is installing photovoltaic panels on our factory, we have started this project months ago and hopefully we will be able to start using solar energy soon. We have also taken steps to reduce all the excess material, changing the boxes, without impacting the quantities contained and the size of the plastic bags, which were often exceeded, to better optimize the spaces and reduce the extra packaging material. The new goal 2023 of our team is also researching suppliers that are able to provide us with organic single packaging that follows BRC & IFS standard to be inserted in our supply chain.

Please list new product launches or innovations.

We have included pizza in our range of products, which is big news for our company. It's made with the dough of our Focaccia Romana, and this comes in two different shapes, rectangular pizza in different sizes or the round one. We have also developed a high-end version of it, a round pizza, available in different flavors like margherita, ham, pepperoni, and red cheese, with a higher level of baking that gives the final customer the possibility to have the products ready in just a few minutes from frozen. This is perfect for those that have a short time available for baking or for using the oven.

Are there any new markets or customer clusters that you are targeting for Matteo's frozen products? If so, how are you tailoring your products and marketing strategies to reach these groups?

Matteo srl and its team is well-known for flexibility, reactivity, the skills acquired over the years, and customer loyalty. These peculiarities combined with the possibility of being able to almost always do what the customer asks in terms of formats and weights, always focusing on quality and differentiation with respect to the market, makes us "unique". Our target is only the "happy customer", so we work hard to reach him. •



Alberto Di Marco,
CEO, Di Marco Corrado Srl



What recent trends have you noticed in the frozen food sector and how have they influenced the production of Di Marco products?

The frozen food sector is currently experiencing strong growth. This progressive development is because frozen food meets the consumer's need for ready-to-use food that is quick and easy to prepare. The challenge today is to combine these characteristics with a guarantee of quality.

What differentiates Di Marco's Pinsa Romana from traditional pizza and other similar products on the market?

The history of the Di Marco company began in the 1970s when our founder, my father, Corrado di Marco, drawing on family influences, began his research - with over 2,000 fermentation experiments - to create products that could combine taste, naturalness, and well-being. The company's mission was and still is to create a new, innovative product that can anticipate the tastes of contemporary consumers. The Pinsa Romana Di Marco is a kind of younger sister of Italian pizza. Its birth, from an original recipe created by my father Corrado Di Marco in 2001, comes precisely from the need to create a lighter dough than the traditional, world-famous Italian dish, which, at the same time, would be tasty and invite sharing. Pinsa Di Marco has a unique dough that comes from a mix of rice, wheat, and soy flour together with dried wheat sourdough. The oval shape and a lightness guaranteed by the absence of fat and sugar convinces everyone. Light and crispy, our Pinsa, in addition to its characteristic oval shape, is leavened for 72 hours and processed strictly by hand by our master pinsaioli.

How do you ensure that the ingredients you use are of the highest quality and meet the expectations of customers who are increasingly looking for healthier and more natural options?

Our company has always been a point of reference for all bakery and pizza professionals. Our history corresponds to a constant search for products that meet the high standards we have set for ourselves, and with the invention of Pinsa Romana we introduced a real revolution to the market that continues to be a contemporary tasting trend because it is synonymous with lightness and authenticity.

With the rise of plant-based diets, how are you integrating vegan and vegetarian options into

your pizza and pinsa offerings?

Our master pinsaioli knows that all you need to enjoy pinsa is some tomato sauce or a simple drizzle of oil! Jokes aside, the seasoning of Pinsa can vary according to taste and dietary requirements or according to the dietary regime one has chosen to adopt. What really makes the difference is the dough, which, as far as Di Marco is concerned, is always light, and crispy and adapts perfectly to all kinds of toppings.

What measures are you taking to reduce the environmental impact of your production processes and packaging?

All our production sites are built to maximize energy savings and are all equipped with photovoltaic systems for electricity production (hence the focus on renewable sources). For packaging, all paper and cardboard come from sustainable FSC sources and for plastics, we are introducing recyclable solutions.

What production process does Di Marco use to guarantee the authentic taste and texture of its Pinsa Romana?

We have always considered scientific research to be the main way to devise innovative solutions for high-quality bread-making that combine taste, lightness, and naturalness. The production process of Di Marco's Pinsa Romana involves a mix of high-quality flours, 72 hours of rising time, and the unique expertise of our master bakers.

Are there new markets or customer groups you are targeting with Di Marco frozen products? If so, how are you adapting your products and marketing strategies to reach these groups?

We export to 62 countries and the demand is constantly increasing as new markets come in, so it is a global product. Today, more than 7,000 Pinse around the world offer our product. Di Marco Corrado srl also has a gluten-free division that allows us to have products for coeliacs made to the same quality standards as our traditional products and to reach customers in new markets. •





Roberto Savarese,

CEO, Sorrento Sapori e Tradizioni Srl

What recent trends in the frozen food industry have you noticed and how have they impacted your manufacturing?

In the last years we have noticed an increase in the demand for frozen food. The figures of frozen food industry are growing year by year. Due to the modern lifestyle, people are always in search of fast recipes that everyone can make but highlighting their attention for a conscious nutrition and a healthy lifestyle. In reply to this trend, we adequate many processes and we revised our recipes to obtain a final product in compliance with the current trend and needs. We worked at our best to obtain a clean label, to use different kinds of flours like the multigrain one or the wholemeal one.

How do you approach product development to stay ahead of the competition and meet the evolving tastes of consumers when it comes to toppings?

The market evolves every day and to stay ahead with the competition and to meet the evolving tastes, here in Sorrento Sapori e Tradizioni, we believe that the key to our success is to listen our customers' requests, take care of their needs and help them turn their "dreamy products" into reality. Daily, we work hard to satisfy their expectations to find the best solution for each problem: searching for dedicated raw materials, optimization of Logistics, continuous quality checks. Furthermore, we really trust in our partners, we like to grow with them and face day by day all the challenges for mutual benefit, building long and strong business relationships.

How do you ensure that your products are of high quality and meet the expectations of customers who are increasingly looking for healthier and more natural options?

To meet the expectations of customers, ensuring the highest quality level, we invest a big part of our resources in development and updates, working each day with our quality department, which is continuously involved in all phases of production. Furthermore, they continuously train our operators to give them all the necessary knowledge on how to avoid any lack in our quality control system. The operators are a big resource in support of the quality team for the daily job. Last but not least, Sorrento Sapori e Tradizioni is certified according to the highest level of international quality accreditations: BRC and IFS.

With the rise of plant-based diets, how are you incorporating vegan and vegetarian options into your

pizza snack offerings?

We started to think about the raising of plant-based diets already in the far 2019, mid-2020 a full range of vegan and vegetarian options. We were very fast to reply to market needs, offering recipes made with tofu, seeds, vegetarian sausage, vegetables. All the raw materials have been selected from our R&D team, checked, and approved by our quality team after a careful control of the suppliers' certifications. We also increased the offer for the dough using wholemeal flour or a multigrain flour which is made here on site by our operators mixing the flour with grains and seeds like spelt, millet, sunflower, and poppy.

What steps are you taking to reduce the environmental impact of your manufacturing processes and packaging?

Sorrento Sapori e Tradizioni is strongly committed to the theme of environmental impact policies. We do our best to stay in compliance with the current environmental law, to keep an open dialogue both with customers and official governmental bodies, to preserve and to use water resources responsibly, to optimize waste disposition managing, to aware the operators to be more responsible with a continued internal training. Finally, in the last 5 years we invested in solar energy reducing the environmental impact and the power consumption. We have quadrupled the production of power from solar energy, reducing the consumption of energy coming from external sources.

Please list new product launches or innovations.

Recently Sorrento Sapori e Tradizioni remade its best seller, Sorrentina, developing it into two new recipes: Sorrentina Doppio Senso, a pizza snack developed with two different flavours. Two recipes in one snack, for exigent consumers. Both reflect our willing to spread the culture of Italian food all around the world. Sorrentina Authentica is a pizza snack inspired by our territory which highlights our strong link with our land. It is made using only raw materials coming from the lands around our site. The strong selection made on raw materials makes our Sorrentina Authentica a real pearl of our portfolio.

Are there any new markets or customer clusters that you are targeting with your frozen pizza snack products? If so, how are you tailoring your products and marketing strategies to reach these groups?

In Sorrento Sapori e Tradizioni we mainly develop products in compliance with our native customers' target, but we are daily monitoring new market trends in terms of new consumers' needs and requests through regular and detailed market analyses taking in consideration purchasing trends, both during and after sales. These analyses help us understand and anticipate market needs that have yet to be expressed and may emerge soon because of market developments. For instance, considering the growing number of people who decide each day to change their diet by reducing animal proteins, we developed a full range of plant-based pizza snacks. •



Giuseppe Lombardi,

Head of the Foreign Trade Office, Mediterranea Quality Food Srl



What recent trends in the frozen food industry have you noticed and how have they impacted your manufacturing?

The world of frozen food is constantly evolving. There is no particular trend to follow, there is constant attention to what is offered. The goal that we at Laltrapizza have is to offer the consumer a product of high quality. The importance of frozen is well known, the growth trend tells us that from the time of the COVID-19 pandemic onwards the consumer preferred to buy mostly frozen products. In this form, the product is received correctly, more easily stored and it also retains the original organoleptic qualities, which is very important. That's why at Laltrapizza we keep constant interest in the frozen topic.

How do you approach product development to stay ahead of the competition and meet the evolving tastes of consumers when it comes to toppings?

At Laltrapizza we offer innovative solutions to our partners. Innovations that concern above all the way of storing goods, as we offer a shelf life of 15 months on our products. We produce pizza bases and pinsa white, giving the consumers the opportunity to season their pinsa with the condiment they desire. Producing for both the Horeca and retail channels means we offer this opportunity to both restaurateurs and families. The freedom to prepare a pizza or pinsa as you want is a choice that customers appreciate. This allows those who use pinsa bases to be able to work their magic.

How do you ensure that Laltrapizza products are of high quality and meet the expectations of customers who are increasingly looking for healthier and more natural options?

The quality of our products is certified first using raw materials, all strictly of Italian origin. The wheat for the flour used follows the strict selection processes that we at Laltrapizza impose on ourselves. Olive oil comes from the regions of Southern Italy, known as a quality product. In addition, our products are entirely hand-laid by our master pizza makers and processed in Italy. Our attention then continues throughout the production chain from packaging to final delivery. Everything is done to provide an excellent product.

With the rise of plant-based diets, how are you incorporating vegan and vegetarian options into Laltrapizza pizza - pinsa offerings?

As I said, the quality of the product is a mantra for us. Using only natural products, we can offer those who observe vegan or vegetarian diets the opportunity to include our products in those diets. The needs of

our customers change, and we are always ready to listen to them. We care about all categories of people, in fact, in our line of products we also think of people that are intolerant to gluten as we also have, in our portfolio, gluten-free products.

What steps are you taking to reduce the environmental impact of your manufacturing processes and packaging?

As for the energy aspect, we rely on everything that the market offers for savings and reducing our environmental impact. Our machines are powered by energy supplied by companies that guarantee a good part of green production. Laltrapizza has always been sensitive about this topic. For packaging, we will soon be using, by the end of this summer, a new recyclable material that will have a much lower impact on the environment.

Please list new product launches or innovations.

At TUTTOFOOD in Milan we presented three new products in our line. Pinsotto, which is a classic Italian sandwich with a peculiarity, is made from the dough of pinsa. 120 grams of soft bread inside and crunchy outside. Then we presented the focaccia in its two versions, classic with flour type 1 and multi-cereal. The soft and tasty focaccia that we all know can also be used as a bread substitute. The peculiarity of this product is that it can be used even without heating it in the oven.

Are there any new markets or customer clusters that you are targeting with your frozen pizza - pinsa products? If so, how are you tailoring your products and marketing strategies to reach these groups?

Laltrapizza is present with its pinsa bases and pizza in Europe, Canada, the US, South Korea, and many other countries. The excellent results push us to do more. In fact, we find the Middle Eastern markets interesting. Our strong point is that we offer a quality product that can be at the same time suitable for these markets, as among other things we have Kosher and Halal certifications. Moreover, commercial communication is different, and we try to conform. Markets are constantly changing, and we must keep up to date, and we do that by using local human resources. •



Mauro Parretti,
Managing Director, Svila Srl



What recent trends in the frozen food industry have you noticed and how have they impacted your manufacturing?

There is a growing demand for products that are free from artificial additives, preservatives, and excessive sodium. This trend has led us to develop healthier frozen options and to a smart and wise selection of vendors. Consumers are looking for products with clear and transparent labelling, showcasing simple ingredients and this is the way we make our pizzas.

How do you approach product development to stay ahead of the competition and meet the evolving tastes of consumers when it comes to toppings?

We research to understand consumer preferences, emerging trends, and evolving tastes, seeking feedback from consumers through surveys and social media platforms, discussing with clients and meeting customers during live shows or the international fairs we attend every year. We also invest in culinary innovation by collaborating with culinary experts. These collaborations allow us to experiment with unique flavors, ingredients, and combinations to create exciting and new topping options. We also draw inspiration from global cuisines, seasonal ingredients, and food trends to develop innovative pizza toppings.

How do you ensure that your products are of high quality and meet the expectations of customers who are increasingly looking for healthier and more natural options?

We prioritize sourcing high-quality ingredients for our frozen pizzas, connecting with trusted suppliers and prioritizing ingredients that are natural, fresh, and minimally processed. This includes using real mozzarella and real cheeses, premium meats, and fresh vegetables, as well as sourcing organic and locally sourced ingredients when possible. We also develop alternative crusts to cater to customers looking for healthier options. This may include whole grain crusts, or crusts made with a mixture of grains. These options provide more dietary choices and accommodate various dietary restrictions.

With the rise of plant-based diets, how are you incorporating vegan and vegetarian options into your pizza and pinsa offerings?

With the increasing popularity of plant-based diets, we are also incorporating vegan and vegetarian options into our products. Our pizzas and pinsas often feature a variety of vegetable toppings that are suitable for vegans and vegetarians. These options include mushrooms, bell peppers, onions, spinach, tomatoes, olives, and more. These toppings are combined creatively to provide a flavorful and colorful experience matching the flavors of our home-made tomato sauces. To cater to the demand for vegan or vegetarian options that mimic the taste and texture of meat, we experiment with plant-based meat substitutes as toppings such as jackfruit "pulled pork" as alternatives to traditional meat toppings.

What steps are you taking to reduce the environmental impact of your manufacturing processes and packaging?

We are prioritizing sustainable sourcing of ingredients like organic ingredients, supporting local and regional suppliers,

and ensuring responsible agricultural practices. Sustainable sourcing helps reduce the environmental impact associated with farming practices, such as pesticide use and deforestation. We are also implementing energy-efficient practices within our manufacturing processes. This involves investing in energy-efficient equipment, optimizing production lines, and using renewable energy sources where possible. By reducing energy consumption, we are lowering our carbon footprint. We are also working to minimize waste throughout the production process implementing waste management systems and we are implementing the use of recycled cardboard and plastic.

Please list new product launches or innovations.

Our new products include the "Sottile" line that is the result of months of research and experimentation on a thinner and crunchier pizza crust. We wanted to achieve an interesting result from a tasting point of view, making the toppings protagonists and pairing them with a super fragrant and tasting base. We have decided to start this new product line with toppings that really boost the flavor of the ingredients and that match perfectly with the crunchy crust! On top of the list, we have the "4 formaggi" with a perfect combination of mozzarella and other three cheeses such as Edamer, Emmental, and Gorgonzola. In the Sottile line we also have a veggie pizza and a classic salami pizza. The line is completed for the moment by the ham and mushroom, but we are still developing new recipes to be added soon!

Are there any new markets or customer clusters that you are targeting with your frozen pizza products? If so, how are you tailoring your products and marketing strategies to reach these groups?

Now our products are distributed in more than 55 countries all over the world, and we are working to expand our products even more. We would like to be able to assert ourselves in a more important way in the northern European market and deeply experience all the possibilities that we are seeing in the Middle East. For this specific market where we are already developing recipes and distributing products, but we would love to maximize our presence in the local supermarket. A similar concept applies for the Far East Market and for all those countries that are expressing interest in the frozen market possibilities. •





A GREAT FIT FOR MODERN CONSUMERS

Finger foods have gained immense popularity in recent years due to their convenience and versatility, as they offer a quick and easy snacking option. Finger foods appeal to consumers because they fit well with modern lifestyles that emphasize on-the-go consumption and social gatherings.

With busy schedules and limited time for meal preparation, consumers seek convenient and time-saving options, and finger foods fulfill this need. Their bite-sized nature allows for easy portion control, making them suitable for snacking or as appetizers during social events or parties. In the ever-evolving food industry, finger foods have

experienced a surge in demand due to evolving consumer preferences and changing dietary habits. There is a growing interest in healthier snacking options, and finger foods provide an opportunity to incorporate nutritious ingredients. Many brands now offer frozen finger foods that are carefully crafted to meet consumer demands for clean labels, natural ingredients, and diverse flavor profiles. These frozen

options cater to consumers who seek a balance between convenience and health, allowing them to enjoy tasty snacks without compromising on nutritional value. Frozen finger foods play a vital role in the food industry as they offer several advantages for both consumers and businesses. For consumers, frozen finger foods provide convenience by eliminating the need for frequent grocery shopping and meal preparation. They can be stored for extended periods, allowing individuals to have a ready-to-eat option whenever needed. Additionally, frozen finger foods often undergo rigorous quality control processes, ensuring consistent taste, texture, and food safety standards. But the appeal of frozen finger foods extends beyond convenience. They provide a wide variety of options to

cater to diverse consumer preferences. From traditional favorites like chicken wings and mozzarella sticks to innovative creations like vegetable spring rolls and mini quiches, the frozen finger food market offers something for everyone. These options not only satisfy cravings but also allow individuals to explore different flavors and cuisines without the need for extensive cooking skills or access to specialized ingredients. Furthermore, frozen finger foods contribute to reducing food waste. By extending the shelf life of perishable ingredients, these products minimize the chances of spoilage and enable consumers to utilize only the desired quantity at any given time. This is particularly beneficial for households with smaller or fluctuating appetites. The frozen finger food industry has embraced sustainability initiatives by focusing on eco-friendly packaging, responsibly sourced ingredients, and waste reduction practices. This emphasis on sustainability aligns with the values of environmentally conscious consumers who seek food options that are both convenient and environmentally friendly.

FROZEN SNACKS MARKET TO WITNESS AN IMPRESSIVE GROWTH

The global frozen snacks market is poised for significant growth between 2023 and 2033, with a projected valuation of USD 136.9bn in 2023, expected to reach USD 250.7bn by 2033. The market is forecasted to expand at a CAGR of 6% during this period. The surge in demand for convenient foods with high nutritional value, enhanced flavors, and variety is a key driver of this growth, as consumers become increasingly conscious of the nutrient content in packaged and frozen food products. Manufacturers are responding by incorporating nutrients, vitamins, and minerals to cater to this demand, leading to a considerable

increase in sales. Moreover, the rising consumption of ready-to-eat meals globally is compelling manufacturers to introduce unique flavors and ingredients in frozen snacks, including organic options, further fueling market sales. The adoption of various diets such as vegan, gluten-free, and keto has also prompted manufacturers to invest in research and development, incorporating clean-label and organic ingredients, as well as intelligent packaging and branding, to tap into new opportunities for growth. In terms of sales channels, the availability of a wide range of frozen snacks in offline channels like supermarkets and convenience stores contributes to their strong sales performance. Supermarkets and hypermarkets are improving their cold storage capabilities to offer a diverse selection of frozen snacks. The expansion of sales channels in emerging economies is also creating opportunities for brands to enter these markets. In 2022, supermarkets and hypermarkets captured a 27.6% share of the global market, indicating their dominance. Additionally, advancements in food processing and freezing technology have





FLAVOURITES

SMALL BITES
BIG FLAVOUR



**IDEAL FOR THE PIZZA OVEN,
SUPER CRUNCHY
GREAT FLAVOUR**





www.frostkrone-foodgroup.com





greatly improved the quality and flavor of frozen snacks. Methods like flash freezing have helped preserve the nutritional content and taste of these products, making them an appealing choice for customers. The growth of e-commerce and online grocery shopping has further facilitated access to a variety of frozen foods, providing customers with convenience and flexibility. As veganism and plant-based diets gain popularity, the market for frozen snacks has expanded, with consumers seeking options that align with their dietary preferences. Producers of frozen snacks now have numerous opportunities to cater to this growing market. According to Future Market Insights, France is expected to dominate the European market due to increasing sales of vegan frozen snacks in the country. The preference for convenience foods and ready-to-eat meals, driven by the hectic and fast-paced lifestyle of consumers, has spurred the demand for frozen-backed products and frozen potato snacks in France. As a result, sales of frozen snacks are expected to remain high in the country over the forecast period. On the other hand, according to a recent market research analysis by Meticulous Research, the healthy snacks market is projected to achieve a CAGR of 6.5% from 2022 to 2029, reaching a value of USD 152bn. Factors such as the growing demand for functional and healthy meals, increased consumer

health consciousness, and the popularity of convenience foods and on-the-go snacks are driving the expansion of this industry. The market also holds significant potential for growth, driven by emerging economies in Latin America, Asia, the Middle East, and Africa, as well as the growing sales through online channels. However, the higher cost of healthy snacks compared to traditional snacks poses a challenge to market growth, along with the volatility of raw

material costs. Changing lifestyles, societal shifts, and increasing consumer awareness have significantly impacted dietary habits. The rising number of individuals consuming



We think in a global way when developing our finger food and snack variations and respond to individual needs when it comes to providing retailers with advice on product selections and special promotions. After all, our partners are extremely diverse and so are their customers.

Frédéric Dervieux, CEO of Frostkrone Food Group



Photo: Frostkrone

nutritious snacks throughout the day has created substantial opportunities for manufacturers in this sector. Healthy snacks are characterized by their absence of harmful ingredients and numerous positive health effects. Government agencies like Health Canada encourage individuals to avoid calorie-dense, nutrient-poor junk food and instead opt for nutritious snacks like cereal and granola bars, dried fruits, nuts, and seeds, which are low in sodium and added sugar. The demand for

convenience foods has experienced significant growth in recent decades. Consumers are drawn to convenience



food products such as biscuits, cookies, meat snacks, and beverages due to their quick preparation and minimal handling time. Changes in mealtime habits have resulted in increased demand for a wider range of dinner options. With busy schedules and limited cooking knowledge, more individuals are turning to ready-to-eat food products. The convenience food trend is not merely a passing fad but a dietary mainstay in countries like China and the US. The convenience movement is expected to further grow with increased urbanization facilitating its expansion.

THE IMPORTANCE OF EXPERTISE IN PRIVATE LABEL

The **Frostkrone Food Group** has displayed its extensive portfolio in the private label sector and showcased a series of new products at the recent PLMA's World of Private Label in Amsterdam. Among the three variations

27.6%
was the frozen snacks market share for supermarkets and hypermarkets in 2022.

available at PLMA were the Flavourites Crispy Cream Cheese Jalapeños Pops (their crunchy coating is immediately followed by the spicy flavor of the jalapeños, blended with the creamy, smooth flavor of cream cheese), Flavourites Crispy Paprinos Cream Cheese Pops (sweet and tangy combination of red cherry peppers and



creamy cream cheese), and Flavourites Crispy Jalapeños Nacho Cheese Bites (with the unique combination of spicy jalapeños and tangy nacho cheese). The new Flavourites range marks Frostkrone's successful move into the future of finger food development. The new and unique food range is crafted with special technology that makes it possible to customize products flexibly in size and weight according to the customer's wishes. Flexibility is also very high when it comes to the choice of ingredients, the company said. These Frostkrone bestsellers are now also available as chilled convenience products for the refrigerated sector. Once again, the company group has broadened its portfolio of finger food and snacks.

6%
is the expected CAGR of the global frozen snacks market for the next 10 years.

"Anybody into potatoes will love the Crispy Veggie Snack range. As small and fine as they are, coated in a crispy, golden-brown coating and filled with delicious, mashed potato. The ideal snack for watching series marathons, on game nights with friends or as food for nerves during gaming. Be sure to try them: Enjoy either pure and crispy as Crispy Potato Sticks or deliciously combined as Crispy Queso-Potato Balls with tasty spicy nacho cheese, Crispy Garlic Potato Balls with a core of mild cream cheese or Crispy Beetroot Bites with beetroot." All finger food variations can be quickly prepared in the oven or deep fryer in just a few minutes until golden brown and then eaten straight away. The Frostkrone Food Group has been a renowned international partner for retailers in the private label sector for many years. The group of companies with its eight locations worldwide understands what is most important when it comes to private labels. "Consumers have become increasingly more price conscious and tend to choose private label products," explains Frédéric Dervieux, CEO of Frostkrone Food Group. "But they don't really want to make any compromises when it comes to quality, taste and choice". That's why sales and product development work hand in hand with the responsible persons from food retail and discount stores. Alongside the new, popular finger food and snack ideas, one of the Frostkrone team's strong points is understanding what the end customers really want. "We think in a global way when developing our finger food and snack variations and respond to individual needs when it comes to providing retailers with advice on product selections and special promotions. After all, our partners are extremely diverse and so are their customers," Frédéric Dervieux adds. A well-coordinated variety of products and well-balanced promotions throughout the year keep consumers coming back to the freezer or the refrigerated counter and encourage them to reach for something new. "One of our many fortes is the very comprehensive finger food and snack assortment for both the frozen food section and the refrigerated counter. We are also a very flexible company and can respond very quickly to our customers' requirements," says Frédéric Dervieux. ■



GETTING COLD QUICKLY

The IQF process is widely used for ingredients such as herbs, rice and noodles.

Although estimates regarding its size vary, the global market for food ingredients and additives continues to expand, driven by increased demand from the processed and convenience foods industry, as well as heightened consumer interest in more natural and clean-label solutions, especially for products such as colourants and starches. According to Persistence Market Research, the global market was worth almost USD34.5bn in 2022, with annual growth expected to average around 5% in the years leading up to 2033.

FOOD INGREDIENTS & ADDITIVES

By this time, global market value is forecast to reach nearly USD55bn. Much of the growth within the processed and convenience foods industry is coming from less developed regions, examples of which include the Asia-Pacific countries and parts of Latin America and Africa. In these parts of the world, consumers (especially from

within the younger age groups and those living in urban locations) are increasingly adopting western-style diets, encompassing foods such as ready meals, pizzas, and other pre-prepared dishes. This has increased demand for herbs, as well as rice and noodles, all of which are now widely produced for frozen food applications using the individual quick freezing (IQF) process.

HERBS

The world has a large and expanding market for herbs, which are used extensively in cooking and food preparation. Herbs are sold in a range of formats, examples include fresh, dried, and frozen, with global sales worth in the region of USD10bn. In recent years, market growth has been slightly higher for dried herbs, as they are considered more affordable and convenient than fresh varieties by many consumers. For the rest of the decade, annual growth within the global herbs market is expected to average around 6%, driven by the ongoing expansion in popularity of

ethnic cuisines and dishes as consumer tastes become more sophisticated, as well as greater interest in a wider range of aromas and taste profiles. Some of the world's most popular herbs include rosemary, garlic, oregano, basil, thyme, and sage. The market also features blended herbs – notable examples include Herbs de Provence (which contains ingredients such as basil, lavender, oregano, rosemary, thyme, and sage and is commonly used as a seasoning or a rub for meat-based dishes) and Fines Herbes, another French creation which blends parsley, chives, chervil and tarragon and is considered especially suitable for salads and egg-based dishes. Europe represents one of the world's leading regional markets for herbs, although there are some variances in consumer tastes. For example, parsley and thyme are especially popular in the UK, whereas chives and dill are favoured by German consumers and garlic and oregano feature strongly as an ingredient in many of the Mediterranean countries.

The market is also benefiting from increased consumer awareness of the health and nutritional benefits offered by many herbs – for example, many are rich in antioxidants (which can reduce damage to the body caused by oxidation of cells), while most are rich in phytochemicals which can boost heart health and offer protection against certain forms of cancer. Some specific examples of herbs and their health benefits are listed below:

- Garlic – this can improve heart health by helping to reduce cholesterol and blood pressure.
- Ginger – this has been shown to possess anti-inflammatory properties, while it can also help with pain management and reduce feelings of nausea.
- Sage – this has been linked with improved brain function and memory, by inhibiting the growth of acetylcholine (a chemical messenger to the brain).

Most herbs are used to enhance the flavour and aroma of various foods and dishes. They are especially widely used as seasonings in applications such as soups and stews, as well as ethnic recipes where distinctive flavours are usually sought by consumers – for example, lemongrass is widely used in Thai cuisine, while coriander features strongly in many Indian dishes. Herbs also represent an important component in the manufacture of many types of sauces – for example, pesto contains basil leaves and crushed garlic, in addition to other ingredients such as cheese, pine nuts and olive oil. Many of the most popular herbs used for cooking purposes appear in frozen format – examples include dill, oregano, tarragon, parsley, basil, chives, coriander, lemongrass, sage, and thyme. These are typically frozen using the IQF process, which is done quickly after harvesting to ensure the nutrients are conserved. The IQF process ensures that no large ice crystals are created while freezing takes place, which could potentially damage the herbs and their structure. Herbs often require cold chain management within the distribution stage, as they are especially susceptible to spoilage if air and weather conditions are unsuitable.

Two of Europe's leading suppliers of frozen herbs are the Belgian producers HerbaFrost and Ardo Group. HerbaFrost celebrated its 20th anniversary in 2020 and supplies a range of IQF herbs, examples of which include chives, dill, lemongrass, garlic, ginger, coriander, mint, and oregano. The company also supplies herbs in compact drop format to customers within the retail, foodservice and industrial sectors, which were introduced in 2021. It also ranks as a major supplier of organic herbs, including Bio Suisse certified varieties. This is the organic food certification in Switzerland, which counts 33 organic farmers amongst its members.

Elsewhere, Ardo supplies herbs and fresh and frozen format, as well as fruit and vegetables. The company, which has an annual turnover worth EUR1.2bn, operates production facilities in 20 countries and exports its products to more than 100. Its UK business includes Rosemary & Thyme, a Suffolk-based site originally started as a joint venture which specialises in the production of frozen herbs. The company's Fines Herbes range includes herb mixtures in styles such as Provence, Thai,

TIEFGEFRORENE KRÄUTER DROPS HERB DROPS



Try, discover and taste it yourself!

HerbaFrost

The finishing touch

HERSTELLER VON TIEFGEFRORENEN KRÄUTERN

Hulshout – Belgium
www.herbafrost.be



6%
is the expected annual growth within the global herbs market.

Scandinavian, Asian, Mexican and BBQ, while it also supplies organic varieties of garlic and coriander.

One of the market's other leading suppliers to the European market is Nomad Foods, via brands such as Iglo and Findus. The Iglo range in the German and Austrian markets includes a wide variety of frozen herbs, encompassing both standard varieties and mixtures geared towards more specific dishes – examples include herb mixtures for meat and fish-based dishes, as well as Garden Herbs and Italian Herbs. In recent months, Iglo has launched frozen herbs packaged in paper-based boxes, which meet sustainability criteria.

RICE

Rice represents a staple food for a significant proportion of the global population. Global consumption is estimated at more than 500 million tonnes per annum, with China and India representing the leading producer nations. Average per capita consumption in global terms is around 54 kg, although this decreases to just 6 kg in the European region. In per capita terms, the world's leading rice consumers are South-East Asian countries, especially Bangladesh, Cambodia, and Laos. As can be seen from the table below, per capita consumption of rice is markedly lower in the larger countries of China, India, and Japan.

Although European rice consumption trails well below the Asia-Pacific countries, imports have increased in

recent years, driven mostly by greater consumer interest in speciality rice. Over 40,000 different varieties of rice are cultivated worldwide, including speciality varieties now featuring as ingredients in frozen foods such as

ready meals. Some of the more significant types of speciality rice finding favour with European consumers include

basmati rice (which is cultivated mostly in India and Pakistan), jasmine rice (another long-grain aromatic rice mostly grown in South-East Asia), Arborio rice (which is produced in Italy and used mostly for risotto dishes) and coloured rice, examples of which include black and red. Also worthy of mention is wild rice, which is not a rice in the strict sense, but a grass mostly cultivated in North America.



LEADING PER CAPITA CONSUMERS OF RICE (KG), 2021/2022

| Country | /capita |
|-------------|---------|
| Bangladesh | 269 |
| Cambodia | 246 |
| Laos | 234 |
| Myanmar | 195 |
| Philippines | 195 |
| Indonesia | 180 |
| Sri Lanka | 170 |
| Thailand | 157 |
| China | 128 |
| India | 108 |
| South Korea | 105 |
| Japan | 80 |

Source: FAO/Industry estimates



However, global rice supplies are coming under pressure at present, with the result that prices are increasing. A worldwide shortfall of 8.7 million tonnes is projected for 2022/2023, which would represent the largest deficit between demand and supply for two decades. Although the situation in Ukraine is partly to blame, much of the shortfall can be attributed to severe flooding in leading producer countries such as China and Pakistan – in the case of the latter, rice output fell by 31% in 2022. The situation has not been helped by severe droughts in European producer countries such as Italy and Spain, as well as reduced output in the US.

At around 10 kg, per capita consumption of rice in the UK is high by European standards, a figure which declines to around 6 kg in Germany. The UK rice market is worth around GBP900m per annum, with 88% of households regularly buying into the category. The country represents the region's largest consumer and importer of basmati rice, due in part to its large Indian and Pakistani population.

Elsewhere, Italy represents Europe's largest producer of rice, with output worth around 1.4 million tonnes per annum, or almost 40% of total production for the region. Areas of growth within the European market at present include organic and brown rice, which are perceived as healthier alternatives to milled white rice, as well as rice which is cultivated in a sustainable manner. When used as an ingredient in frozen foods,

rice is often supplied in IQF format, as well as for applications within the foodservice industry. Using this process, the rice is fully cooked and then quickly frozen in separate bags, which can then be thawed and heated at a later date. IQF rice exhibits a similar texture to home-cooked rice, while it is also less prone to excessive softening, as can often happen when rice is frozen using standard techniques. As consumer tastes become more sophisticated, opportunities are likely to arise for suppliers of IQF rice in varieties such as whole grain, black rice and wild rice. Another key market development has been the emergence of IQF rice packaged in microwaveable pouches for added convenience.

The leading supplier of IQF rice to the European market is Ebrofrost. This company has operations in Germany, Denmark, the UK and the US, and also supplies noodles and pasta products prepared using the IQF process. Its range of IQF rice includes long grain white or yellow, basmati and Arborio. Other suppliers of IQF rice include Simplot of the US and the Japanese manufacturer Nippon Industries.

NOODLES

Noodles are made from unleavened wheat dough, which are extruded, stretched or rolled and then cut into varying shapes such as strips or strings. They are especially popular within the Asian region, where they account for a significant proportion of total wheat consumption. Although noodles are typically cooked in boiling water,

they can also be pan-fried or deep-fried. According to Vantage Market Research, the global market for noodles was worth over USD16.5bn in 2022. Market value is forecast to increase by an annual average of more than 3% over the coming years, reaching USD21.6bn by 2030. The Asia-Pacific region accounts for almost 40% of global market value, as well as representing one of the most dynamic. Sales of ready-to-eat (RTE) cup and instant noodles are especially high in countries such as Japan and China, where they represent a popular meal or snack. In contrast, frozen noodles are believed to constitute only a relatively small percentage of the global market. As is the case with rice, noodles can be prepared using the IQF process. These are especially suitable for food industry applications such as frozen ready meals and soups. The growing consumer interest in Asian cuisines such as Chinese and Japanese has stimulated demand for a range of different meals featuring noodles as an ingredient, with Chow Mein one of many examples. As the market has expanded, consumer demand has increased for specialist noodles associated with Asian cuisine, examples of which include Udon and Yakisoba varieties. ■

>40k
different varieties of
rice are cultivated
worldwide.





A FOCUS ON PRECISION & CONSISTENCY

Cutting machinery plays a vital role in the food industry by facilitating streamlined food preparation, boosting productivity, and ensuring uniformity in the size and shape of food products.

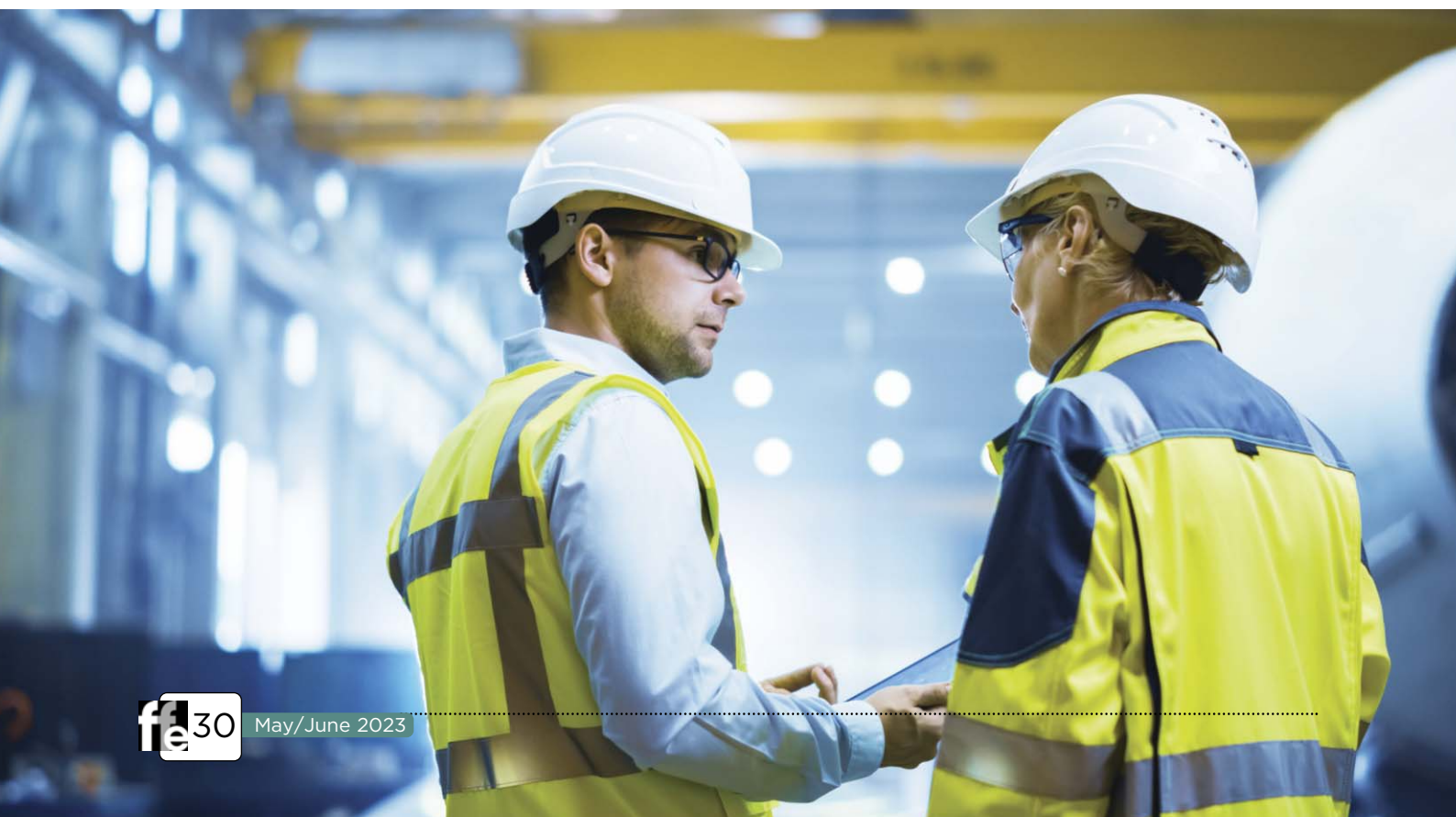
By enabling precise cutting techniques, such as portioning, slicing, dicing, and chopping, cutting machinery helps food manufacturers and processors save time and reduce labor costs. It also enhances food safety measures by minimizing the potential for cross-contamination and maintaining consistent product quality. As such, manufacturers of cutting machinery are key to developing the end-product.

PRECISION CUTTING FOR PERFECT PIZZA TOPPINGS

Pizza has taken the frozen food industry by storm. Its convenience and mouth-

watering flavours have made it a staple food in households across the globe. However, the journey from dough to delicious frozen pizza is not without its challenges. Frozen pizza manufacturers face hurdles in achieving even cooking, cutting high-fat products like salami, and using different sizes and shapes of vegetables as toppings. **FAM STUMABO**, a leading European manufacturer of industrial food cutting machines, offers cutting-edge solutions that address these challenges and help pizza manufacturers deliver top-notch frozen pizzas. Achieving even cooking can be a challenge for frozen pizza manufacturers. Uneven cooking may result in an unsatisfactory dining

experience. Precise cheese cutting can be challenging because it is a living product with different properties like fat and moisture content, hardness, softness, and age that need to be considered. The accuracy and repeatability of the cut quality are crucial when cheese is used as a pizza topping, whether in small cubes, strips, or shreds. Consistency in size is essential to ensure that no pieces are overcooked or undercooked during the melting process in the oven. FAM STUMABO, with its extensive expertise, rigorously follows the cheese market to ensure its machines and knives generate optimal results for the latest cheese products. Mozzarella and brand-specific blends are the most used types of



cheese for pizza while plant-based frozen pizzas are gaining popularity. FAM STUMABO's top-level machines for cheese cutting all deliver outstanding performance and precision: The FAM Centris™ 400C Hytec with the 16-station SureShred cutting head combines high-capacity shredding with an ultra-hygienic design. The FAM Hymaks™ is the highest capacity drum dicer, offering rigorous sanitation standards. For medium high volumes, the FAM Flexifam 55 is the most flexible and time-saving cheese dicer.

GET THE DESIRED CRISP STRUCTURE ON HIGH FAT TOPPINGS

A wide variety of meat products, including ham, bacon, cooked beef, chicken, pork sausages, pepperoni, salami, and chorizo, are commonly used as pizza toppings. The challenge arises with high-fat products like salami and certain hams, which require cutting at extremely low temperatures, around -15°C, thus necessitating heavy-duty machines and blades. To withstand the impact of hard frozen products, FAM STUMABO has developed a selection of sturdy blades, including their renowned "golden knives" made from a different metal alloy. These golden knives, with their enhanced resistance to extreme cold, ensure a free-rolling, non-sticking product that is easy to pack and put on top of pizzas. The FAM Volantis™ V-belt slicer plays a vital role in achieving precise and consistent slices for meat toppings. Its V-belt that perfectly aligns the sausages towards the slicing wheel, combined with the transversal cutting principle, delivers exceptional results with minimal waste. The popular "coin cut" slices, such as pepperoni and salami, benefit from FAM STUMABO's dedicated set of knives, which are capable of handling occasional pepper grains that are harder than the meat itself. Additionally, FAM STUMABO offers dedicated cutting solutions for dicing, strip-cutting, and shredding meat and poultry. The robust FAM CMD.2 high-capacity drum dicer is capable of uniform cutting of frozen products in very clean dice and strips. The FAM Yuran™ Hytec hygienic belt cutter is specialized in processing meat and poultry products into dice, strips and pulled look-alike products.

VERSATILE VEGETABLE TOPPINGS/ APPLICATIONS

To withstand the impact of hard frozen products, FAM STUMABO has developed a selection of sturdy blades, including their renowned "golden knives" made from a different metal alloy.

FAM STUMABO representatives

Pizza manufacturers face a unique challenge when it comes to using vegetables as toppings. Sven Boen (Sales Manager EMEA) explains that the diverse range of vegetable applications, with varying shapes, sizes, and textures, requires efficient and versatile cutting solutions. This challenge is further intensified by the demand for smaller production runs and a wider variety of products. Popular vegetable toppings include onions, garlic, peppers, olives, tomatoes, and mushrooms. FAM STUMABO addresses these challenges by offering a range of machines suitable for cutting vegetables. They provide smaller machines, such as the FAM Dorphy dicer or FAM Centris 315 for increased flexibility, while the medium-high FAM Tridis™ 180 and high-capacity version FAM Tridis™ 240 cater to larger production needs. FAM STUMABO understands the importance of versatility and fast changeovers between different products. We design our machines to empower customers with the ability to make more products with one machine by simply and quickly changing the cutting tools. "With over 40 years of experience, FAM STUMABO has prioritized customer intimacy, understood individual needs, and offered tailored cutting solutions to drive business growth. Their commitment to food processors is clear: «Together, we cut your product to perfection.» By partnering with FAM STUMABO, frozen pizza manufacturers can achieve the desired consistency, quality, and customer satisfaction that set their pizzas apart in the market," representatives conclude.



Photo: FAM STUMABO

A CONSTANT PROCESS OF IMPROVEMENT

"Safety is paramount to anything that we develop," said Alan Major, chief sales officer at **Urschel** during an interview we had at interpack, in Dusseldorf. "We want to make sure that in no way, shape, or form the customer, if they don't do anything to bypass the safety, they'll never get hurt on our product. And because we have very large rotating arbors or assemblies moving at very high speed with a lot of sharp blades on them, safety is very important. But what we look for in newer type designs are obviously the durability that we've done over the years, reliability, heavy-duty-ness of the parts are built into the machine. And so that is critical in design, but we also look for ease of disassembly, ease of use. Cut quality is very important to us. We must maintain that cut quality that really represents the best cut quality in the business and the industry. And we've maintained that with all the new developments. We're always looking to improve all those areas and how does that benefit the end user? Reduction in disassembly and assembly, reduction in sanitation time means more uptime for the equipment, less labor costs there. Improved cut quality reduces cell damage so that the end user gets a better shelf life for their end product down the road, which is saving them money," he explains. "And

then with our products, because they're so well built, you'll be able to replace any parts without any problems. They'll fit on the machine, there won't be any issues because they're just built very heavy-duty. You know, we have machines that were made in the 50s that are still running, and we still supply parts for them. I would like to sell new machines, but we're also going to support our existing customers that are in the field that have very old machines." In January of 2022, Urschel started a new division called the Innovation and Development Department. It is separate from engineering, and they are off-site. "They have their own building. They have their own machinery. They have their own manufacturing engineering. They have their own machinists and, of course, design engineering. We're starting small, but this department will now do all the heavy-duty research and development that will be required aside from manufacturing. A lot of times, some of our products will take two, three, four years to develop from idea to marketplace, but we're going to reduce that time probably in half with this department because they're going to be able to make parts on their own and won't have to wait to get in line for special parts for customers or new developments from engineering. This Innovation and Development Department is going to really help us take ideas to the marketplace in a much shorter window," Alan Major says. "The I&D department is responsible for new developments outside the box of what we currently design and build. So, it'll be a different style of machine, typically, that we're building in that side of the business. It's really kind of a think tank, if you will, of our business. Obviously, in concert

with sales and marketing, saying, okay, this is what our customers are asking for. Now you go make it. You go figure out how to design it. So that's how we're doing it." Energy efficiency hasn't been a main focus for the company, as we haven't had customers that have focused on the energy consumption of our products. In general, we don't have a lot of equipment that's going to require a whole lot of power. Obviously, if the marketplace is going to go in that direction, we will obviously change and start thinking about that. But I think a lot of it is going to be on the motor manufacturers, as we don't make the motors. So, I think a lot of that is going to be based on how they handle things. We know the torque that we need for cutting that amount of volume. And so, then it comes back to the motor manufacturer." Regarding revenues, Alan Major says Urschel had a record year in 2022. "We really had a backlog that was much larger than anything we've ever experienced. We beat our record sales year from 1995 last year. So, we're continuing to see a massive backlog. And of course, there's been some supply chain issues. Not as much with us because we're a little bit different. In our business, and there's very few businesses like ours in the processing and packaging world, we make our own parts - the fasteners,

the cases, the assemblies. We have our own foundries; we have our own machining equipment. Everything is literally made internally except the electrical components and the motors. So, we're not dependent on anyone." And while the current situation might look somewhat unpredictable, Urschel's chief sales officer expects positive results for this year. "We're running at a pretty good clip above last year. Now, what's going to happen? Is there going to be a recession? You keep reading about all these things. I don't know. But I would say that based on our backlog and what's going on, I can see this year we'll finish relatively strong, at least on the same level as last year. I think if there's a global recession, that will impact our business somewhat just like everybody else. But in general, we're in the food industry, and it's somewhat isolated from the large, dramatic drops in business. So, we've been fortunate enough that when there's been a significant downturn, it has had very little impact on our business overall." Regarding industry segments and their contribution to Urschel's sales volumes, Alan Major says that the mix is similar to what the company has always had. "The plant-based food business has really been good for us over the past four to five years. That seems to have tapered off with inflation. But beyond that, everything else is very strong. We're seeing a lot of strength in the potato industry, the vegetable industry, the meat industry, the dairy industry, which we have a significant business in as well. It's all fairly strong at this point. Each year they'll move on about a 1% or 2% basis up or down, each one of them, on our overall volume. But in general, they haven't shifted much in the last 10 years," he concludes. ■

The I&D department is responsible for new developments outside the box of what we currently design and build. So, it'll be a different style of machine, typically, that we're building in that side of the business.
Alan Major, chief sales officer, Urschel



Photo: Urschel



Any Way You Cut It Rely on Urschel

As the #1 European and Global Leader
in Food Cutting Technology,
Urschel is a powerhouse developer
and manufacturer of cutting machinery.

Urschel delivers targeted results to
meet processing goals and optimize profits.
Rugged slicers, shredders, dicers, and milling
machinery **built to exceed expectations.**



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

URSCHEL®

The Global Leader in Food Cutting Technology

Set up a free test-cut of your product.

www.urschel.com



A RACE FOR INNOVATION THE BENEFITS ALL PARTIES

Freezing equipment plays a vital role in the food industry, offering several significant advantages that contribute to the preservation, quality, and safety of food products. In the first place, freezing technology enables producers and sellers of food to increase the shelf life of perishable commodities, thus assuring the year-round availability of seasonal or perishable products, enabling a more reliable supply chain, and lowering food waste. Additionally, bulk purchasing and storage are made possible by freezing equipment, enabling enterprises to benefit from cost reductions and economies of scale.

GEA Frozen Foods'
CALLIFREEZE is a unique new energy saving freezer control system developed for use with the GEA range of freezers for the food industry. The new system can be configured for freezers handling a wide range of food products, including meat, poultry and fish, ready meals, bakery, and dairy products. It monitors the condition of products exiting the freezer, and then automatically calibrates the freezer parameters to ensure that every product is frozen according to optimum requirements. **CALLIFREEZE** automatically adjusts product retention time in the freezer, air temperature and fan speed to achieve the precise level of freezing required, with minimum energy consumption. In detail, according to GEA's product specifications, **CALLIFREEZE** monitors the condition of products exiting the freezer, and then automatically calibrates the freezer

parameters to ensure that every product is frozen according to optimum requirements. The control system achieves this by continuously monitoring the level of crystallized water in the food products, and automatically adjusting product retention time in the freezer, air temperature and fan speed to achieve the precise level of freezing required, with minimum energy consumption. Continuing to cool a product once it has

already reached the required degree of freezing is not only unnecessary, but it is also a waste of energy. Some products need to be 100% frozen, while for other applications an 80% level of frozenness at freezer discharge is acceptable, with product 'finish off' occurring in the cold store, to maximize energy savings. However, until now there has been no way of checking the level of frozenness of products as a continuous part of the

CALLIFREEZE monitors the condition of products exiting the freezer, and then automatically calibrates the freezer parameters to ensure that every product is frozen according to optimum requirements.
 GEA Frozen Foods



Photo: GEA

cooling process. CALLIFREEZE uses GEA's unique sensing technology to measure the level of frozenness inline, at the freezer exit, without direct contact with the food product. The system then automatically adjusts the freezer parameters to maintain perfect freezing conditions according to customer and product requirements. CALLIFREEZE helps food processors to produce the finest quality frozen food. The ability to continuously monitor product frozenness and automatically adjust freezer conditions ensures that products exit the freezer in optimum condition, so customers can be confident of the highest quality output, whether freezing meat cuts or the most delicate baked goods. The system has been proven to reduce power consumption and improve freezer efficiency. Tests running CALLIFREEZE with GEA freezers have resulted in a considerable increase in production capacity - by up to 20%, whilst also achieving a reduction in energy consumption of 10%. Maximum benefits are achieved when the system is combined with GEA energy saving and heat pump solutions. CALLIFREEZE can be specified as an option for GEA S-Tec and A-Tec spiral freezers or may be installed in existing spiral freezers, including freezers from GEA and OEM systems.

A TOOL THAT PROVIDES MORE THAN JUST INSIGHTS

With OmniBlu, **JBT's** new AI-powered subscription-based platform that combines Parts & Service, Maintenance manager, and Machine performance, providing customers with a powerful tool that creates more value, maximizes uptime, and improves yield should be easier than ever, according to Guilherme Goinhas, general manager of Customer Care Protein, EMEA at JBT. "OmniBlu will bring our customers unmatched visibility of their operation and help them improve it even in the smallest detail," he points out. OmniBlu is JBT's new generation customer care and a service designed around improving customer operations and includes services and parts supported by digital tools. This is intended for one single goal: optimizing customer results. Consequently, OmniBlu includes spares on stock, preventive maintenance activities, and a customer success manager to support the customer with operations and maintenance activities. JBT has

OmniBlu allows us to add more sensors on the equipment, which gives the customer a better understanding of their process by using specific parameters for specific operations and needs. It also makes it more convenient to plan maintenance by predicting it and making it easy to order spare parts through the Parts portal.
Guilherme Goinhas, general manager of Customer Care Protein, EMEA at JBT

optimized the monitoring to an expert level by building and continuously improving its digital tools. Therefore, joining the OmniBlu program is like having a specialist always next to your JBT machine, guiding you and your team, the company states. OmniBlu monitors the machine's performance, gets all the different data, and generates alerts and graphs depending on equipment and application. OmniBlu can also help predict the future based on the new algorithms that have been developed. The data presented in the monitoring tool is designed to control the most critical value levers that operations and maintenance can use to improve. "The information collected from the machines is merged with the customer's operation because food processing works differently for different customers. This is designed to generate more value for the customer on their operations by analyzing and optimizing their performance and more accurately predicting future maintenance needs", says Guilherme Goinhas. For years, JBT's PRoCARE service contracts have effectively maximized the longevity of JBT machines through high-quality support and maintenance. At the same time, JBT's iOPS® offered machine performance monitoring and analytics to give customers insight into equipment performance data. Now with OmniBlu, JBT combines these different services, PRoCARE and iOPS, and takes this to a new level, providing smart insights and connected care designed around customer value. "OmniBlu has been field tested on various food production sites in the US and Europe for almost a year. During this time, much information has



Photo: JBT

been collected and used to finetune the tools and validate the data and what conclusions one can draw from it," says Auke Bouwense, global commercial director of JBT OmniBlu. "The testing guarantees that the tools will work as intended. We will keep learning while we keep implementing OmniBlu for more customers. Our customers are diverse and different, so we are never done learning and improving." When OmniBlu is implemented, data is collected from day one, but how much information is needed to analyze a trend depends significantly on the customer's conditions, like how many hours they work, how many shifts they have, or if they frequently change products. "If a customer has an inefficient process, we will see it immediately and get insights into what to adjust after a few weeks. But if a customer has all their processes well under control, the improvements are more subtle and need enough data to improve the process, like avoiding micro stops, for instance", adds Guilherme Goinhas.

SETTING THE STANDARD FOR EFFICIENT FOOD PROCESSING

Subsequently, as more and more food processing plants use OmniBlu, the aggregated data creates a standard industry benchmark for individual food products. Even if the plants are different and located in separate regions, the processing of, for instance, poultry is done in the same way on the same JBT equipment. However, there can be minor differences depending on the chosen options. "Now we can support our customers in more ways than before. We have created a form of best practice regarding how the customers should run their process under certain conditions. Another benefit is that by analyzing aggregated data, we will be able to provide feedback on the development of our equipment and improve it in a way

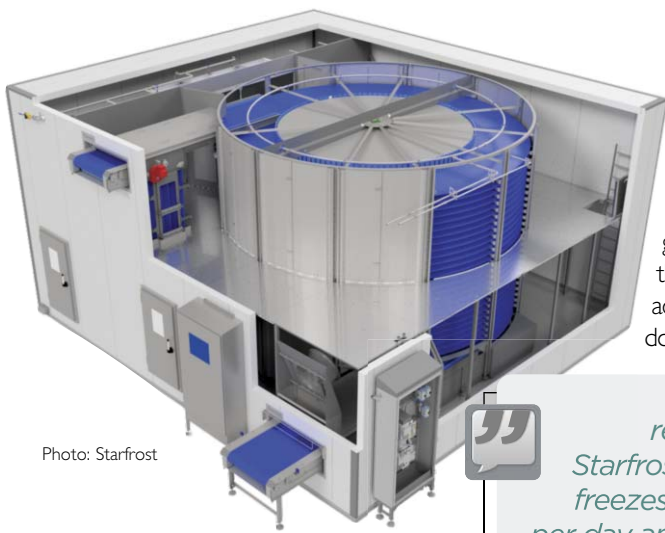


Photo: Starfrost

that will benefit our customers even more, says Auke Bouwense. OmniBlu is developed to work with all JBT food processing equipment, although it will be launched in different steps. "First connected was the JBT Frigoscandia GYRoCOMPACT® self-stacking spiral freezer, and we are now deploying ovens, fryers, and the DSI Waterjet portioners. OmniBlu can also be connected to older machines depending on age," says Auke Bouwense. "Machines up to ten years old are pretty easy to connect. If they are older, they need an upgrade that could be more or less expensive, depending on what kind of machine it is. All devices can be connected, but if it's too old, it's probably a good idea to invest in new equipment anyway", Guilherme Goinhas points out. OmniBlu offers a high degree of predictability, making it possible to anticipate problems and thus decrease downtime. "OmniBlu allows us to add more sensors on the equipment, which gives the customer a better understanding of their process by using specific parameters for specific operations and needs. It also makes it more convenient to plan maintenance by predicting it and making it easy to order spare parts through the Parts portal. With OmniBlu, we are a strategic partner to our customers, working with them to maximize performance and yield while minimizing downtime. And although we have just launched OmniBlu, the interest is huge." With OmniBlu, JBT also introduces the new Parts portal, where customers can order parts online for their equipment. They will see a digital twin of their machine on their tablet or PC and can drill down to a specific section or detail of the device and look for the components or parts they want. There they will see the part number, price, availability in stock, and delivery time, and

they can order the part with one click. With the new Maintenance manager, they will also get a visualization of all the maintenance activities they need to do in the next couple of



Using natural refrigerant CO₂ Starfrost's equipment freezes up to 20 tons per day and has enabled Newburgh Foods to significantly increase its production capacity while delivering the additional benefit of increased efficiency for the firm by reducing freezing times to less than 85 minutes.

Starfrost

months. All the data being uploaded from the equipment and analyzed by the algorithms are used to adjust the Maintenance manager continuously. Based on machine learning, it will extend or reduce activities of maintenance to make it as efficient and predictable as possible. "With OmniBlu, we will also be able to detect things in the customers' operations that they don't see and help them improve their working flows. We can show them how they can reduce cleaning cycles or adjust them to make them more efficient, for example", Guilherme Goinhas added.

INCREASING CAPACITY BY INSTALLING AUTOMATED FREEZERS

Starfrost has recently provided machinery to Newburgh Foods, a UK-based provider of high-quality retail, foodservice and wholesale poultry products, which has increased its poultry block freezing production capacity by 60% with the installation of an automated Starfrost Helix spiral freezer. The company, which supplies major supermarkets and restaurants across England, had an existing contract with a fast-food chain that recently increased its capacity requirements. This led Newburgh Foods to review its freezing process capabilities and seek a solution that would fulfil the substantial increase

for its customer. After a thorough evaluation of different freezing methods, Newburgh Foods awarded the contract to Starfrost, a leading manufacturer of mechanical freezing and chilling equipment. Starfrost supplied and custom-built a Helix spiral freezer that was designed to fit seamlessly within the existing production layout at Newburgh Food's Warrington-based factory. Using natural refrigerant CO₂, Starfrost's equipment freezes up to 20 tons per day and has enabled Newburgh Foods to significantly increase its production capacity while delivering the additional benefit of increased efficiency for the firm by reducing freezing times to less than 85 minutes. This is a substantial improvement from the previously used blast freezing method, which took between 12 to 15 hours. The installation of the automated Starfrost spiral freezer has allowed Newburgh Foods to meet the increased capacity requirements of its customers and maximize production efficiency. The success of this project showcases Starfrost's ability to design and deliver customized solutions that meet the unique needs of their clients. This was also encountered last year, when Pukka hired Starfrost to build and install two Helix spiral freezers at its bakery in Syston, Leicestershire, as part of its three-year growth plan. This technology allowed Pukka to improve both its commercial and production capacities. The brand-new Starfrost spiral freezing system was created to take the place of outdated machinery and offer a dependable freezing solution that increases manufacturing output, decreases downtime, and uses the least amount of water possible. Up to 12 hours of uninterrupted operation are possible thanks to a cutting-edge air defrost mechanism, while automatic cleaning systems save downtime and save water. As a result, Pukka's production capacities are future-proofed by the spiral freezers to support any forthcoming product development or growth ambitions. Spiral freezers made by Starfrost are intended to automate production lines to boost output effectiveness, improve product quality, save operating expenses, and increase revenue. The freezing systems continually lower the surface and core temperatures of individual food products using high performance technology to deliver consistent manufacturing results. ■



EYE-LINK®



OMNI-GRID® 360



SMARTSPIRAL®

TOP OF THE FOOD CHAIN



THE LEADERS IN CONVEYOR BELT TECHNOLOGY

EYELINK®

Versatile steel conveyor belts can be designed and manufactured to satisfy the most demanding of applications.

OMNI-GRID 360®

Increase capacity while minimizing maintenance and downtime in the most demanding applications.

SMARTSPIRAL®

Remotely monitor multiple spirals at different plants in real time.

Contact us today to let us help you move your business forward,
Call **+31 20 581 3220** or visit us at ashworth.com/frozen-food



VIEW OUR RECENT
SMARTSPIRAL
SUCCESS STORY!



A CRUCIAL STEP TOWARDS A PERFECT PRODUCT



The frozen food sector places a lot of value on optical sorting technology because it provides several advantages that improve efficiency and quality control. Optical sorting allows for accurate and automated examination of frozen food products thanks to its sophisticated sensor-based systems, guaranteeing that only high-quality products reach the market. With the help of this technology, many flaws, including foreign objects, color, blemishes, and even size irregularities, may be found and eliminated, guaranteeing that buyers obtain goods that adhere to high standards of quality.

Optical sorting quickly and precisely separates frozen food products, which not only raises the quality of the finished product overall but also reduces the possibility of contamination and increases food safety. Additionally, by speeding the sorting procedure, minimizing human labor, and maximizing production throughput, this technology boosts operational efficiency. As a result, frozen food producers and distributors see cost savings and increased productivity.

A SUCCESSFUL PARTNERSHIP

After extensive testing, research, and validation, global food manufacturer Nestlé decided the **TOMRA** sorter met their needs best and cited the Smart Sort technology as the deciding factor. The quality check process involves taking the raw material out of totes or cases, putting it through a series of inspections, and then putting it back in totes after it has been determined it is safe and

desirable. The first two examinations see the toppings pass through a bulk X-ray machine and then over a magnet to remove any remaining metals. The final check sees the remaining good materials travel through the TOMRA optical sorter before finally returning to the totes. Food trends continually change and stress the importance of an operation's capacity to adapt quickly. Being agile and evolving to meet the customers' desires for higher-quality products makes a world of difference. Employing TOMRA sorters has positively impacted Nestlé's procedure, adding an invaluable point in the process to reduce the risk of foreign matter ending up in the final product. With their TOMRA Nimbus, Nestlé processes around 15 million pounds of raw material at the Solon, Ohio facility in a year, where they distribute toppings to three other production locations around the United States. The machine's robust capabilities allow production lines to continue running the highest volumes while also rendering data that allows them to notify suppliers of product

quality trends earlier in the supply chain. Nestlé utilizes TOMRA optical sorters for their frozen food operations at Solon (United States) and at their Nonnweiler facility in Germany. A corporate recommendation and Nestlé's commitment to food quality & safety led to the discovery and implementation of TOMRA sorters. Their dedication to continuous process improvement, food safety, and offering their customers the highest quality product keeps bringing them back for more.



Photo: TOMRA

SELECTING THE RIGHT SORTER

When selecting a sorting machine for a frozen food processing plant, the first consideration is what unwanted materials or product defects you need the machine to detect and eject. Some of these might be difficult to detect, and sorting machines differ greatly in their 'seeing' ability, according to Jacob Hobbel, TOMRA Food's global category director for vegetables and fruit. Another consideration is the sorter's ability to minimize food waste and maximize yields, he explains. "Will the machine work with a low level of false rejects, removing unwanted materials without also removing too much that's saleable? Machine performance also differs in this respect. Yet another consideration is downtime. The sorter needs to be easy to operate, easy to set-up when switching from one type of food to another, easy to clean, and reliable. It must work well in the tough conditions found in IQF environments, in temperatures can be as cold as -30°C and as hot as 50°C. If a problem should occur, the machine user needs to know the manufacturer will quickly provide technical back-up, whether that's remotely or by getting a technician on site." One more factor to consider is futureproofing, Hobbel explains. "Selecting a sorting machine is not only about current needs, but also what it will take to stay competitive in the future. As we move into an era of digital transformation, sorting machines with Artificial Intelligence will deliver advantages, as will machines which produce usable data." For example, connectivity to the TOMRA Insight

Selecting a sorting machine is not only about current needs, but also what it will take to stay competitive in the future. As we move into an era of digital transformation, sorting machines with Artificial Intelligence will deliver advantages, as will machines which produce usable data.

Jacob Hobbel, TOMRA Food's global category director for vegetables and fruit

customer portal and cloud-based data platform can show operators live data which enables them to make line efficiencies almost instantly. This data can also ensure that when frozen vegetable products are mixed, each bag is packed with exactly the right mix. And by accessing data retrospectively it's possible to quantify the standards of raw materials from suppliers and to make better-informed business decisions.

PROVIDING AN INTELLIGENT ANALYSIS OF OBJECTS IN THE PRODUCT FLOW

Processors rely on belt-fed sorters to remove foreign material (FM) and product defects, explains Marco Azzaretti, director of marketing at **Key Technology**. "Most belt-fed sorters inspect wet products with only top-mounted sensors looking at the product on-belt and only partially in-air – this fails to detect defects located on the side of the product that rests on the belt. VERYX belt-fed sorters are unique in that they inspect products entirely in-air, from the top and the bottom, to see every facet of each object in the product stream. Featuring sensors, light sources and optical backgrounds positioned away from product splatter zones, VERYX sustains all-sided surface inspection in messy operating environments throughout long production cycles without operator intervention." For frozen product inspection, he goes on to say, chute-fed sorters are usually preferred because they take up less space than belt sorters and frozen foods convey well on a chute. Here, immediately prior to packaging, the sorter's ability to ensure a product is in-grade and free of FM is critical since this is the last product inspection opportunity on the line, according to Azzaretti. "To maximize product quality and yield, VERYX sorters can be equipped with our Pixel Fusion® inspection technology. Pixel Fusion combines pixel-level input from multiple cameras and laser sensors, producing higher contrasts to find even the most difficult-to-detect product conditions and FM while virtually eliminating false rejects." On the wet end of a frozen food production line, the primary objective of the sorter is to remove FM and defects so that only good product is further processed. After freezing, immediately prior to packaging,



Photo: Key Technology

VERYX belt-fed sorters are unique in that they inspect products entirely in-air, from the top and the bottom, to see every facet of each object in the product stream.

Marco Azzaretti, director of marketing at Key Technology

the primary objective of sorting is to ensure final product quality and safety. At the same time a sorter improves product quality by removing FM and defects, it should help maximize yield by reducing false rejects. Key Technology's Director of Marketing adds.

ADDRESSING THE CHALLENGES OF SORTING PRODUCE

FM and contaminants that have a color, mass and shape that are like good products can be difficult to detect and remove. This scenario is most common when inspecting fresh products at receiving or pre-processed foods prior to blanching. According to Marco Azzaretti, after freezing and immediately prior to packaging, the sorter is responsible for ensuring the quality and safety of the final product before it reaches consumers. Sorters at the end of the line must be able to find and remove any FM that could have been introduced into the line inside the plant – things like a rubber gasket, a piece of glass or materials from protective gear worn by line operators – as well as possible contamination from other products that may be produced on the same line. Here, at this critical inspection point, the challenge is in the variety of different FM types of the sorter must be able to detect and remove. Regarding the trends on the the frozen vegetables and fruit market, Marco Azzaretti says he continues to see growing demand for equipment that can collect and share information to support an Industry 4.0 approach that can better manage food processing operations. ■



PRACTICALITY AS THE MAIN REASON FOR PURCHASE

Italy has one of - if not the - most recognizable gastronomies in the world, so looking at the upward trajectory that frozen food had here in the last couple of years is a great sign for the industry worldwide. Virtually every Italian eats frozen food products, and the consumption per capita keeps reaching new heights.

The consumption decisions made at the table appear to accurately mirror the social and economic tendencies that the recent pandemic crisis has aided in fostering. Lockdown, increased time spent at home, and a growing propensity to stock up on food all contributed to a surge in the consumption of frozen goods across all product groups from 2020 to 2022. As a result, Italy's per capita consumption of 15 kg was first exceeded in 2020. Today, 98% of Italians eat frozen foods, and this statistic applies to all age groups, regions of the country, and all family types without exception. In order to show how the Italian freezer and the approach to the consumption of frozen food changed, as well as on the basis of the various types of families and age groups, the IIAS - Istituto Italiano Alimenti Surgelati collaborated with the research firm BVA-DOXA to photograph the new trends in the sector. Over half of Italians (54%) increased their consumption of frozen foods between 2020 and 2022 (18% significantly and 36% moderately). This trend was more pronounced in the south of Italy than in the north, among young people, and in households with young children. The latter group, along with people under 35, are the ones who use sub-zero products the most frequently; on average, they do so 2.44 times each week. A startling statistic that has led more and more families to switch to a larger appliance in place of their freezer or refrigerator in 2020: +32.3% of new freezers and +40% of large refrigerators.

VEGETABLES POPULAR WITH SINGLES, FISH PRODUCTS CHOSEN BY FAMILIES WITH CHILDREN

As the popularity of frozen foods rises, so does their variety: 74% of those surveyed by IIAS said they've added previously untried items to their freezer and have tasted everything from veggies to snacks, pizza to fish, and ready meals. Vegetables, seafood, and frozen pizzas have proven to be the "must have" items in Italian freezers even after COVID-19, but with some variations: Most individuals and couples without children (44%) prefer frozen vegetables, whereas families with children (40%) and those located in central Italy are increasingly consuming more frozen fish items. 26% of people favor pizza, snacks, and french fries; this number jumps to 29% in the North-East and 30% in households with small children. The Italian freezer also has no shortage of ready meals (13%), which are practical foods that are still preferred even after the pandemic's initial phase and are more prevalent in the freezers of single people without children (16%) and in central Italy (15%). On the other hand, households with older children have

sufficient space in their freezers to accommodate all frozen goods equally: 30% of their purchases range from pizza to snacks to fish. Finally, 43% of Italians say they independently freeze goods to store up (such as bread, meat, sauces, or other home-made preparations); this is particularly common in the North-East. Practicality (70%) has been reaffirmed as the primary motivator for purchases by Italian consumers across all frozen product categories; this is particularly true for women, consumers in the North-East, and those in the 35-54 age range. Following this are the options for changing the food (37%), which were mentioned especially by families with young children, and decreasing waste (25%), which is something that couples without children pay close attention to. According to IIAS, the nutritional value is also important, with 22% of respondents comparing the convenience of frozen foods to fresh products, particularly in the South and among families with young children. Frozen foods also help 17% of the sample members save money, as shown particularly by the under-35s and single adults without kids. Italy was one of the European nations where e-commerce in the grocery sector expanded the fastest at the start of the pandemic (in 2020), at almost 60%. The value of online food purchases from supermarkets has doubled to EUR921m, outpacing food delivery (which has increased by +46%). Online sales of frozen goods in particular set records in 2020, increasing by 151.4% in value and 145.6% in volume. Additionally, the upward trend persisted in 2021, when sales increased by +20.6 in volume and +17.4% in value. ■



La Pinsa

It's not a Pizza, it's a PINSA



The great Italian and international success of the Pinsa is to be found in the general health trend which tends to reward those products characterized by eating healthily and genuinely. The lightness of the Pinsa derives from a higher hydration of the dough unlike traditional pizzas, and therefore a better digestibility. Consequently, the type of water used to make a Pinsa is a fundamental element to obtain its taste. Even the ancient Romans, from whom the recipe comes, knew its lightness, so much so that they used the Pinsa in its original oval form, like an edible dish on which they spread the main dish, usually meat or fish. Svila, the company that has been producing exclusively bakery products, for over 45 years, masterfully approached the ancient Roman recipe of Pinsa, maintaining all the features connected with tradition. The company is nestled in the Sibillini mountains, where the air is always sparkling, and the pure water has always distinguished all its production, guaranteeing an index of lightness and purity among the highest in the category.

The lightness and tastiness of Svila Pinsa is also the result of the raw materials used: a mixture of wheat and cereal flours, carefully selected, which make the product crispy on the outside but extremely soft inside. The high digestibility of the Svila Pinsa is guaranteed by an exceptional water that perfectly hydrates the dough, by a very long leavening and above all from the "pinsatura" made by hand, without ever stressing the base. It is this slow movement that brings us back to the real name of Pinsa, which comes from the gesture of stretching, of enlarging, in fact the Latin word is "pinsere"! When you cut a Pinsa produced by Svila, you already recognize the quality by eye: the presence of its innumerable alveolus represent the essence of its lightness. The crunchiness of its crust preserves the secret of softness! Svila has been producing baked products every day for 45 years. Millions of hours of experience that pass through wise daily gestures. The choice of excellent raw materials, is combined with a constant care for product control. Because everything done in Svila, before others, is eaten by them and their children. This is their quality assurance!



SVILA srl
via C. Battisti 55
62039 Visso (MC) Italia
Tel. +39 0737 972811
Fax +39 0737 972833
vendite@svila.it
WWW.SVILA.IT



ADAPTABILITY AS A KEY ELEMENT FOR SUCCESS

Pasta is undoubtedly one of the most beloved foods around the world, and its popularity can be attributed to several compelling factors. One of the primary reasons behind its popularity is its versatility. With the ability to be paired with an extensive array of sauces, toppings, and ingredients, pasta offers limitless possibilities for culinary creations.

From classic tomato-based sauces to creamy options, pasta accommodates diverse flavors and caters to various dietary preferences. This adaptability ensures that pasta remains a universally accepted dish, allowing individuals to personalize their meals and explore a wide range of taste experiences. Pasta serves as a staple ingredient in numerous traditional and contemporary dishes across different cultures. It forms the foundation of iconic Italian dishes like spaghetti carbonara, lasagna, and fettuccine Alfredo. Additionally, pasta plays a central role in other global cuisines, such as Asian noodle dishes, Middle Eastern pastries, and American macaroni and cheese. Its adaptability allows chefs and home cooks to create an endless array of recipes, catering to various tastes, preferences, and dietary restrictions. Moreover, pasta offers a convenient and budget-friendly option for everyday meals. Its long shelf life, ease of preparation, and quick cooking time make it a go-to choice for busy individuals and families. It can be easily combined with ingredients like vegetables, meats, and sauces to create a balanced and filling meal.

Pasta comes in three main types: dehydrated, fresh, and frozen. Each type has its unique characteristics and culinary uses. Frozen pasta is a convenient option for those seeking quick and easy meal solutions. It is typically made using either fresh or dehydrated pasta that has been pre-cooked before being frozen. This pre-cooking process ensures that the pasta retains its texture and taste when reheated. Frozen pasta can be found in various forms, including fully prepared dishes like lasagna or individual frozen portions of cooked pasta. It offers the advantage of longer storage life compared to fresh pasta, making it a popular choice for meal planning and bulk purchases. Frozen pasta can be reheated by boiling, microwaving, or baking in the oven.

Pasta is crafted by combining dough made from various ingredients such as semolina, durum flour, farina flour, corn, rice, wheat, or a blend of these, along with water, and occasionally including eggs. In October 2021, the USDA published an article that stated, the production and consumption of durum wheat, which is commonly used in the manufacturing of pasta, have experienced significant shifts in recent years. The US,

for instance, typically consumes around 80 million bushels of durum per year, with pasta accounting for most of this consumption. During the 2019/20 marketing year, the COVID-19 pandemic prompted a surge in consumer demand for pasta products, leading to a sharp increase in the use of durum for food manufacturing in the US. As a result, total durum food use reached a record high of nearly 88 million bushels. Additionally, imports of pasta saw notable growth, rising by 13% in 2019/20 and a further 21% in 2020/21. The surge in durum consumption and increased imports of pasta indicate a heightened demand. This can translate into a positive influence on the frozen pasta market, as consumers continue to seek convenient and ready-to-cook options for their pasta-based meals. The key players in frozen pasta market include Nestlé S.A. (Switzerland), Conagra Brands (US), General Mills (US), Freiberger Lebensmittel GmbH (Germany) and Dr. Oetker (Germany). The manufacturing of frozen pasta involves various equipment like scales, mixers & blenders, pasta extruders blanching & cooking equipment's and freezing equipment's like IQF (Individual Quick Freezers) or blast freezers. In the



3-5%
is the expected growth rate of the frozen pasta market up until 2028

frozen pasta processing flow, the ingredients are prepared and mixed to form a uniform dough. The dough is then shaped using pasta extruders or other equipment to create the desired pasta shapes. The pasta is blanched or partially cooked to preserve its texture and color, and then it is rapidly frozen to maintain its quality and extend its shelf life. Finally, the frozen pasta is packaged and stored for distribution and sale. The frozen pasta processing can be semi-automated or automated process lines. Automating the process can reduce expenditure on labor & energy and increase flexibility between different operations.

A SEGMENT THAT HOLDS ITS OWN

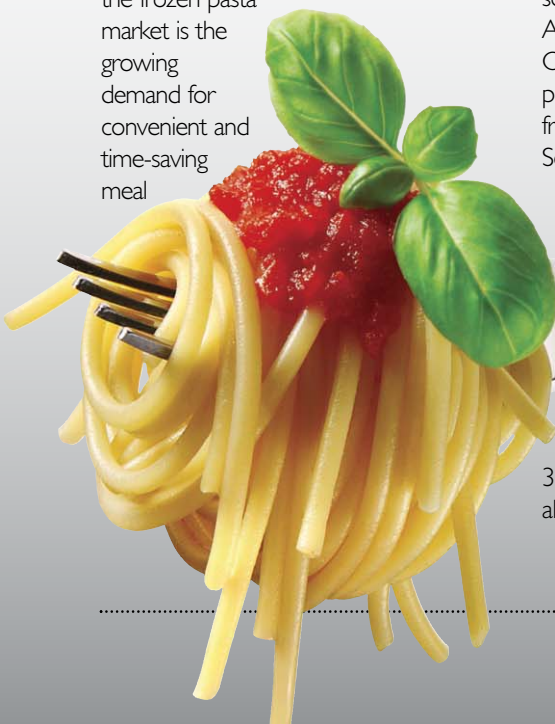
The global frozen foods market offers different types of products, of which frozen pasta accounting for approximately 12% of the market in 2022. The market is expected to witness a single digit growth rate of 3-5 % from 2023-2028. One of the key drivers of the frozen pasta market is the growing demand for convenient and time-saving meal

options. In today's fast-paced lifestyle, consumers are seeking meal solutions that offer ease and time-saving benefits. Frozen pasta perfectly fits into this demand as it provides a convenient option for quick and easy meals. The key advantage of frozen pasta is its minimal preparation time. Unlike traditional pasta that requires extensive cooking and ingredient preparation, frozen pasta is pre-cooked and ready to heat. Consumers can simply take the frozen pasta from the freezer, cook it for a few minutes. This convenience factor is particularly appealing to busy individuals, working professionals, and families with hectic schedules. It eliminates the need for time-consuming tasks like measuring ingredients, kneading dough, or waiting for water to boil. With frozen pasta, consumers can enjoy a delicious and satisfying meal without compromising on taste or quality, making it an ideal choice for those seeking convenient meal solutions in today's fast-paced world. According to USDA's report released on October 2018, on analyzing household purchase data of US citizens, researchers from the Economic Research Service (ERS) found

Interestingly, across generations, there is a negative relationship between income and pasta purchases, meaning that as households become wealthier, they tend to buy less pasta and opt for more perishable foods such as fresh meats, fruits, and vegetables. The impact of these trends on the frozen pasta market can be significant. The data suggests that Millennials, being a key consumer group, have a strong preference for pasta and are willing to allocate a significant portion of their food budget to it. This can positively influence the demand for frozen pasta products, as they offer convenience, longer shelf life, and quick meal solutions. Manufacturers and retailers in the frozen pasta market can capitalize on this by providing a diverse range of high-quality frozen pasta options that cater to the preferences and convenience-seeking behaviors of Millennials. Raw material providers like Cargill, DuPont, ADM and more, source and process essential raw materials such as wheat, flour, and various food additives, ensuring that manufacturers have access to the necessary ingredients to meet the demand for frozen pasta products. Whereas technology

that Millennials allocate the largest proportion of their grocery budget to pasta, closely followed by Gen Xers. Millennials allocated 3.7% of their food-at-home expenses to pasta purchases, while Gen Xers allocated 3.5%. Baby Boomers and Traditionalists allocated 2.9% and 2.8%, respectively.

providers like JBT, Linde, Octofrost, Marel and more, offer advanced equipment and innovative solutions for the production, processing, and packaging of frozen pasta. The supply side companies provide state-of-the-art technology solutions, raw material and technology to the overall growth and success of the frozen pasta market. However, in the demand side, the regulatory bodies play a crucial role in ensuring food safety and





quality standards for frozen pasta products, assuring consumers of product safety and compliance and the retailers play a vital role by offering a wide variety of frozen pasta products, providing convenience to consumers, and increasing market accessibility.

RECENT TRENDS ON THE GLOBAL MARKET

The frozen pasta market is witnessing the impact of several significant changes. Here are some recent trends shaping the industry:

- **Expansion of Health-Conscious Options:** The expansion of health-conscious options is a key trend in the frozen pasta market driven by the increasing consumer focus on healthier eating habits. As individuals become more conscious of their dietary needs and preferences, there is a growing demand for frozen pasta products that cater to specific requirements. This includes options such as gluten-free, organic, whole grain, and plant-based alternatives. Gluten-free frozen pasta caters to individuals with gluten sensitivities or those following a gluten-free diet; Organic options appeal to consumers seeking products made with organic ingredients, free from synthetic pesticides and additives; Whole grain frozen pasta provides a higher fiber and nutrient content; Plant-based alternatives

cater to those adopting a vegetarian or vegan lifestyle. By offering these health-conscious options, frozen pasta manufacturers can attract a wider consumer base and meet the evolving needs of health-conscious individuals. For instance, in 2021, Nestlé S.A. (Switzerland) launched Banza chickpea frozen pasta, which is known for its gluten-free and nutrient-rich qualities. The inclusion of Banza chickpea frozen pasta expands the options available to individuals with gluten sensitivities or those who prefer to incorporate more plant-based protein into their diets. The introduction of these innovative frozen meals not only strengthens Nestlé's product portfolio but also positions the company to capture a larger share of the market. By offering a wider range of options that cater to specific dietary needs and preferences, Nestlé attracts a broader customer base and appeals to health-conscious consumers seeking convenient, high-quality frozen pasta meals.

3.7%
of Millennials' food-at-home expenses were allocated to pasta purchases.

- **Focus on Premium and Gourmet Offerings:** The frozen pasta market is experiencing a notable focus on premium and gourmet offerings, reflecting a shift in consumer preferences. Manufacturers are going beyond conventional options by incorporating high-quality ingredients, employing artisanal production methods, and embracing authentic regional recipes. This emphasis on premiumization aims to elevate the overall dining experience and cater to the tastes of discerning consumers. By using superior ingredients and applying traditional techniques, frozen pasta brands strive to deliver restaurant-like quality and authenticity to consumers' homes. This trend aligns with the growing demand for elevated and indulgent food experiences, as consumers seek convenient yet sophisticated meal options. The focus on premium and gourmet offerings allows frozen pasta manufacturers to differentiate themselves in the market and attract consumers seeking a higher level of culinary enjoyment. For instance, General Mills (US) offers frozen pasta brand "Freezer to Plate", which reflects the focus on convenience while still incorporating elements of premium and gourmet offerings in the frozen pasta market. Along with pasta the product offers a choice of high-quality sauce varieties, such as Lemon Garlic Herb, Marsala, Southwestern, and Teriyaki. This product offers a convenient solution for creating a flavorful and restaurant-inspired meal at home. With a wide range of flavors, shapes, and sauce varieties, frozen pasta caters to diverse consumer preferences and dietary needs. As consumers seek convenient yet satisfying meal solutions, frozen pasta market offers convenient, flavorful, and high-quality options. The market's manufacturers are striving to innovate, introduce new flavors, and meet the ever-changing demands of consumers. Overall, frozen pasta has emerged as a versatile and convenient choice, bringing convenience, taste, and variety to the dining table. ■



[frozen dossier food]

Click it or flip it: read, discover and lead!



ON-LINE

version available on
frozenfoodeurope.com

PRINT

hardcopies available complimentary to
Frozen Food Europe magazine

2 times a year STATE OF THE FROZEN FOOD INDUSTRY

is a project which contains reports on the most important frozen food categories, as well as technical equipment innovation related to product manufacturing, published both in print and on-line.



Up until now, multifunctionality in our branch referred mainly to devices which allowed kitchen professionals to use cooking techniques that required different thermal devices. Multifunctionality will be understood more broadly in the future. Some photovoltaic systems for instance open up new possibilities in commercial kitchens.

MULTIFUNCTIONALITY: A NEW DIMENSION?

Multifunctionality: is this topic still relevant for everyday use in professional kitchens? Has not everything been said about this? Aren't the devices so advanced that technological leaps are no longer to be expected? At first sight, one could come to this assessment. But on closer examination, one must differentiate. There is also another point: technologies, which one doesn't at first associate with commercial kitchen devices at all, could play a role for these in the future too. It is possible to make connections between photovoltaic or e-mobility and commercial kitchen equipment even when it still seems somewhat daring today – but more about that later.

HOT-AIR STEAMERS – A SYMBOL FOR MULTIFUNCTIONALITY

The development dynamics of multifunctional devices can be illustrated very well by the example of hot-air steamers. The first production plant from Rational, today's global leader of this

market segment, started its operation in 1973. At that time, the devices had a few thermal functions without the addition of moisture. That changed in the middle of the 90's when the company combined pure heat with moisture in its combi-steamers and gradually refined this technology. Subsequently, more and more cooking techniques, which up until that time were tied to stove units, were transferred to combi-steamers – a development that all the competitors followed. Pressure cookers, which even controlled themselves later (just like combi-steamers), set another milestone. Not only did they cook under pressure, but also combined other cooking programs that were only known from stove units and combi-steamers. Being that the latter previously absorbed cooking technologies from other commercial kitchen devices, now pressure cookers, called Vario Cooking Center, took over some of the cooking functions of combi-steamers. Rational refined both device technologies to the point where cooks with pressure cookers and combi-steamers were able

to run community catering kitchens without a problem.

MULTIFUNCTIONALITY OF OTHER THERMAL DEVICES

One also finds multifunctionality in tilting roasting pans, for instance those from Phoenix. The devices not only roast, but also cook sensitive dairy dishes among other things. Therefore, they take over the functions of traditional mixing kettles, which in turn partly have re-cooling functions so that blast chillers are relieved. Microwave devices can also combine several cooking functions so that one can prepare entirely different dishes in them such as soups, pizzas, cakes, or roasts. In addition, manufacturers like Panasonic combine functions like hot air, grilling or convection and hot air with the microwave functions.

DISHWASHING SYSTEMS CAN DO MORE THEN DISHWASHING

In the case of devices and systems for dishwashing, multifunctionality is



somewhat broader in scope. Due to ecological and economic reasons, manufacturers and users are striving to minimize the energy consumption of their devices and systems. That's why they combine their dishwashing technology, standard or optional, with heat exchangers. Systems equipped this way fulfill two other functions in addition to dishwashing. On the one hand, they extract heat from the wastewater. On the other hand, one can lead the exhausted air, which is generated during the dishwashing process, through a heat exchanger with the help of a fan. At the same time, it warms its cooling water that can then be used for preheating the clear rising water. Heating pumps can be combined with heat exchangers.

ONE CONTAINER - DIFFERENT FUNCTIONS

Multifunctionality is not only an important topic for devices. To cook, store, transport, regenerate, and serve in different containers is out of date for economic and quality reasons. These process steps tie up personal and affect the quality of the food. Rieber has created a system with its QR controlled Thermoplates, in which all process steps of the production cycle are processed in a multifunctional container and their stock can be tracked electronically.

MULTIFUNCTIONALITY: A NEW DIMENSION

The consumption of resources is currently under scrutiny across all European countries. Besides water, this is particularly true for energy, especially when it is derived from fossil fuels. The attack on Ukraine has made citizens and their representatives in several countries aware of the risks of overdependence on one supplier. This also applies to energy sources as well as to raw materials required in production processes. This realization fueled the enforced use of renewable energies, especially those of wind power and solar thermal energy. Some countries such as Portugal are already extremely successful in this respect. Unfortunately, others, also very large countries such as Germany, are currently still lagging far behind, but are at least slowly catching up.

MULTIFUNCTIONAL PHOTOVOLTAIC SYSTEMS

Classical photovoltaic systems produce electricity and provide it directly to the users after production. These can use it, store it for a short time (long-term storage media are currently still very expensive) or feed the amount that they haven't used themselves back into the public grid for a fee. A joint venture of the automaker, the

BMW Group, and the energy provider E.ON SE (SE: the legal form for an incorporated company in the European Union) equips photovoltaic systems across Europe as of the end of this year with an additional function. It enables the use of solar energy in the best possible way. A special load management system is designed to efficiently supply all electricity consumers of a local customer, including, for example, e-cars. This special consumption control is intended to ensure that electricity is only purchased at times when the tariffs are particularly favorable. E-cars, for example, that are used to deliver meals can then be charged during times of low consumption.

A BIDIRECTIONAL CHARGING OPTION

E-cars are not only power consumers but can also be power suppliers. During periods of intense sunlight or strong winds, solar thermal energy or wind turbines provide more energy than can be consumed or, more specifically, buffered in decentralized in-house storage facilities. In these cases, the mobile storage of e-vehicles can be used as a buffer. In the face of scarce production or availability of electricity, they return part of their buffered energy to the in-house system, which then can also be used by kitchen devices or systems. Of course, photovoltaic is not a classic example for multifunctional devices. But it shows how sensible it is to check devices and systems as well as their software to see whether they can take on additional tasks beyond their classic intended purpose. It is not uncommon for this to open interesting opportunities. ■





A HIGHER LEVEL OF INNOVATION

As always, interpack has seen the pinnacle of innovation, as companies brought forward exciting solutions for each and every need. Still, regardless of whether the target was set on increasing the hourly output or using less costly materials, an awareness of the environment seemed to be on everyone's mind. It was somewhat expected, as even the main themes of interpack focused on sustainability, circular economy, and more.

For the frozen food sector, where packaging plays a key role for areas such as safety or shelf life, those interested could find new machinery suitable to virtually any factory. The level of adaptability of these new products is incredible, as any new weigher or sorter can now be implemented on an existing line. So, let's take a look at what interpack 2023 meant.

INTERPACK IN FIGURES

The world's largest and most important packaging trade exhibition

set standards once more from May 4 to 10, united the sector globally, and served as a marketplace and a hub for content. It kept its promises and exceeded the exhibitors' expectations. Interpack 2023 attracted attendees from 155 nations, while 2,807 exhibitors demonstrated the strength and inventiveness of the packaging sector. The various inspirations, concepts, and actual business deals that will be carried out during the ensuing years were plain to see. Two-thirds of the approximately 143,000 visitors to interpack in Düsseldorf were from

outside the country. The top visiting countries were the US, Japan, and several European nations. About 75% of the attendees were middle or top management, according to data offered by Messe Düsseldorf. This interpack undoubtedly turned out to be one of the most significant ones in its history when considering current market changes, the great obstacles but also the much bigger prospects. Changes in consumer patterns, the desire to act sustainably, and the necessity for automation are all examples of transition. Numerous innovations were created because of



interpack's strategic focus on the four Hot Topics of circular economy, resource management, digital technologies, and product safety. This year's trade show more than lived up to its reputation as a major fulcrum in the innovation cycle of the packaging sector and associated process industries. At Interpack, sustainability in all its forms was a major subject. High-end technologies and comprehensive ideas that take



2,807
companies exhibited
at this year's interpack.

every day, with presentations, case studies, and interactive sessions from top-tier industry pioneers and experts. Among the topics addressed were logistics, circular economy, reusable packaging, sustainability, digital technologies, product safety, and e-commerce.

The SAVE FOOD Highlight-Route" with new strategies to combat global food loss and waste, and the advancement of women at "Women in Packaging" are just a few of the events that took place. The approximately 200 women from the international sector who networked and exchanged during interpack were



75%
of interpack's
attendees were middle
or top management.

efficiency and sustainability into account throughout their whole manufacturing chain were displayed by exhibitors. A wide variety of solutions were shown, including a world debut for a variety of packaging products. This part alone featured more than 1,000 exhibitors, setting a record. The main goal of Spotlight talks&trends at interpack 2023 was to examine the important elements, concerns, and trends associated with best practices for processing and packaging and their use as commercial drivers for innovation and expansion. The conference had one main theme



155
nations were present
at interpack 2023.

the source of the unique buzz at this premiere. interpack.components, a concurrent event with 80 exhibitors in a separate hall, was favorably received by attendees, as the upstream sectors that provide hardware and software to process engineering and packaging technology are crucial to the digitalization of industrial processes. ■



Photos: Messe Düsseldorf



HÄAGEN-DAZS INTRODUCES NEW PLANT-BASED FROZEN DESSERT



A line of brand-new frozen treats made with plants has been introduced by Häagen-Dazs. This new oat-based collection, created for flexitarians aiming to increase their plant-based intake, aims to taste better than other frozen sweets made from plants. These products are made in London, Ontario, and are vegan-approved. The Plant-Based Collection features three exciting new flavours: Häagen-Dazs Plant-Based Chocolate Peanut Butter (400 ml tub), Plant-Based Vanilla Raspberry Truffle (400 ml tub), and Plant-Based Caramel Fudge Chip (400 ml tub).

www.haagen-dazs.ca

KERRY INTRODUCES NEW RANGE OF TASTE SOLUTIONS

Kerry, a world leader in taste and nutrition, has launched a next generation Tastesense Advanced range of solutions, aimed at transforming the low and zero-sugar product market with the ability to deliver sweetness and full-bodied mouthfeel, as well as sustainability benefits. Tastesense Advanced is an affordable alternative to sugar and stevia, supporting the development of sweetness closer to sugar and well beyond 3⁰ Brix sucrose sweetness equivalence, with optimized flavor, better mouthfeel and reduced off-notes.

www.kerry.com



BENEO LAUNCHES INGREDIENT FOR SUGAR REDUCTION



BENEO, one of the leading manufacturers of functional ingredients, is expanding its portfolio with the launch of Beneo-scl85, a short-chain fructooligosaccharide (scFOS). The new variant offers customers greater versatility for sugar replacement and enrichment of foods with dietary fibre. Sugar reduction has grown to become an important area of focus for consumers with new figures showing that globally, more than 1 in 2 consumers (57%) state that “low in sugar” claims influence their purchasing decisions. Expanding the range of ingredients with Beneo-scl85 means that manufacturers have more variety and increased potential to offer products with less sugar.

www.beneo.com

EUROPASTRY PRESENTS NEW PASTEL DE NATA OPTIONS

Europastry brand Gamma is introducing Forest Berry Pastel De Nata. This pastry is made with vegetable margarine and no partially hydrogenated fats. A perfect combination of Europastry crispy puff pastry, with velvety cream custard tart infused with fruits of the forest. This has a 69% filling that gives the aroma and flavour of freshly picked fruit. Using the inspiration of fruit, the Pastel de Nata Manzana has 70% filling, with real pieces of Jonagold apples (13%). Puff pastry base laminated with margarine, very light and crispy. Made with free-range eggs.

www.saudadelisboa.com/copia-de-brioche



1

JANUARY/FEBRUARY

Ad closing 03.02
Publishing 14.02

| | |
|---|---|
| Frozen Pasta for Catering and Foodservice | product innovation, manufacturers, suppliers |
| Bakery and Pastry | key market players, producers, suppliers |
| Bio and Organic Products for the Food Industry | trends and innovations |
| Frozen Potato Market | innovative products and European overview |
| Frozen Potato Technology | sorting, peeling, cutting, slicing, dicing |
| Freezing Technology | conveyor belts, freezers and chillers, tunnel & spiral freezing systems |
| Transport & Logistics | developments, distribution, and cold storage |
| Artificial Intelligence | update on applications for automation & robotics |
| Frozen Desserts & Ice Cream Market in Europe | market dynamics, new product development |
| Nutrition & Ingredients | for frozen bakery and potato products |
| Frozen Food in Germany | recent developments, review, estimates |
| Trade fairs: | BIOFACH Nürnberg, GULFOOD Dubai, FOODEX JAPAN, INTERNORGA Hamburg, CFIA Rennes, FOODEXPO Greece, M.A.D.E. Paris, IFE London, CIBUS CONNECTING |

2

MARCH/APRIL

Ad closing 24.03
Publishing 07.04

| | |
|---|--|
| PLMA, TUTTOFOOD & INTERPACK SPECIAL EDITION | |
| Appetizers, Snacks and Pies | high convenience, filo pastry & pies, pizza & ready meals |
| Frozen Vegetables, Fruit, Mushrooms, Green Herbs | trends and market overview |
| Technology Innovation for Frozen Vegetables & Fruit | sorting, peeling, cutting, slicing, dicing |
| Packaging Technology | state-of-the-art equipment and solutions |
| BeNeLux Market Review | major players and new products |
| Cooked & Pre-Cooked IQF products for the Food Industry | rice, pasta, sauces, cereals, noodles, vegetables |
| Technology and Equipment | industrial freezing, freezers, coolers, proofers, ovens |
| Plant-based & Vegetarian Products | meat-free and protein substitutes |
| Digitalization & Networking | smart solutions for the food industry |
| Frozen Fish & Seafood | sustainable practices, market overview, major processors |
| Nutrition & Ingredients | vegetables, fruit and herbs |
| Frozen Food in the UK | market overview |
| Trade fairs: | PLMA Amsterdam, TUTTOFOOD Milano, INTERPACK Düsseldorf, SEAFOOD EXPO GLOBAL Barcelona, FOODEX Birmingham |

3

MAY/JUNE

Ad closing 26.05
Publishing 09.06

| | |
|--|--|
| Frozen Food from Italy | market overview for retail and foodservice |
| Frozen Pasta & Sauces Market | trends, new product development, producers, suppliers |
| Frozen Pizza Market | major producers, suppliers, country breakdown |
| Technology and Innovation for Frozen Pizza | processing machines, toppings, portioning and forming |
| Ingredients for the Food Industry | herbs & mixed herbs, rice, noodles, vegetables, processed meat, and sauces |
| Frozen Finger Food, Fried & Baked Products | trends and successful products |
| Frozen Burgers | new products, producers and suppliers |
| Frozen Snacks and Pastry | innovative products for retail and foodservice |
| Optical Sorting Technology | innovation and latest equipment |
| Deep Freezing Technologies, Proofing, Baking, Cooling | for bakery applications |
| Multifunctional Cooking Devices | one device for different cooking processes |
| Frozen Food in the US | evolution, challenges, opportunities & major players |
| Trade fairs: | SUMMER FANCY FOOD SHOW NY |

4

JULY/AUGUST

Ad closing 28.07
Publishing 11.08

| | |
|--|--|
| ANUGA SPECIAL EDITION 1 | |
| Coated/Breaded/Batter Foods | new products, market evolution |
| Ethnic Foods - Greek, Mexican, Italian, German, French & Asian Food | product trends, producers, markets overview |
| Potato Market Update | frozen fries market overview in retail & foodservice |
| Potato Technology Innovation | new equipment for potato processing |
| Vegetarian and Vegan Food | product trends, innovations |
| Technology for the Frozen Food Industry | maintenance & after sales services |
| Frozen Food in Spain and Portugal | latest market developments |
| Industrial Freezing Systems | latest equipment and technologies |
| Dishwashing Machines for Professional Kitchens | saving resources, networking of devices, hygiene optimization - what next? |
| Nutrition & Ingredients | trends for coated and breaded products |
| Trade fairs: | ANUGA Cologne, PACK EXPO Las Vegas |

5

SEPTEMBER/OCTOBER

Ad closing 15.09
Publishing 29.09

| | |
|--|--|
| ANUGA SPECIAL EDITION 2 | |
| Key Exhibitors Road Map and Event Agenda | |
| ANUGA Trends | special report |
| Bread, Bakery, and Pastry | sweet & salty products |
| Frozen Vegetables, Fruit, Mushrooms, Green Herbs | solutions for retail and foodservice |
| Technology Innovation for Frozen Vegetables and Fruit | sorting, peeling, cutting, slicing, dicing |
| Technology & Logistics | trends and solutions in packaging equipment |
| Blast Chilling and Shock Freezing | versatile applications between shock freezing and pasteurizing |
| Meat and Poultry Products | new technologies for product development |
| Frozen Food in France | key players, product innovation, suppliers |
| Global Retail Market | consumer behavior, new products, processors, suppliers |
| Nutrition & Ingredients | for pre-baked and ready to bake foods |
| Trade fairs: | ANUGA Cologne, IBA München, INTERPOM Kortrijk, PLANT BASED World Europe, PLMA Chicago, GULFOOD MANUFACTURING Dubai |

6

NOVEMBER/DECEMBER

Ad closing 24.11
Publishing 08.12

| | |
|--|--|
| Ready to bake & Pre-Baked Foods | market innovation, producers, new products |
| Convenience Food for Retail & Foodservice | European market evolution, category breakdown |
| Frozen Products for Catering & Foodservice | suppliers, producers, processors |
| Meat and Veggie Burgers | product development & trends |
| Freezing Technology | refrigerating and freezing equipment |
| Quick Service Restaurants & Bar and Snack Channel | leading operators in Europe and market evolution |
| Going Green | substantial contributions of equipment manufacturers |
| Nutrition & Ingredients | ethnic food innovation |
| Frozen Food in Scandinavia | producers, suppliers, consumer trends |
| European Retail Market | suppliers, major retail categories, food trends |
| Trade fairs: | SIRHA Lyon 2024, MARCA Bologna 2024, FRUIT LOGISTICA Berlin 2024, Gulfood Dubai 2024 |

Frozen Food Europe

on social media



Like our page and join our online community:
[www.facebook.com/
FrozenFoodEuropeMagazine](http://www.facebook.com/FrozenFoodEuropeMagazine)



Follow us on Twitter:
@FrozenFoodMag
We will update regularly on our activities,
upcoming features and show attendance.



Join our group on LinkedIn search for:
Frozen Food Europe