### PROCESSING

it. MAGAZINE n° 3-2024

#### **BEVERAGE & PACKAGING**

PROCESS AND PACKAGING

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Performance, Packaged



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A single machine, in seven different diameters, with mobile or fixed labelling stations interchangeable and replaceable in a few steps.

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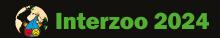
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focusing on
PACKAGING
and on the
FOOD&BEVERAGE
technology



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# >01-43 SPECIAL PACKAGING PROCESS & LOGISTICS

)44-62
AUTOMATION



IMA FOOD, LEADING THE FUTURE OF FOOD PROCESSING AND PACKAGING SOLUTIONS.

PG. 22/24

)63-81

>82-116
PRESERVING INDUSTRY



SITEC, STATE-OF-THE ART TIMERS AND TEMPERATURE CONTROLLERS. **PG. 54/56** 

SONIA V. MAFFIZZONI Editorial Manager

Thinking about packaging and its push towards better sustainability, I am constantly reminded of Lavoisier's postulate. No, don't think about school desks. This law, real and ruthless, is every day before our eyes: "nothing is created, nothing is destroyed, everything is transformed."

It goes without saying, then, how increasingly necessary it is to pay attention to resources, but also to the life cycle they undergo. By 2030, we are asked that the packaging of various sectors - food, pharmaceutical, chemical - be recyclable or reusable.

So, more and more often, surprising solutions are encountered at trade fairs, made possible by new technologies. An example is packaging that uses mycelium technology, where the underground part of the fungus, the mycelium, is combined with hemp waste. In 5 days, the mycelium binds organic matter like glue. The result is a sturdy, 100% natural and glamorous box that completely degrades in 45 days, enriching the soil. A virtuous example of how Lavoisier can guide the search for innovative solutions with high creativity.



SALIMIX CAL: THE DEFINITIVE SOLUTION FOR THE BEST EFFICIENCY AND YIELD OF YOUR CHEESES. **PG. 70-71** 



PND MANGO PEELER: EFFICIENCY, SPEED, VERSATILITY. PG. 86-87









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# TRADITION, INNOVATION AND QUALITY



# The Perfect Triangle of PANIFICIO COLACCHIO

by SONIA V. MAFFIZZONI BENNATI Editorial Manager





In the context of Calabria's exceptional culinary landscape, Panificio Colacchio stands out as a unique reference point, where tradition, innovation, and quality merge in an extraordinary combination.

This company is much more than just a producer of

This company is much more than just a producer of gastronomic delicacies; it's a perfect example of how traditional art can be improved and amplified by modern technology

he Calabrese Tradition:
A Heritage to Preserve
Panificio Colacchio is deeply
rooted in Calabrese tradition, and
this heritage is a treasure that the
company commits to preserve and
enhance.

The artisan techniques, handed down from generation to generation, are the very essence of this company, a continuous homage to the authentic gastronomic culture of this region.







The company embraces modern technology to elevate Calabrese delicacies to new heights of quality and taste.

A striking example of this synergy between old and new is the use of packaging machines from the TECNO PACK group of Schio.

These packaging machines represent a step forward in quality and safety of packaging.

The provision of more than one horizontal packaging machine, including a special H4S machine for creating a bauletto bag with four perimeter welds and a double bottom with folded fins in paper film for Diamond line long pasta with a Shrink Tunnel, is an example of Colacchio's dedication to quality and innovation.

The shrink film packaging machine for trays & Traditional Friselle with horizontal single fold offers significant advantages.

Its cantilevered structure facilitates sanitation and accessibility to main components, ensuring both hygiene and safe maintenance.

#### The Result: Exceptional Quality

The combination of tradition and high-quality technology results in an exceptional outcome for Colacchio

Here, the past is respected and honored, ensuring that the historical roots never fade away.

#### The Innovation that Transforms Taste

But what makes Panificio Colacchio truly special is its ability to combine tradition and innovation harmoniously.



# TRADITIONAL ART

# EXCEPTIONAL QUALITY

products. Each delicacy, carefully packaged, is a celebration of Calabria, where tradition meets culinary perfection.

Quality is the watchword, and every step of the production process is aimed at ensuring that each bite meets the highest expectations of customers. In conclusion, Panificio Colacchio is an example

of how tradition can thrive and grow through innovation and high-quality technology. Here, every product is a testament to the love for Calabria, the passion for culinary perfection, and the dedication to uncompromised quality. Each bite is a journey through the history and future of gastronomy.













#### **AMC TIGER TWIN**



MC Srl has been designing and manufacturing packaging machines and industrial automation systems for the food industry for over 25 years. The company's passion and flexibility have meant that AMC machines and solutions are today among the most appreciated in the world.

The continuous research and technological innovation brought to the sector is demonstrated by the release of seventeen national and international patents.

The "Taylor Made" philosophy that has always distinguished AMC has led to the creation of over 150 different models of packaging machines, each of which can be completely customized according to each specific need.

In particular, the new born in AMC plant, Tiger Twin is a vertical packaging machine made entirely of AISI 316 stainless steel and was created combining great production power and extreme versatility, contained in a small space. This is the first machine in the world that contains two independent machines and therefore the possibility of using two different formats at the same time, of sealing different products (solid, creamy or liquid), al-



lows the change of format from "clip" to "pillow" in a totally automatic way without production stops, thanks to the patented AMC double jaw system, independent with brushless motorization. The machine is also equipped with a self-centering reel system which allows you to save film and time which can be combined with semi-automatic or automatic reel change. It is also equipped with an exclusive AMC patented system for the rapid replacement of the welding jaws to minimize production downtime for or-

dinary and/or extraordinary maintenance. The machine is equipped with an interchangeable clipping unit that allows you to change clip format in a few minutes, from metal clip to adhesive plastic clip or block plastic clip. It can be combined with weighers, with product loaders of all type and with metal detector systems.

For more information, visit:

**www.amcpackaging.com** or write to:

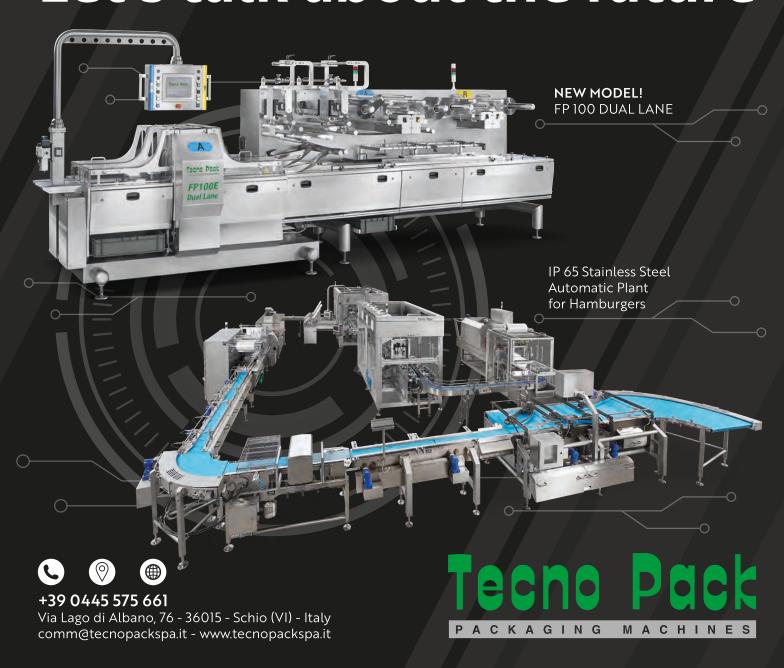
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### Let's talk about the future



# B.M. GROUP SRL: all-around service. CNC machining, pre-treatments, anodizing

.M. Group S.r.l. was founded more than 50 years ago and its Quality Management System is certified to the worldwide standard ISO 9001:2015. We count on two different production hubs – located in Thiene and Zanè – both easily accessible with the highway.

Our Chairman, **Mr. Silvano Busin**, has developed a deep knowledge of both sector through the years and for this reason he in person is managing the technical department. On the other hand, our VP **Ms. Marina Vitacca**, is managing both communication strategies and research departments. Moreover, our team is made up with young and qualified staff aiming at continuous self-improvement, in line with our Management working philosophy.

CNC Machining of big-sized aluminum plates has en-

abled us to establish also abroad in the main European markets and to meet the requirements of a niche sector in which B.M. Group S.r.l. has recognized the potential.

Aside from the CNC Machining we perform pre-treatments as mechanical brushing with different types of finishing or chemical pre-treatments, as well as anodizing.





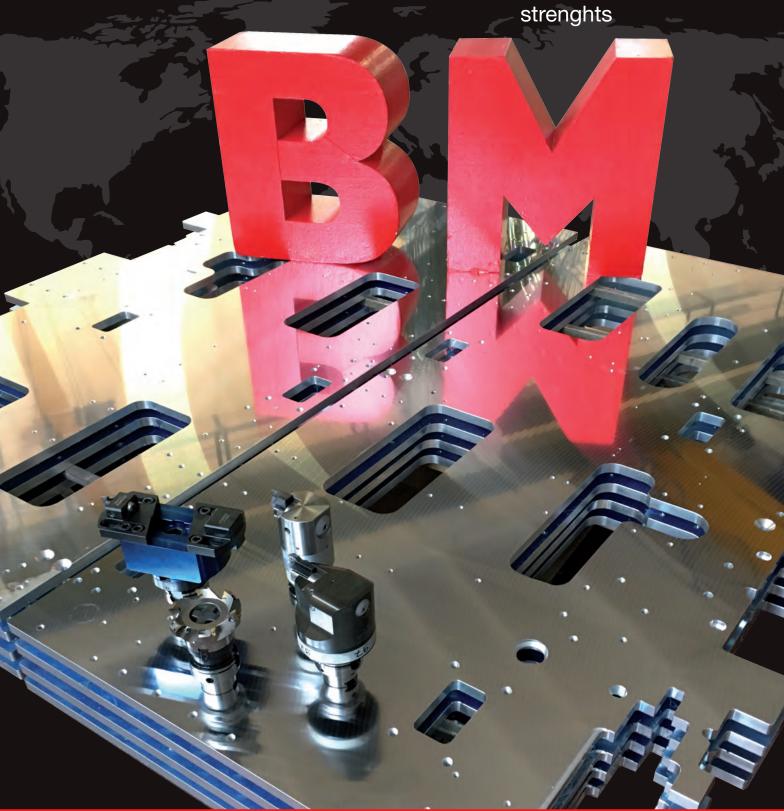


#### **LAVORAZIONI MECCANICHE**

Qualità, velocità e servizio sono i nostri punti di forza

#### **MACHINING**

Quality, speed and service are our strengths





Our strong point is the speed of service, thanks to our warehouse which allows us to stock materials of different alloys (5083, 6082, 7075 etc.) and thicknesses, and also to our machines up to 13 meters long and 2,5 meters wide that enable us to machine multiple plates at the same time.

Upon the customer request we are able to release declaration of compliance with the order, as well as the normative MOCA (food-related norm), measurement reports, anodizing and/or material certificates as regulated by the European standard UNI EN 10204.

We were able to conjugate our know-how with the passion that has always distinguished us. We like thinking that our customers may find a partner able to make a difference.

#### www.bmgroupsrl.com









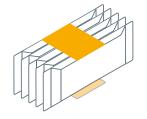


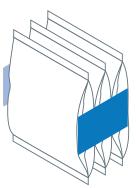
# MULTIPACK LABELLING SOLUTIONS



LABELLING SYSTEMS
FOR A VARIETY OF MULTIPACKS.
MODULAR AND CUSTOMIZABLE
MACHINES MEETING SPECIFIC
PACKAGING REQUIREMENTS









### VIMCO as partner for monoblock solutions

imco is an Italian company specialized in secondary and end-of-line packaging solutions in cardboard. For more than four decades, Vimco has been providing high quality and technologic customized solutions. Vimco's portfolio includes forming and closing machines, cartoning and sleeving machines, and case packers or wrap around solutions.

Vimco has long served the market as a turn-key partner with complete, integrated packaging equipment that includes box forming, product filling, and closing machines.

These lines are equipped with robotic solutions that have been developed and implemented by Vimco's engineering team for years now.

One of the main characteristics of the group is the ability to study customized solutions by following customer requirements as closely as possible.

Space sometimes represents the biggest challenge for positioning machines and lines within a customer's plant.

For this reason, more and more often Vimco develops monobloc solutions, within which all the secondary packaging steps are included.

But that's not all: for a large multinational company, Vimco has also recently developed integrated solutions in which, in addition to traditional secondary packaging, the created packages are placed in American cases ready for palletizing; all in one compact structure.

This shows how closely Vimco works with the customer to study and optimi-



ze packaging solutions that can be implemented in the various food sectors. Vimco's strength lies in being able to

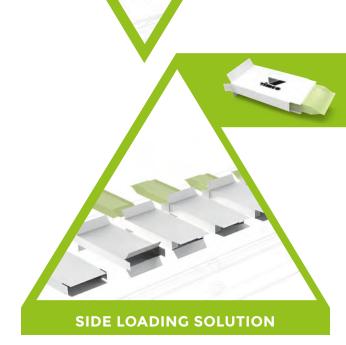
customize its solutions according to the type of product and the needs of the end user. Vimco supports the cu-



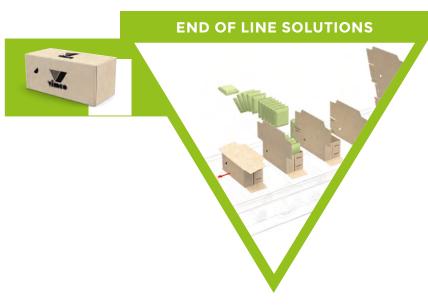


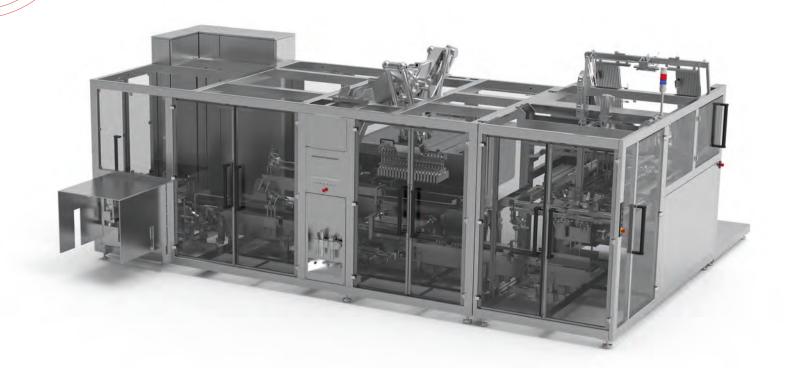


### WE PACK YOUR WISHES!









stomer's project from the beginning to the end, studying it in every detail and guiding the customer through the transition from the "manual" to the automatized process.

The advantages of monoblock lines are certainly compactness and versatility. Versatility is an equally important requirement, as packaging is con-

stantly undergoing changes in market trends and responding more and more to marketing needs.

As always, the challenge is to meet all our customers' needs by providing flexible and user-friendly machines.









### SNACKS OR PUFFED CEREALS? LET'S MAKE THEM ALL.



#### One single machine for different products!

With the new popping machine RP-EVO you can finally make puffed cereals cakes or no-fried snacks with one single machine. Choose the shape and you are done. Are you ready for the change?

New RP-EVO. Join the (r) EVOlution.

#### **LET'S MEET AT**

**7 - 10 May 2024** Barcelona - Spain

#### Hispack 2024

PACKAGING, PROCESS & LOGISTICS

At VITALFOOD SL booth Gran Via, Hall 3, Level 0, Street B, **Stand 133** 

19 - 20 June 2024 Stockholm, Sweden



Stand 446



#### **POPPING MACHINE RP-EVO**

Re Pietro's Innovation for the production of cereal cakes and no-fried snacks

OPPING MACHINE RP-EVO is the press of the latest generation manufactured by Re Pietro Srl to produce both cereal cakes and no-fried snacks, products that following a worldwide trend are having a constantly increase in demand.

With this new press, the highly innovative attitude of Re Pietro Srl is setting new standards in cereal cakes and snacks production, by offering one solution that will revolutionise and simplify the manufacturing of these products. In fact, once the mould has been chosen and installed, the POPPING MACHINE RP-EVO transforms the cereals and/or the micropellets into fragrant cakes or crunchy snacks.

Its efficiency and flexibility allow to have a wider range of products, using one press only.

Nowadays these products not only are appreciated as healthy alternatives to conventional bread, but they are also valued for their versatility by professionals and consumers: they are perfect as carbs supply during meals, as crunchy snacks for a quick bite or as fancy decorations to dishes and desserts.

By using the new POPPING MA-CHINE RP-EVO you can maintain the taste and freshness of the raw material used whether it is rice or legumes, corn or cereal mix or even various types of microspellets, so that you can offer to your customers a tasty and healthy product with a wide choice of flavours and shapes.

You may wonder how many moulds and which shapes can allow you to produce both cakes and snacks with our new press. Round big and small, round with ridges, triangular or



square, hexagonal and rectangular just to name a few. But we can also produce customised moulds based on the customers' requests.

#### POPPING MACHINE RP-EVO FOCUS ON

It has a nickel coated steel structure, certified food contact material, a stainless-steel electric panel with a side rotating and swivelling touch screen control panel, set at eye's level for easier use.

The POPPING MACHINE RP-EVO is equipped with a hydraulic system that produces the high pressure needed for the expansion of the cereals or micropellet turning them into fragrant cakes or crispy snacks.

The volumetric dosing is carried out by a pneumatically operated feeding plate.





The moulds which shape the popped cakes and snacks are made by hardened steel coated with titanium nitride, to guarantee solidity and a long-lasting life, and to prevent the sticking of the products on the moulds.

The moulds, as well as all the parts that get in touch with the products, comply with the MOCA specification for food processing machines as per Reg. No.1935/2004 CE (MOCA compliance). The upper and lower moulds are heated by cartridge heaters sepa-

rately controlled by thermoregulators. Each press has got its own PLC (Siemens S7-1200) and 7" control panel. From the HMI it is possible to set up each production phase, to save the recipes and check any malfunctioning thanks to its efficient diagnostic system.

#### **POPPING MACHINE RP-EVO** is

another milestone in the production of Re Pietro Srl, where the manufacturing of food processing machines and plants has always been approached with an eye to innovation and development, relying on 90 years of solid experience.

In fact, the Company, surrounded by paddy fields in the southern outskirts of Milan, celebrate this year the 90th anniversary of the great intuition of its founder Mr Carlo Re, who saw the potential of rice and its processing. Without forgetting the incredible added value of the Made in Italy quality.



www.repietro.com





# IMA FOOD, leading the future of food processing and packaging solutions

he IMA FOOD – Processing and Packaging Solutions - serves the international Food market with the best platforms and machines now available to satisfy any industry need, consistently providing tailored technologies for the processing and packaging of tea & herbs, coffee, confectionery, stock cubes and savory, dairy, bakery, protein, produce and more, offering fully engineered turn-key solutions delivering highly efficient packaging lines.

We have a clear and consistent vision in the food packaging sector. Leadership is the answer to our constant efforts in anticipating and



driving changes in the behaviour of the industry: while it takes time to achieve leadership, maintaining it is an ongoing endeavour.

We serve the widest range of food industries with the widest range of technologies, but we do it from the dedicated perspective of trying to explore new opportunities and rapidly adjust our know-how to changes.

Innovation and expertise are our key pillars and we develop new packaging solutions on an ongoing basis, responding rapidly to competitive products by introducing cutting-edge technologies with an excellent cost-performance ratio.





We believe in strategic partnerships that allow us to share and combine competences and skills while exploring emerging markets, for example.

Serving the market means offering an all-round service thanks to our world-wide sales and technical assistance network.

We do not want to be just a machine supplier. We can offer our know-how and expertise every step of the way and aim to be the perfect partner to enhance the value of any food industry together with our customers.

If we think of our future, we are aware of the fact that the packaging value chain has an important role to play in finding future-proof solutions to respond to a variety of requirements, starting from sustainability and resource-efficiency challenges for which we are already well prepared.

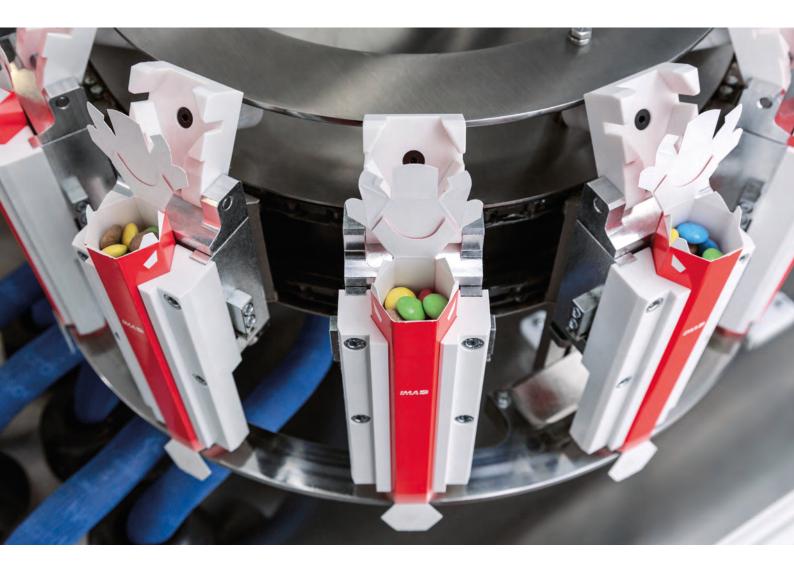
The food industry fragmentation, aimed at serving a vast variety of niche consumer tastes and needs, also tells us that we need to follow and drive trends by counting on our constant efforts in research and development and on our wide range of tailor-made solutions.

Since the 60's IMA is world-wide renowned as a leader in the production of teabag packaging machines, but its expansion in the FOOD sector, by the acquisition of consolidated companies started in 2010 and proceeded along the following

years with the aim to gather the best platforms and technologies available that allow today's IMA FOOD to satisfy any industry need.

Thanks to the acquisition of Petroncini, Spreafico and Tecmar companies, IMA FOOD sector can count today on a dedicated IMA COFFEE HUB ensuring market-leading competences in the supply of solutions for all stages of coffee handling, processing and packaging.

IMA FOOD supports the Confectionery international industry responding to the most diverse processing and packaging requirements with machines and platforms conceived to handle gums, candies, coated sweets and bars, from powder dosing to palletizing.



Thanks to historical brands like Gasti (founded in 1900), Corazza, Benhil, Erca, Hamba, Hassia, Intecma - all part of IMA Group and together with Fillshape, Active and BFB divisions, IMA FOOD serves the international Dairy, Preserves & Condiments, Beverages and Baby Food markets with the best platforms and machines available to satisfy all the industry needs about the processing, filling and packaging of stock cubes, processed cheese, butter & margarine, yoghurt, desserts, dressings and sauces, beverages & baby food, and, in general, liquid to pasty products.

Starting from 2013, with the acquisition of the Ilapak Group's

companies, followed by more recent ones - Eurosicma, Record, Tecmar, Ciemme - IMA moved its first step giving birth to today's FLX HUB: a one stop supplier for flexible packaging solutions.

Launched in 2020, the new IMA FLEXIBLE PACKAGING HUB delivers turn-key horizontal and vertical solutions, from product handling and weighing up to end of line technologies for the bakery, protein, produce and any other food industry.

With the acquisition of the companies Benhil, Erca, Gasti, Hamba, and Hassia (former OYSTAR Group) in 2015 IMA Group

could step deeper into the food

Counting on the corporate organisation focused on new digital, sustainable projects and technological laboratories, IMA FOOD shares its expertise at every step of product processing or packaging to be the perfect partner to enhance the value of the food industry chain.

Visit: ima.it





#### ZER



**NOP (No-Plastic Program)** means we promote eco-friendly plastic substitutes for the packages manufactured on IMA machines. Through the research and testing of alternative processes and materials together with our partners we foster plastic-free and sustainable, compostable, biodegradable or recyclable packaging solutions.



According to these objectives, IMA established **OPENLab**: the Group's network of technological laboratories and testing areas, dedicated to the research on **sustainable materials**, **technologies** and **production optimization processes**.

Discover more about **IMA NOP** on *ima.it/imazero* and **IMA OPENLab** on *ima.it/open-lab* 



# Mono-material labelling technology conquers 'overpacking' challenge in snacks industry

Turnkey packaging lines from Cama Group deliver best-of-both-worlds solutions to address consumer and sustainability demands

onsumer demand and advancing legislation are reshaping the way suppliers serve the market. Not only do the public require more flexibility and more choice, but they want this in more sustainable packaging and nowhere is this truer than in the snacks and baked goods industries.

Supermarket shelves will attest to the food manufacturers' ability to keep pace with these demands; but what this doesn't show is the incredible work going on behind the scenes in relation to the development and constant evolution of packaging machines.

One such company addressing these challenges is Cama Group, a global leader in secondary and tertiary packaging machines and turnkey lines, with a deep pedigree in the bakery industry. "We have to make sure we can give the producers the machines they need," explains Alessandro Rocca, Group Sales Director at Cama Group. "And these machines need to be capable of absorbing future challenges too. Gone are the days of one machine for one job; we must produce machines that can handle multiple flavours and multiple formats, while also having the capability to process more-sustainable materials.

Our customers must reduce packaging and be more sustainable based on the PPWR 2023 Directive, which dictates that everything must be recyclable or reusable. Our challenge, therefore, is to develop solutions that allow them to hit these goals, while also being more agile and capable to absorb market variations, and without compromising sales performance or creating negative consumer experiences. It's a real balancing act, but it's something we have perfected over the past few decades."

A case in point is Cama's labelling technology, which replaces multipack flow wraps with labels that se-







cure individual products in shelf-ready collations.

Typical applications include chocolate bars, individual cake bars, wafers, noodle packs or wet wipes, all of which can be secured together by a common shared label and then 'broken off' individually as required.

"We still need the primary packaging to maintain product integrity, especially with snacks and baked goods," Rocca explains, "but we can deploy secondary stickers or labels that come from the same chemical family, which means they can be recycled in the same process to that used by the primary packaging.

The moment you go to mono materials you've taken the first step to making waste collection and recycling more effective. It's an easy win."

Another advantage of this approach is the flexibility is gives to branding and marketing. Secondary flow wrap materials are almost always created and printed by specialist companies before being, delivered and stored in bulk, with end-users often storing hundreds – even thousands – of kilometres of pre-printed wrap material on two tonne reels.

Stickers on the other hand give these companies the ability to be more agile with their branding and marketing, as they can be printed on demand –



even lineside – and easily tailored to discrete batches.

"Our strength is how we deliver these label-based packaging capabilities," Rocca elaborates. "We are currently developing a highly integrated turn-key packaging line for a large multinational customer that combines the ability to collate and package individual products into shelf-ready cases or as labelled multi packs into shipping cases.

Not only do our solutions handle multiple case styles, but their modular design flexibility means they can more easily adapt to available real-estate.

Changeover is also tool-free and both packaging processes are highly optimized, ensuring that they do not compromise the speed of any upstream processes. "Over wrapping, or as it has now been dubbed, over packing, has less and less appeal for suppliers and consumers alike," Rocca concludes, "so alternative, more-sustainable approaches are growing in popularity."

And with our range of machines, packaging technologies and domain experience we can deliver these alternatives. When the market talks, we listen.

We know what our customers want, and, just as importantly, we know what their customers want.

Thanks to our breadth of capabilities, we are able to translate our machines into solution that address their precise needs."

Visit: www.camagroup.com



# Climate concerns drive a sustainable lifestyle

By Winfried Muehling, Director of Marketing and Communications, PRO CARTON

onsumer preferences for sustainable packaging materials are evident in our latest Pro Carton Consumer Packaging Perceptions Survey 2024. We asked more than 5,000 people across Germany, Italy, Spain, France, and the United Kingdom about their packaging choices.

#### Global concerns

Climate change remained the biggest concern for consumers in Europe, despite high inflation and the war in Ukraine. Pro Carton found that 68% of respondents mentioned climate change, well ahead of inflation (56%) and warfare (56%). Additionally, the survey findings concluded that Europeans believe they have a clear idea on how to improve the negative impact of climate change. When asked about the most suitable actions to tackle the negative impact of climate changes, consumers were clear to mention increase recycling efforts and planting new trees. The link between healthy forests and improved global climate becomes increasingly clear in consumer minds. Similar to concerns about climate change remaining high despite other pressing issues, a significant shift towards sustainable lifestyles is evident across Europe. On average, over 62% of Europeans report that living sustainably has become more important to them and their families in the past two years. This trend is particularly strong in France (63%), with the UK and Germany following closely at 56% and 55% respectively.

Taking action is a key aspect of this growing concern. Across the EU, a majority are actively incorporating



eco-friendly practices into their daily lives. Recycling remains the most popular choice, with 66% reporting increased recycling efforts. Additionally, over half (58%) are consciously reducing water usage, and nearly half (46%) are actively buying fewer products wrapped in plastic packaging materials.

However, despite these positive shifts, a sense of urgency regarding climate change remains. On average, only



26% of Europeans believe enough is being done to combat its harmful effects. This overwhelming sentiment (74%) highlights the need for continued individual and collective efforts to address this critical challenge.

#### **Changing packaging choices**

Consumers across Europe are sending a clear message that carton-board packaging is the preferred packaging materials. The recent study found a staggering 87% of







respondents favour cartonboard over plastic, a 1% increase compared to 2022. This growing preference reflects a strong desire for recyclable, fibre-based materials sourced from renewable resources.

Confidence in recycling is also on the rise. 82% of Europeans now feel confident identifying recyclable packaging, a 5% jump from the 2022 study. Furthermore, a vast majority (88%) of European respondents reported the significant trust they have in the efficient collection and recycling infrastructure of paper and cartonboard packaging. This level of trust sits well ahead of other materials, such as glass, metal, and plastic packaging.

Despite these positive trends, there's room for improvement. Only 16% of Europeans believe retailers and brands are definitively doing enough to offer eco-friendly packaging. This sentiment is echoed by the high number of consumers (42%) who say they've switched brands due to packaging concerns. The top reasons for switching include non-recyclable packaging (50%), excessive or unnecessary packaging (48%), and plastic use (41%).

The research reveals a strong preference in Europe for eco-friendly packaging, translating directly into a willingness to pay more. On average, European consumers are prepared to pay an additional 5.4% for products with environmentally friendly packaging. This willingness varies slightly by country, with Italians leading the pack at 6.3% and France coming in at a lower 4.9%. These findings paint a clear picture of how Europeans prioritise sustainable packaging and are willing to pay a premium for it, urging businesses to adapt and meet this growing demand.

The European cartonboard industry is primed for growth, driven by sustainability and consumer trends as the recent survey shows a major shift towards greener living. Consumer preferences for eco-friendly options fuels industry growth. With a recycling rate of 82% paper and cartonboard packaging is a true recycling champion. It also opens doors to exciting new applications, and our industry's commitment to sustainability positions us as a key player in Europe's circular future. Our industry is ready to substantially contribute to Europe's transition to a circular economy.

Visit: www.procarton.com





Online auction machinery and inventory at former production location Homann Feinkost GmbH on behalf of Progressu GmbH in Dissen aTW (DE)



Online auction machinery for the food industry in Landskrona (SE)



Online auction machinery for the food industry in Ystad (SE)



Online auction machinery for the meat and vegetable industry as well as bakery and catering inventory in Oosterhout (NL)



Online auction meat and vegetable processing machinery in Stowmarket (UK)



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Pay and p

# GPI, the extent of success in the food industry

o manufacture a successful end-of-line plants it is crucial to become customer's algorithm, and to be a proactive listener of his visions, an expert able to provide efficient and personalized answers. It is not by chance then that GPI's motto is "Tailor made innovation with reliability", a catchphrase for innovative, customizable and highly renowned technologies.

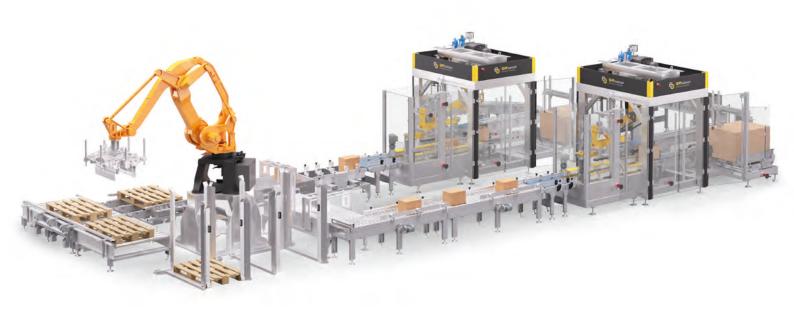
In the forefront of the sector, GPI - Geo Project Industries has created a team of skilled experts in packaging advice and sales engineering able to build tailored solutions upon their partners' production and sales requirements.

GPI offers a comprehensive range of horizontal cartoning machines, forming machines, closing units as well as flexible lines and modular projects whose arrangement and configuration are adjustable.

That's a real revolutionary governance of the production of some of the most popular international brands.









Tailor made plants whose every single phase - from depalletization through primary and secondary packaging and right to palletization - expresses highly specialized knowhow to meet customer's requirements down to the finest details, in any food sector.

A customized and successful answer in various sectors, such as dairy, confectionery, pasta, yoghurt & juice, frozen and dry food, and pet food.

The demand for automation in end-of-line packaging processes is growing, such as pouches,

doypack, flowpack, bags, sachets, alu-trays, and thermoformed trays, in different formats and materials.

It is also worth remembering the most appreciated and unquestionable advantage of the pouches: moderate logistic expenses, easy disposability for end consumers thanks to small volumes, and sustainability deriving from low carbon footprint: energy cost per each package is lower and footprint minimal.

Environmental awareness sharing continuous innovation to be on the frontline of packaging evolution, which needs fast and constant study to safely handle the most diverse types of packaging.

Such teamwork also involves all the company's co-operators in an environment that focuses on innovation, full customization and reliability, values that blend with GPI's passion and well-established experience.

#### Visit: www.gpindustries.eu



#### **SUCCESS STORY**

20 years of Partnership: the relationship between the **Farchioni group** and **P.E. Labellers** is a success story, grown in the name of collaboration and continuous innovation.

uality - Environment - Safety. These are the pillars on which the Farchioni group has been based since 1780. Today the brand is recognised as an undisputed world leader in the production and sale of unfiltered extra virgin olive oil.

A focus on quality and an emphasis on innovation brought Farchioni Olii and P.E. Labellers together, paving the way for a success story that has lasted twenty years.

In twenty years of working together, Farchioni has purchased ten P.E. labelling machines, installed in the Gualdo Cattaneo and Giano facilities in Umbria, consolidating a wellestablished partnership.

The common goal: flexibility and accuracy in labelling each bottle, to optimise the company's production processes and put perfect products on the supermarket shelves.

Modular SL is the labelling solution that Farchioni continues to choose - ideal for its extreme versatility and on-board technological innovation.

Modular SL is an icon of flexibility: a multi-configuration and multi-technology machine, capable of incorporating in-

terchangeable labelling units, with all the application technology on board.

A single machine, in seven different diameters, with mobile or fixed labelling stations, and a production speed of up to 72,000 BpH. Ideal for the Food & Dairy sector, and also very popular in the Beverage, Wine & Spirits, HC & PC, Chemical and Pharma sectors.

One of many special solutions is the **automatic label feeder**, which fully meets all the needs for non-stop production, with no downtime, making the operator's job much easier and increasing the overall efficiency of the line.





#### TOTAL FLEXIBILITY



1. Self-adhesive, hot melt, cold glue, hot melt from reel, shrink technology



2. Front/back applications, collars, I/L/U shape tax seals, wrap-around labels



3. Paper, PVC and OPP labels



4. Cylindrical and shaped containers



5. Customised special and optional solutions

"The relationship between Farchioni and P.E. Labellers developed in parallel - says Ing. Riccardo Cerbini, Facility Director of Farchioni Olii - we grew together in a highly productive way, in an atmosphere of mutual trust. What impressed us from the very beginning about P.E. was the immense passion that everyone poured into what they did: we immediately felt on the same wavelength because we have the same approach to our work. This is how we initiated the relationship between our companies and designed the first P.E. labeller for Farchioni. We ended up not buying six, but ten Modular SL models from then until now."

The next steps: what do you expect from the future and how do you prepare for it?

"Overall, the Food sector is in a tough spot at the moment, especially when it comes to oil", continues Riccardo Cerbini. "Nature basically does as it pleases... in the last two years, yields have been 40% less than average. We can expect a significant increase in costs, which unfortunately will also impact the end consumer. Our task will be to concentrate as far as possible on ensuring a constant, high quality raw material to be put on the market with continuous production.

Farchioni has always stood for one thing: guaranteeing the end consumer a product that is excellent value for money. In order to do this, we have to be highly efficient, and, above all, extremely flexible, including in the investments that need to be made and the ability to manage warehouses and reduce stock. So, what we expect from the food market, at least over the next two years, is a response to the needs of large-scale organised distribution.

Having a line in Farchioni now, that I believe is the fastest ever in the oil sector, effectively reaching 20,000 bottles an hour, serves precisely this purpose and we will move increasingly in this direction, with the aim of promptly supplying the consumer with a product that is always fresh. To achieve these results, we will have to make further investments in technology, but we are ready. And we have the right partners to do this."

www.pelabellers.com









# Syensqo partners with TOMRA to advance the sorting of multilayer PVDC packaging waste

Joint project proves the feasibility of separating multilayer PVDC films from polyolefins in used packaging structures

yensqo and TOMRA, a leading provider of sensor-based sorting technology and solutions for the circular economy, have joined forces to demonstrate the technical and economic feasibility of separating and sorting multi-component plastic structures in which polyvinylidene chloride (PVDC) serves as a barrier layer.

The partners developed a joint set of experiments with multilayer samples of commercial packaging waste consisting of low-density



polyethylene (LDPE) and Syensqo's lxan® PVDC.

The results have proven that multilayer films containing PVDC can be separated from mixed plastic waste using industrial sorting equipment to achieve clean-grade polyolefin and PVDC recycling streams.

"The overall target of this project was to challenge major industry standards which claim that multilayer PVDC films cannot be sorted







#### TEK in PAK s.r.l.

Via Ercolani,9/D - 40026 Imola (BO) Italy Mobil: 346 0470095 - 371 3303132 e-mail: tekinpak13@gmail.com SKYPE: ket1vd9kap www.tekinpak.com

#### TECNOLOGIA - ESPERIENZA AL SERVIZIO DELL'IMBALLAGGIO

### MACCHINE E LINEA PER REALIZZARE I VOSTRI PRODOTTI MACHINES AND LINE TO REALIZE YOUR PRODUCTS



INTERFALDE BORDATE **INTERLAYER WELDED** 



PALLET DA FUSTELLATO PALLET FROM DIE CUT SHEETS



**BOX PALLET** 



MANICA DI CONTENIMENTO CONTAINMENT SLEEVE "TIP"



**SCATOLE AMERICANE** AMERICAN BOXES



MANICA "W **CONTAINMENT SLEEVE EDGE "W"** 



ANGOLARI GROSSI SPESSORI



**PLATEUAX CANNE SALDATE** ANGULAR LARGE THICKNESSES PLATEAUX WELDED FLAUTE

out of multilayer packaging structures," explains Federico Baruffi, Global Marketing Manager, Specialty Polymers, at Syensqo. "Our experiments have demonstrated the contrary and are sending a clear message to the packaging and recycling industry that it can be done, notably with good accuracy and repeatability using existing industrial technology."

The positive results apply to markets that are currently generating multi-layer mixed plastic waste containing PVDC, such as shrink films in consumer and food packaging.

"One of the concerns in the recycling industry was the reliable identification of polymeric waste with PVDC content," adds Marco Gregori, Area Sales Manager Italy at TOMRA Recycling Sorting.

"By combining our advanced optical and near-infrared detection systems, we managed to achieve a selectivity rate of more than 80% when sorting from post-consumer plastic mix and more than 95% when sorting from LDPE monolayer stream. This is

yet another example of what today's technology, in this case our AUTO-SORT<sup>TM</sup>, can already do."

Altogether, these results have extended the scope of mixed plastic waste suitable for recycling to a wide range of multi-layer structures containing PVDC. The joint project between Syensqo and TOMRA is also considered a role model of advancing the circularity of the plastics industry through the dedicated research and development of industry partners who share similar values.



#### **About Syensqo**

Syensqo is a science company developing groundbreaking solutions that enhance the way we live, work, travel and play. Inspired by the scientific councils which Ernest Solvay initiated in 1911, we bring great minds together to push the limits of science and innovation for the benefit of our customers, with a diverse, alobal team of more than 13,000 associates in 30 countries.

Our solutions contribute to safer, cleaner, and more sustainable products found in homes, food and consumer goods, planes, cars, batteries, smart devices and healthcare applications. Our innovation power enables us to deliver on the ambition of a circular economy and explore breakthrough technologies that advance humanity.

www.syensqo.com

Learn more at

#### **About TOMRA Recycling Sorting**

TOMRA Recycling Sorting designs and manufactures sensor-based sorting technologies for the global recycling and waste management industry to transform resource recovery and create value in waste.

The company was the first to develop advanced waste and metals sorting applications use high capacity near infrared (NIR) technology to extract the most value from resources and keep materials in a loop of use and reuse. To date, more than 9,000 systems have been installed in 100 countries worldwide.

TOMRA Recycling is a division of TOMRA Group. TOMRA was founded on an innovation in 1972 that began with the design, manufacturing and sale of reverse vending machines (RVMs) for automated collection of used beverage containers. Today, TOMRA is leading the resource revolution to transform how the planet's resources are obtained, used and reused to enable a world without waste. The company's other business divisions are TOMRA Food and TOMRA Collection.

TOMRA has approximately 105,000 installations in over 100 markets worldwide and had total revenues of about 12 billion NOK in 2022. The Group employs 5,000 globally and is publicly listed on the Oslo Stock Exchange. The company headquarters are in Asker, Norway. For further information about TOMRA, visit **www.tomra.com** and follow TOMRA Recycling Sorting on LinkedIn, X, Facebook and on Instagram.



## FOOD&BEVERAGE PACKAGING: tailor-made solutions for your plant

BBM Service is able to offer 360° support and customized service for your bottling plant



talian excellence. BBM SERVI-CE is an Italian company with a long and renowned experience in the beverage sector and specializes in the turnkey supply of water and beverage bottling plants.

Flexibility, presence, and ability to work on all the machines of the line are just some of the strengths of BBM. For more than 15 years, BBM has been a technical partner of some of the most renowned brands in the sector, such as Nestlè Waters, Coca-Cola HBC, Refresco, Group, Heineken, and many others.

## A single partner, from audit to start-up

BBM Service is a single point of reference for market and budget analysis, study layout, supply and installation of machines, management of safety protocols, and logistics. What are the "turnkey" services of BBM Service?

### EXCELLENCE IN USED BOTTLING MACHINERY

BBM has an impressive selection of 200+ used packaging machines, completely overhauled. BBM offers the best of the second-hand market,

including blow molding machines, filers, labelers, shrinkwrappers, wraparound case packers, tray formers, palletizers, and much more! Customers can view the machines and follow the overhaul and start-up process at the BBM showroom in Lenna (Bergamo, Italy).

#### Available in just 90/120 days

BBM has in stock everything you need for a turnkey supply. After the customization of the machine, our specialized technicians are ready to carry out the transport, assembly, and start-up at the customer's site.



#### Wide selection

BBM has more than 200 used machines in the new showroom of over 10,000 square meters.

#### Quality

All the machines undergo several check-ups. All defective components are replaced with compatible spare parts to achieve maximum performance. For even greater safety, BBM provides a full 6-month warranty on all its overhauled machines.

#### Go green, go second-hand

The growing problem of disposal of industrial material makes it necessary to adopt a new philosophy, where old machinery is not demolished, but withdrawn from suppliers such as BBM. Buying the overhauled used means making a conscious, convenient, and environmentally friendly choice.

### VISIT BBM ONLINE STORE At www.bbmpackaging.com

you can consult the complete cata-

logue of used BBM machines plus accessories. The information sheets are complete with layouts, technical details, and videos of the machines in action

Contact **info@bbmpackaging.com** for a free quote.



#### ON DISPLAY: COMPLETE PET LINE 22,000 BPH

**Flexible, cost-efficient, sustainable, and available NOW.** When it comes to the ideal bottling line, there are 3 qualities that all customers search for: flexibilit, cost-efficiency and sustainability. Guess what? BBM's 22,000-bottle per hour bottling line meets all these requirements! Used and 100% overhauled, the complete PET line packages still and sparkling water, from blowing to palletizing.



#### **THE PROS**

- **1. Available in just 90/120 days:** BBM already has in house the bottling line, which can be customized to your needs and installed in just a few weeks.
- **2. Turn-Key Service:** Layout study, line assembly and start-up, on-site operator **training** and scheduled **maintenance**: BBM takes care of all these steps.
- **3. You don't like one of the machines? No problem:** Choose an alternative from BBM's **catalogue** of more than 200 machines and follow the overhaul process at the BBM workshop in Lenna.
- 4. Second-Hand: a sustainable choice: Buying second-hand means promoting the recovery of existing material, with a view to sustainable growth. Did you know that with certain types of mixed supply (used + new) you can access Industry 4.0 incentives?



5. What about the Old Line?: Will the 22,000 bph PET line replace an existing line?

Through a detailed audit, BBM will assess which components of the 'old' line can be saved and which can be dismantled. They will estimate the value of the used equipment and, if necessary, purchase it, guaranteeing a secure return on investment.

#### THE MACHINE LIST



BLOW-MOLDING MACHINE SIDEL SBO16 S2

overhauled and guaranteed, complete with Siemens PLC and available with brand-new molds.



FILLER
PROCOMAC GRIPSTAR

second-hand fille , to work with Corvaglia neck-finish. Complete with AROL capper.



**LABELLER**KRONES PRONTOMODUL

for the application of OPP or hot-glue precut label. Also available AS IT IS.



SHRINKWRAPPER SMI LSK 602F

overhauled and guaranteed, with nominal capacity 60 ppm. Complete of 6 lanes.



PALLETTIZER ACMI P130 2I

packs up to 45 pph.
Palletts in Epal 800x1200 mm; complete with automatic interleaf applicator.



STRETCHWRAPPER TOSA

Used, overhauled, and guaranteed stretchwrapper. Available also AS IT IS.

BBM is a single partner for the supply and installation of complete bottling and packaging lines; they are above parties in providing technical advice and market research, leaving nothing to chance. Interested in the 22,000 bph PET line?

Watch the video of the line in action





## Showcased: used bbm depalletisers, palletisers and stretchwrappers, to automate bottling plant logistics

BBM has a wide selection of used, overhauled, and guaranteed palletizers, palletizers and stretch wrappers available. The machines can be customized for specific processes, installing change-over kits and customization for the handling and packaging of the required products.



Discover BBM'S end-line solutions and if you do not find the right one for you, fill in the form with your request.





#### **SPARE PARTS**

BBM is an independent alternative for spare parts supplies, having a large stock of mechanical, pneumatic and electronic components **compatible** with the major brands in the industry.

All spare parts are tested by BBM in a certified laboratory; in fact, BBM has



always invested in research and development to provide customers with free pass material of the highest quality, at prices 10-20% lower than the market average. We provide special discounts for our regular customers, and we create stocks of basic spare parts for routine maintenance.

We specialize in the supply of overhaul kits for specific machine groups, so that the customer can save on the purchase of each individual part. BBM also offers to mark spare parts, in order to ensure traceability or facilitate identification

In order to overcome the current problems of component supply, we have developed an up-to-date and proven **minimum stock program**, to ensure the availability of spare parts and thus quick delivery to our customers. We have a warehouse of over 1,800 m², almost 80 m³, with a wide range of parts ready to be shipped.

Our team of experts is always on hand to ensure **short delivery times**. The extensive entourage of foreign agents facilitates commercial and logistical operations in the supply of spare parts in EU and EXTRA-EU territories.

By the end of 2023, we will launch a new e-commerce entirely dedicated to the sale of compatible spare parts. The aim is to make the customer purchasing process faster, leaner, and more automatic. Customers will be able to independently enter their spare parts lists and receive an offer or proceed directly to purchase.

Read the list of machines and brands compatible with BBM spare parts.





#### TECHNICAL ASSISTANCE AND ENGINEERING

With twenty years of experience and a team of over 50 qualified technicians, BBM offers a complete range of services to support the customer: line dismantling and relocation, format changeover, regular maintenance of the plant, and staff training.

BBM also provides remote assistance HOTLINE service, for an even faster response, in order to get the line back in action as quickly as possible.

#### What else?

BBM offers its know-how for highly specialized engineering interventions.

Our portfolio consists of machine upgrades to fully exploit the potential of the machine and achieve energy and cost savings.

In particular, BBM has specialized in upgrades on the blow molding ma-

chines of all main OEMs. Thanks to a few, simple installations, it is possible to save up to 35% in energy consumption.

#### www.bbmpackaging.com





## Cutting-edge SIDEL packaging technology in action at Hispack 2024

On-stand G160, Hall 3, Sidel will be showcasing its latest innovative packaging technologies for the food and beverage industry at Hispack 2024 from 7 to 10 May in Barcelona, Spain.

ispack Barcelona showcases pioneering technologies within the food and beverage packaging ecosystem from across Southern Europe. Sidel will be highlighting a range of cutting-edge solutions on stand to help manufacturers unlock a new level of production performance.

### High performance palletising in action

At the show, Sidel will exhibit its agile packing and palletising equipment for primary packaging including bottles, shaped containers, jars, tins, pots, cans, flexible packaging and cartons as well as secondary packa-

ging like RSC, wrap around, shelf-ready-packaging and film.

Through live demonstrations, visitors to the stand will be able to witness the efficiency of the new agile and compact Sidel palletising unit, RoboAccess\_Pal S, launched on the market last year. Combining the best in robotics and cobotics, this high performing, all-in-one solution delivers improved agility, operability and compactness to the Food, Home, and Personal Care (FHPC) markets.

RoboAccess\_Pal S is the perfect solution to replace manual operations. It delivers faster speeds of up to 12 cycles per minute and enables high case payloads of up to 25kg while ensuring a fast return on investment, typically between one and two years. The machine also achieves a new level of compactness with a footprint of less than 12m² for two stations and an impressive pallet stack height capacity of 1700mm.

Thierry Grassart, Sales Director FHPC Northern & Southern Europe at Sidel, comments: "RoboAccess\_Pal S embeds three new patented features to provide an even higher level of agility, operability, and compactness. A light-weighted carbon fibre and 3D-printed clamping head helps deliver







higher payload capacity and overall machine footprint reduction while handling a wide range of secondary packaging. And this solution is available in just ten weeks."

## Advanced complete packaging line solutions

The packaging sector contributes to 2.65 percent of Spain's gross domestic product and, Sidel will be demonstrating on-stand how its turnkey packaging line solutions can boost industry profitability as well as sustainability for all types of beverage and container (can, glass and PET) manufacturers, including one way and returnable bottle packaging.

As a full solutions partner, Sidel helps manufacturers optimise line performance, ensure high product quality and food safety, and enhance production flexibility while future proofing packaging to meet upcoming circula-

rity regulations. Javier Guzman, Sales Account Manager for Southern Europe at Sidel, concludes: "Sidel's decades of expertise and portfolio of services spans line concept, engineering, line control and automation, packaging technologies and equipment. We're excited to meet and work

with new and existing customers at Hispack to design the packaging solutions of tomorrow."

Find out more about Sidel's complete line solutions and how you can access this kind of support for your business on the **www.sidel.com** 





## INNOVATIVE AUTOMATIC DOSING SYSTEM: fast, accurate and eco friendly

Color Service is an Italian excellence and since 1987 has positioned itself as a leading supplier of automatic dosing systems for any kind of powder and liquid product.

ith a start in the textile field and thanks to years of experience and know-how, Color Service introduced its unique technology into many markets segments (rubber, tire, cosmetics, plastics) before orienting his innovation into the food industry, where the dosing of powders and liquids requires considerable precision, speed and traceability.

#### Why dosing is so important in food processing?

Weighing is a key element of the food production process for quality compliance: dosing the proper amount of ingredients is extremely important to fulfill recipe specifications and constant quality requirements.

In most cases, the food industry's

weighing department employs operators who manually dose raw ingredients, resulting in difficult and complicated management in terms of weighing accuracy.

To support this necessity, our technology is designed to solve problems associated with the manual weighing of any kind of powders and liquids applied in the food industry and it is developed with the goal of achieving a safe, fast and precise dosing. The aim is therefore the development of high-efficiency systems that allow to minimize the production costs and boost productivity while also improving final product quality, essential for the competition of all companies.

According to customer's requirements, Color Sevice offers to the market two





solutions of automation: a complete full automatic and a semi automatic weighing system.

#### Full automatic dosing system

With the full automatic dosing system, all processes are automatically monitored and data are recorded in the software integrated with the customer's management system. The activity of the operator is exclusively confined in the loading of products into storage silos of various capacities through high-performance vacu-

um for powders and pump for liquids that guarantee fast loading with low air consumption.

During the dosing, a multi-scale conveyor completely aspirated through a dedicated dust extraction system allows high dosing accuracy of recipes that can be dosed directly into a bucket or in identified bags created in a completely automatic way: this is a fundamental characteristic that allows each individual recipe to be traced. The full automatic system, guarantees High Dosing Accuracy,

Batch Traceability and Modularity of storage stations and according to product consumption and production requirements, the system offers several storage modules of different capacities that could be interchangeable or expanded in the future.

### Semi-automatic dosing system

On the other hand, the semi-automatic weighing system can offer a good compromise: the robotic storage of powder products with the manual







weighing assisted by a PC. In this way, according to the recipe, the system drops the right box and transfer it to the weighing position, where the operator, guided by the PC can dose the product.

### Key benefits of our automatic dispensing system

By investing in an automatic dosing system, the customer will be able to benefit from a repeatable production process that runs 24 hours a day, is reliable and fast, in which human error is definitively eliminated and which allows leading to high-quality

end products with uniformity features throughout time.

Systems are user-friendly and software is intuitive and easy to use, allowing a quick and easy understanding.

"Dosing right the first time" as a consequence of accurate and exact dosing of powders and liquids, results in a reduction of product waste, energy/water consumption, processing times and, as a consequence, cost. From the ecological point of view, our technology reduces to zero the exposure for operators to dangerous substances or toxic ingredients and provides absolute control of the dust

emitted during the weighing with the use of special suction devices, ensuring total operator safety and environmental protection.

Another significant advantage is the traceability of recipes. Indeed with a manual weighing, in case of non-conformity, it is impossible to identify all the products that are affected by this problem downstream and it is difficult to trace the causes upstream that can be represented for example by an incorrect mixing proportion or from a non-conformity of a specific ingredient. Without expensive labor costs due to manual batch processing and profit loss due to recipe formulation mistakes, companies can begin to boost profits, while offering a superior and uniform product to their customers. 🟛

www.colorservice.eu









Our micro-dosing sytem automatically weighs components in powder or liquid forms ensuring high accuracy, fast dispensing of ingredients and traceability of the recipes.







## **INOX MECCANICA: Innovation** and Tradition Serving the Food Industry

uring the 2024 edition of Anuga FoodTec, the German event dedicated to food industry technologies, we had the opportunity to interview Pietro Donegà, Sales Manager of Inox Meccanica. Since 1983, Inox Meccanica has been designing and manufacturing machinery for automation in the processing and packaging of meats and cured meats, as well as systems for washing and sanitizing equipment and food.

#### Pietro, could you tell us about the solution that Inox Mecca-

#### nica presented at Anuga FoodTec?

Inox Meccanica introduces an evolution of the PIC99B clipping and pressing machine. This machine, proudly launched on the market in 1999, has been developed to meet the growing market demands, which require increasingly longer products, high production performance, and integration into automatic systems for the food industry.

#### A machine in line with Italian tradition and the needs of in-

#### dustry sectors. What products are handled by this line?

The line is specifically designed for whole muscles, following the traditions of the Italian market. It mainly deals with products such as coppa, pancetta, bresaola, and other boneless raw products, which need to be stuffed into casing or casing and netting for hanging during the seasoning phase.

Could you provide some details about the technical characteristics of this line? Espe-











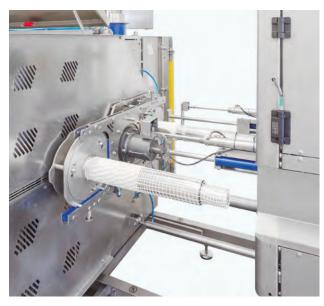












#### cially from the perspective of technological innovation and sustainability.

We are adopting an increasingly electric approach, abandoning the traditional use of pneumatics. This allows us to ensure greater performance and consistency in work, meeting the needs of our customers who are primarily seeking regularity in production processes.

## What materials are used for stuffing?

The materials used for stuffing include synthetic casings and nets, such as plastic casings, culici, collagen casings, and calibrated elastic nets.

Furthermore, with the ability to produce 90% of the machine internally, we can adapt our production to the specific requests of customers.

### How much does export impact Inox Meccanica's activities?

Currently, exports represent approximately 30-40% of our activities, but we aim to reverse this proportion in the short term. We want to take our products and our Italian identity beyond national borders, adapting to the needs of foreign markets.

### An especially interesting Anuga FoodTec for Inox Meccanica.

Yes, at Anuga FoodTec, enthusiasm

and interest in the solutions we offer to the industries continued to grow. With a wide and diversified range of products, we are ready to meet the needs of an increasingly demanding and global clientele.

Inox Meccanica's presence at Anuga FoodTec exemplifies the company's commitment to integrating innovation and tradition in serving the food industry. With growing enthusiasm for their solutions, they stand prepared to meet the evolving demands of their global clientele with their diverse range of products.

www.inoxmeccanica.com







www.proxaut.com

www.middprocessing.com



## Introducing CUBE: PROXAUT'S Innovative AGV Revolution

Gabriele Macchi, Operations Director at PROXAUT, tells us how the new automated guided vehicle was born: the CUBE. Thanks to the skills acquired in the field of R&D, Mr. Macchi has become a promoter of technological innovation and supporter of new employment policies.

Listening to the market demands of this last year and after having carried out a dedicated strategic marketing study, together with the Management of PROXAUT, Mr. Macchi and his team of researchers have taken care of developing a new AGV vehicle. "The challenge was to find a SMART solution, designing and building a small and versatile AGV, capable of carrying weights up to 1000 kg (2200 Lbs). PROXAUT vehicles, in fact, are built to work in narrow spaces, such as in warehouses where we have a few centimetres of tolerance for our automatic handling.

We have therefore used years of experience to create a small self-driving shuttle ( $1300 \times 900 \times 300$  mm h) with inertial guidance capable of passing where others do not enter. There are no application and industry limitations for this automated transportation system. Do you have a Euro pallet with



Gabriele Macchi Operations Director at PROXAUT









goods weighing 1000 kg to be transported from point A to point B? Here's the solution: **CUBE** by PROXAUT!

An efficient automated warehouse worker which will work for you 24/7, without going on vacation or getting sick. "I don't deny that a minimum maintenance must be done regularly, but this operation takes only a few hours a year and serves to ensure optimal performance and maintain maximum efficiency levels, also in terms of the durability of lithium batteries" Mr. Macchi tells us. "Moreover, the advantages of these forklifts with and without forks are now known: reduction of personnel and indirect costs in general, reduction of human error thanks to integration with WMS and management software, improvement of traceability and management of warehouse stocks, maximum configurability with company management

systems, increase in production with 24/7 shifts, improvement of safety, optimization of flows and traffic, operation in environmental conditions hostile to man, hygiene and cleanliness".

But we are curious... We want more... What about the price? The Operations Director smiles and replies without hesitation: "I'm a technician, not a salesman. However, I can tell you that we have tried to make a low-cost shuttle. If we don't consider the prototype presented at the fair MEC-SPE (6-8 March 2024 in Bologna) and LogiMAT (19-21 March 2024 in Stuttgart), we have already put a series of vehicles into production.

The trade fairs have given us the desired results, we have already concluded some sales contracts for AGV plants, including of course also several CUBEs that should be operational at the end of summer 2024. We

have already had confirmation from our Production Manager that, compared to the prototype, prices have dropped: the industrialization of this model allows us to enter the market with a very interesting and competitive price!"

The challenge of a market in constant revolution does not scare Proxaut. The trade fairs of recent months and a growing market have given new life to a company that has been on the market for over 30 years. From a small family-run business, it has become part of an international group, the Middleby Corporation, a world leader in the food machinery industry. In 2022, the year Proxaut was acquired, it was named "World's Best Employer" by Forbes magazine.

For more information:

www.proxaut.com www.middleby.com



## SITEC, state-of-the art timers and temperature controllers

Sitec timers and temperature controllers are multifunction, setting to comply with UL certification, they can be also provided with the innovative motor fast gear change function

or more than 25 years, Sitec has been the ideal partner for professional timers and temperature controllers for baking industry.

Handy (thanks to a big and ergonomic dial featuring renewed design), practical and extremely user-friendly, Sitec timers and temperature controllers for ovens and mixers stand out as the perfect solution that meets bakery and confectionery professional requirements, since they can be highly user-friendly and reliable also in particularly difficult environments.

Electronic dial timers for mixers enable fast and clear time setting by means of an ergonomic dial that is extremely handy even though operators wear gloves.











## SITEC timers and temperature controllers: enjoy the simplicity.

Take an extremely **user-friendly**, **intuitive** and **multifunctional** product equipped with a large, **ergonomic dial**. Add some **new features**, such as the UL certification setting and optional fast gear change function owing to the AC motor brake unit. Mix in the **experience** gained by a company that has been producing oven timers and timers for mixers for over 25 years. The result is unique and successful: that is why **Sitec products are used by 2 out of 3 professionals in the baking industry**. Simply irresistible, like all the best things!











Multifunction, setting to comply with UL certification, they can be also provided with the innovative motor fast gear change function. Sitec offers a comprehensive range of dial timers for mixers, timers and temperature controllers for civil and industrial furnaces, as follows:

- Timer 72x72 (3 displays and red led lights for time display)
- **Timer 96x96** (4 displays and red led lights for time display)
- Timer 72x144 (control on both cycle times; led light and double display)

The novelty is the AC motor brake unit, a device designed to meet the safety standards.

Sitec electronic timers for mixers can be supplied with the electronic module AC motor brake unit, which allows controlled engine "deceleration", with power adjustment, and braking time.

Timers and electronic dial temperature controllers for ovens enable controlling cooking and steam time, and temperature in the oven.

- Timer, Series TFO (3 displays and red led lights to display cooking and steam times).
- Temperature controllers, Series TRG (set point through transparent dial) All Sitec timers and tempera-

ture controllers for ovens and mixers feature high protection degree that grants an excellent seal from powders and liquid sprays. "

www.sitecsrl.it/en/timer

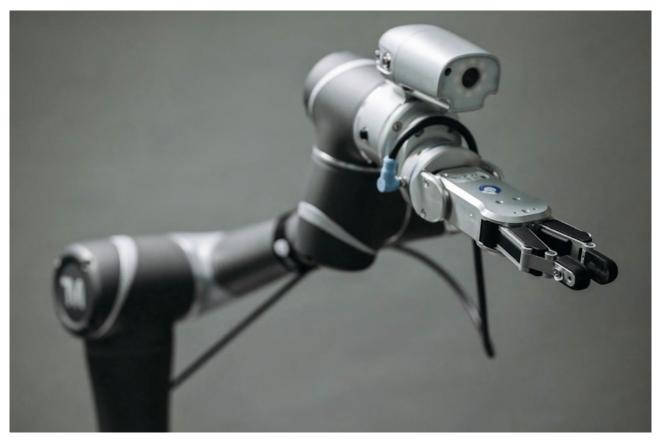






## THE WORLD OF PACKAGING BETWEEN ROBOTICS AND ARTIFICIAL INTELLIGENCE 99

The use of robotics and artificial intelligence in packaging is increasing, providing benefits in efficiency, quality, and sustainability. However, companies must consider costs and invest in training for effective use



nades: unsplash.com

he world of packaging is undergoing a rapid evolution thanks to the introduction of robotics and artificial intelligence. In recent years, advanced technologies have radically changed the way companies produce and package their products, offering advantages in terms of efficiency, precision, and sustainability.

One of the main benefits of using robots in packaging is the increase in speed and efficiency. Robots can work 24/7 without interruptions or slowdowns, improving productivity and reducing delivery times. Additionally, robots can be programmed to work precisely



#### latest news



and repetitively, reducing human errors and improving product quality.

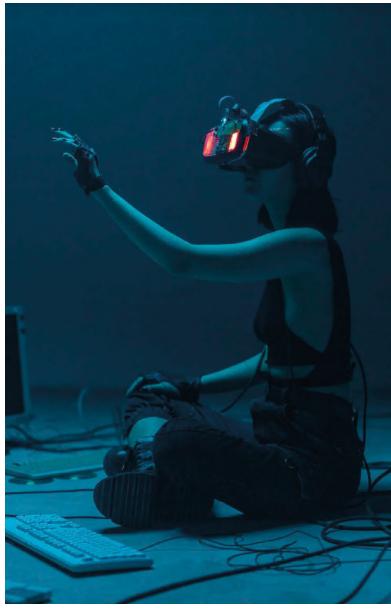
Artificial intelligence is another technology that is revolutionizing the world of packaging. Thanks to Al, machines can continuously learn from their environment, improving their performance and adapting to new situations. For example, machines can use artificial vision algorithms to detect defects or anomalies in products, reducing the risk of errors and improving product quality.

Another advantage of using robotics and artificial intelligence in packaging is the reduction of waste and environmental impact.

Machines can work with greater precision and use only the amount of material necessary to package products, reducing waste and energy consumption. Additionally, machines can be programmed to recycle or reuse packaging materials, reducing environmental impact.

However, the introduction of robotics and artificial intelligence in the world of packaging is not without challenges. For example, companies must invest in expensive technologies and train personnel to use them effectively. Additionally, machines can be subject to malfunctions or breakdowns, causing interruptions in production and additional costs for maintenance.

In conclusion, the world of packaging is becoming increasingly robotic and intelligent, offering numerous advantages for companies that decide to invest in these technologies. However, it is important to carefully evaluate the costs and benefits before making a decision and ensure that personnel are adequately trained to use the machines effectively.



## We turn your vision into reality

iat has been active in various industrial sectors for over 80 years and it is in continuous development with the automation of production processes and an increasingly innovative production technology.

In the fruit and vegetable sector we offer a wide range of standard and customized brushes, made with certified materials for the food industry. For the Siat company food safety is very important.

One of the many goals of the team is the realization of solutions that can guarantee maximum efficiency on the

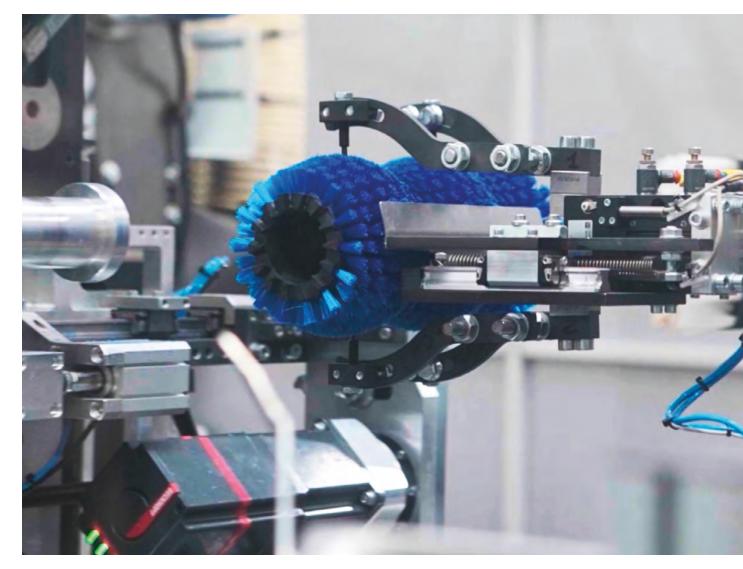


fruit and vegetable processing lines minimizing waste and enhancing every resource, achieving the desired quality that the market requires.

#### **MISSION:**

The Siat team aims to be more and more efficient and to reach out to

countries where it has not yet arrived with increasingly innovative solutions. With a complete customisation service and a very fast maintenance service, the company guarantees maximum efficiency for its customers and fruit and vegetable processing plant owners.



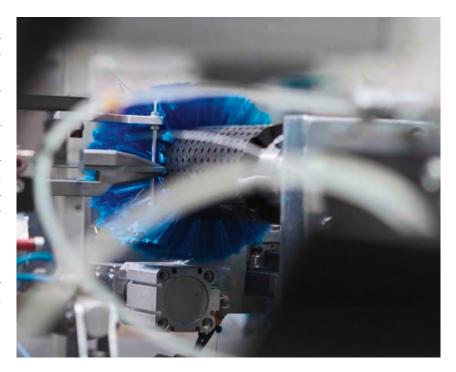




#### **INNOVATIVE SOLUTIONS:**

Siat's proffessional team provides customised solutions for all stages of fruit processing, from harvesting machines, bins unloading systems, brushing machines, polishing machines, grading machines, to packaging and bins filling. Siat's competitiveness is high, all production processes take place inhouse and the search for new materials for the production of state-of-the-art industrial brushes is continuous. The Siat team listens to customers' needs and, after an in-depth technical analysis, begins prototyping solutions designed in relation to the mechanical characteristics of the customer's processing lines and individual machines.

For more information: www.siat.it







## **ANGELUS: can seaming equipment** manufacturer



n the late 1800's and early 1900's, the invention of the double seam – a means of folding 5 layers of material in a way that interlocks a can end with a can body - transformed Food and Beverage packaging by eliminating the need for soldered seams to achieve a hermetic seal. By 1910, Henry L. Guenther had taken this advancement to the next level by designing and patenting the first machinery to create these double seams on cans. With that invention, the Angelus Sanitary Can Machine company was founded, with a vision of creating the finest machines of their kind, anywhere in the world.

Today, more than a century later, and with more than 16,000 seamers sold

in 132 countries across the globe, Henry's vision has been realized, and the Angelus name is still recognized as the standard for excellence in seaming technology and equipment. Joined with Pneumatic Scale Corporation in 2007, the combined company of Pneumatic Scale Angelus is a global leader in the design and manufacture of packaging machinery for liquid and dry filling, capping, can seaming, and labelling applications as well as state-of-the-art container handling solutions. The company is a division of BW Packaging under the Barry-Wehmiller umbrella of compa-

In recent years, the company has introduced the Angelus V-Series line, designed to meet the specific needs of the Food and Beverage markets. The same technology used for high-speed seaming applications has also been scaled for the needs of the craft beverage space. Angelus has manufacturing facilities in Ohio in the United States, as well as its Parma, Italy location.

In nearly all markets Angelus serves, concerns for sustainability and increased, pandemic-driven demand for shelf-stable products created a surge in can demand and a subsequent shortage of them. Though pressures have eased somewhat, with can makers working aggressively to increase production, it will still take time for supply to catch up with demand.

In addition, the lightweighting of cans brings challenges to seaming





equipment, as lighter cans can often lead to an increased risk for can damage during production and even transportation. Seamer suppliers like Angelus are responding with innovations to seamer design and container handling.

For Pneumatic Scale Angelus, consistent communication with can makers helps drive not only future product design, but also current partnerships with customers to analyze production and mitigate potential areas for damage, not only at the seamer, but also upstream and downstream from the seaming process. Angelus currently has patents pending for several new developments in seamer design and container handling that it believes will provide superior solutions for its customers, as well as a competitive advantage for the company.

When asked about the future of sea-

mers for Food and Non-Food cans, Thomas Thiel, Product Line Leader for Can Seaming replied, "Angelus continues serving the Food and Beverage markets with seamers specially designed to address their unique needs. We have a long history of innovation in seaming, and we are excited about our plans to continue that legacy well into the future."

www.psangelus.com







DREAM-LIKE INNOVATION, REAL END-TO-END SOLUTIONS.

#### **CRATE WASHERS HIGHLIGHTS**

- **Washing capacity** up to 10.000 crate/hour.
- Possibility of washing crate of different shapes and types, including: collapsible, rigid and stackable crates and baskets.
- Perfect drying with the compact single or double-rotor spindryers; from 2100 to 4200 units/hour capacity.

Colussi Ermes will propose the best crate washing solutions, automatic and highly versatile, for washing and sanitizing crates and baskets, suitable for all sectors of production, ensuring impeccable results in terms of hygiene. The production range includes cabin or tunnel systems with the possibility of selecting various options: one, two or three tracks, horizontal or vertical.

#### HERE'S OUR RECIPE FOR SUCCESS



MAXIMIZE SANITATION SAFER DESIGN, EASIER CLEANING



INCREASE YIELDS
RAISE PROFITABILITY



ACCELERATE PROCESSING IMPROVE THROUGHPUT



MAINTAIN CONSISTENCY HIGHER QUALITY



REDUCE COSTS
OPERATING AND CAPITAL



PRACTICE SUSTAINABILITY
OPTIMIZE ENERGY
CONSUMPTION



EXPAND CAPACITY

MORE PRODUCTION









## COLUSSI ERMES Advanced Washing Systems

the washing, sanitizing, and drying machines that make the difference in your everyday life



ompact machine design, energy consumption reduction, minimal consumption in water and detergent use, automatic cycles, loading/offloading automation, and parameter monitoring are just a few of Colussi Ermes sustainability benefits.

Global leader in the design and production of advanced washing systems for the food industry, Colussi Ermes has become specialized not only in the bakery, confectionery, fruit & vegetables, meat, dairy, poultry, and fishery sectors but also in more complex fields such as the pharmaceutical, hospital, logistics and automotive sectors. A modern and dynamic brand, showing an exceptional capability of addressing a constantly changing market. Values such as innovation and organization guarantee competitiveness, flexibility, and quality for absolute environmental protection



complying with the most recent rules in terms of hygiene and safety. Analytical and monitoring tools, a highly skilled and trained labor force, innovative engineers and an outstanding service team allow to satisfy all customers' needs. Colussi Ermes is a company that exports all over the world and from July 2022 it has became a division of The Middleby Food Processing, which is providing a portfolio of global brands with complementary, industry-leading technologies for food production so to supply the highest quality full-line solutions to the customers.



#### **Saving resources**

Large and small companies working in the food market and using Colussi Ermes machines have been able to achieve extraordinary advantages such as:

- dramatic energy and chemical savings
- environmentally friendly wash opera-
- reduced wash time vs. very high hygienic and sanitary standards
- increased production capacities and safety
- better working performance of their staff



Here following you can find a brief description of some types of plants.

#### **Spin Drying Systems**

High capacities – up to 4200 crates/ hour with the double-rotor spin-dryer and up to 2100 crates/hour with the single-rotor spin-dryer - speed and perfect drying result are the key features that set apart this new generation of Colussi Ermes spin-dryers along with the possibility to dry different type of crates, foldable or rigid. this machine can dry a high number of crates with a minimum footprint. In just a few seconds the Colussi Ermes spin-dryer can achieve excellent drying with low electrical energy consumption, making this both an efficient and cost-effective solution.

## Automatic centrifugal machine to wash trays and equipment placed on racks

The rack washing systems have been carefully engineered to wash racks carrying different kinds of equipment. By means of specific frames or special trolleys, it is possible to wash pans, crates, pallets, bins, meat-trucks, containers or isotainers fully respecting the highest washing and sanitizing hygiene standards.

The washing capacity is very flexible: from a minimum of 20 to a maximum of 120 racks/hour.

#### Industrial mixing bowl washers

The industrial mixing bowl washing systems are equipped with fully automated advanced technology and ensure impeccable washing and drying results, for immediate re-use in the production process.

Thanks to special monitoring, connected to HACCP systems (Hazard Analysis and Critical Control Points) they guarantee impeccable results in terms of hygiene. Washing capacity up to 20 industrial mixing bowls/hour.

www.colussiermes.com





## 66 BAKING INNOVATIONS: FROM FLOURS TO 4.0 TECHNOLOGIES 99

Bread, an ancient food as old as humanity itself, continues to be a staple at the table today.

Its enduring success is due to its ability to evolve, adapt to the demands of increasingly knowledgeable and health-conscious consumers, and embrace the future with Industry 4.0 technologies.

espite being an ancient art, baking continues to fully meet the needs and tastes of consumers today, offering ever-new solutions and a propensity for innovation. Evidence of this is the fact that 84.9% of Italians continue to enjoy the ritual of fresh bread and continue to buy it from the 20,000 artisan bakeries in operation, which produce about 1.5 million tons a year (source Aibi). However, Italians are buying less bread than in the past and less frequently, so much so that in 40 years, consumption has decreased by 65%, dropping to 85 grams daily per capita



by Elisa **Croffi** 



images: freepik.com

(source Associazione Panificatori di Confcommercio Milano). On the other hand, sales of industrial bread have exploded, reaching over 216 tons (source NielsenIQ), while many products have continued to grow, like sandwich bread (+8.5% in volume), buns, such as hamburger buns (+8.3%) and white bread (+5%).

These changes in consumption lead to a reflection: bread knows and must adapt to the new, paying maximum attention to quality and innovation, the two dictates of the market

#### **Bread from Origins to Table**

The world of baking is vast and fascinating, with a rich history and an incredible variety of techniques, recipes, and culinary traditions. It seems that the first loaf was born by chance when prehistoric man discovered that crushed cereals mixed with water and heat produced an edible substance. This "primitive bread" was cooked directly on hot stones near the fire.

Then came the Egyptian and Mesopotamian civilizations, with more sophisticated techniques. But it was only with the discovery of yeast, probably through natural fermentation processes, that a breakthrough occurred. The use of yeast allowed for lighter and softer doughs, contributing to creating the bread as we know it and love today.

Many baking methods have ancient roots and are passed down from generation to generation. The use of natural yeast, long fermentation, fermented doughs, and artisan shaping techniques are just a few of the traditional elements still used. Many are the novelties already in place and many more await the sector.

#### **Quality and Innovation of Raw Materials**

Today's consumers like special recipes, with unusual raw materials and flours. Consider multigrain and healthy breads. Regarding health, the demand for gluten-free options (such as rice flour and almond flour) is continuously increasing, and bakeries are trying to develop tasty and high-quality recipes to meet this demand, with more nutritious and healthy proposals that include the use of whole flours, seeds, and alternative cereals like spelt and kamut, and legume flours, among which chickpea flour has won a place in the hearts of many consumers, thanks to its ability to add variety and nutritional value.

And if for those who bring bread to the table, crafts-manship remains an indisputable cornerstone, due to the growing awareness of health and the search for healthier options, with fewer additives and refined ingredients, natural fermentation, as a guarantee of traditionality and quality, is also gaining popularity. Although it requires more time, it allows for production with a better structure and a more complex flavor. Sourdough as a lifestyle choice, therefore, highly appreciated by the most attentive consumers.

On the quality front, there is also another aspect: the shelf-life and preservability of the product, leading to two consequences: a preference for smaller formats, to be consumed without waste, and a new love for the loaf.

The long duration of bread is crucial for purchase, especially in the logic of fighting waste: consider that, according to the Waste Watcher Report, in 2022, each Italian threw away an average of 1 kg of bread. In this regard, it is interesting to mention a recent three-year





research project, conducted by the Universities of Pisa and Florence, to extend the shelf-life of Tuscan bread, intervening on the characteristics of the wheat and using innovative preservation methods that allow it to last up to 40 days.

#### **Technological Innovations**

Although traditional techniques are still much appreciated and respected, the bakery sector boasts a series of interesting technological innovations that allow for accurately controlling the baking process.

Through the use of so-called smart ovens, it is possible to ensure a more precise and uniform baking of the bread. This begins with the management of temperature, which remains constant and is adjustable very accurately, ensuring uniformity. It then continues with the regulation of humidity inside the oven, fundamental for obtaining the desired crust and ensuring uniform heat distribution during baking.

Some smart ovens are equipped with advanced steam injection systems that allow controlling the quantity and distribution of steam inside the oven, preserving the internal softness of the bread. In addition, special sensors and monitoring systems allow automatically adjusting the temperature, humidity, and baking time according to the specific needs of the loaf being processed. Nothing is left to chance, therefore, not even consumption, since

some solutions are designed to maximize energy efficiency, reducing energy consumption during baking. Innovation also concerns the use of robots and automated machines for dough, shaping, and baking bread, and the implementation of systems to control fermentation and leavening, capable of monitoring and regulating temperature and humidity.

Industry 4.0 is at the doorstep in the bakery sector, it's just a matter of letting it in.

While it's true that machines generally used in small-medium enterprises today are not interconnected and do not exchange data, thus lacking the ability to smartly manage operating parameters for process optimization, it's also true that soon, thanks to the spread of the Industry 4.0 model, it will be easier to optimize processes with the use of modern and internet-connected machinery. This, with the advantage of improving the production cycle, standardizing productions, and facilitating the work of operators. The joint use of Artificial Intelligence and the Internet of Things (IoT) will support small and medium-sized bakery industries to improve their organization and competitiveness in the market while fully respecting the environment.

Bread has come a long way, but its journey is just beginning, and those who can seize the opportunities offered by the sector will be able to explore the infinite horizons of this fascinating market.





SCA is an Italian food company based in the Food Valley that puts the customer, his needs, and its production competence in the first place of his business and research. All in the wake of the **Mediterranean food tradition**. SCA constantly produces and researches ingredients and technological adjuvants for the sectors:

(Salimix, Lacfood, Ovilac, Vitalmix, Gelcream)

Intended into the production of cheese, ricotta, mascarpone, yogurt, processed cheeses, and other dairy specialties.

## CONFECTIONER

(Gelfood, Gelcream)

Intended into the production of confectionery, ice cream and bakery products.

## VEGAN

(WixaMix, Gelfood, Cycrom)

Intended for all vegetable - based productions, sustainable, vegans, Kosher and Halal.

Solutions of plant origin to preserve the shelf life of the food products.



SCA srl Via Friuli, 5 29017 Fiorenzuola d'Arda (PC) Ph. 0523 / 981616 Fax 0523 / 981834 Cap. Soc. 50.440,00 i.v. info@sca-srl.com









# SALIMIX CAL: the definitive solution for the best efficiency and yield of your cheeses

fter years of studies, research and development about the colloidal characteristic of the milk and its implications for the coagulation, **SCA** is proud to announce that developed a special and specific product "SALIMIX CAL": a colloidal dispersion of calcium phosphate in water solutions.

SCA has been the sole company, on the world stage, able to create a calcium phosphate in colloidal dispersion, mission considered impossible before, obtaining the unique and most innovative technological adjuvant for the milk coagulation.

The milk mineralization is the main factor of its own coagulation. The proper disposition of ion bridges stabilizes its structure, based on colloidal calcium phosphate.

The casein micelles are permanently in colloidal dispersion in the fresh milk.

Constantly moving, they move in short distance entering in collision one each other against fat cell, changing direction. During the renneting is fundamental that any collision can be potentially 100% positive.

Unfortunately, the thermal treatments (from the cooling, storage and then pasteurization), reduce its mineralization: it's known that any milk when in the vat and ready for the coagulation has already lost an average of 20% of its



CCP and this reduce the positive collisions causing weaker milk clots.

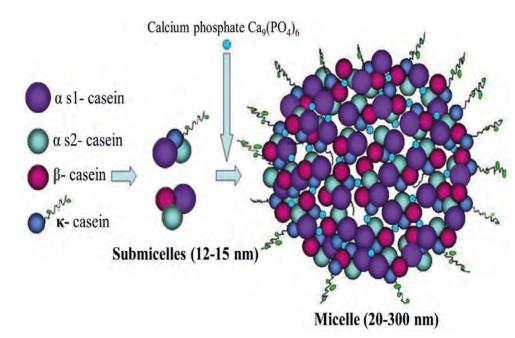
The technological knowledge allows to say that Ca++ is the main important salt ion but not the unique.

In the event of ion losses distributed proportionally within the existing ion (CCP), the actual dairy technology is still based on the Ca++ ion only.

This practice is correct, however the use of only a "strong" ion like Calcium, "force" the protein structure triggering a partial self- replacement towards the remaining ions.

The effect of that is the typical problem connected with the downsizing of the spatial structure for the reduction of the bridges, which ever causes yield losses.

The role covered by **SALIMIX CAL** in this process is to create





the best electrostatic and covalent bonds to facilitate 100% positive collisions with the formations of bridges among and between micelles. Its native structure stabilizes the casein micelles acting as cement of the hundreds submicelles.

Adding SALIMIX CAL, instead of using the sole ion Ca++, the original spatial structure is restored. It doesn't induce the narrowing of the curds, as it could happen with the use of Ca++, but it guarantees the full and perfect elasticity which is the base to eliminate the formation of "fines" and the losses of fat in the whey, ensuring the highest possible yield.

Contact us for more information and to organize tests.

The other SCA products are:

**LACFOOD:** selected dairy ingredients for cheese, ricotta, mascarpone, yogurt and processed cheeses productions;

**VITALMIX:** complete range of cultures and BIOPROTECTIONS

for any cheese, yogurt, kefir and fermented milks;

**SALIMIX:** technological adjuvants 100% based on SCA technology and developed for

- SALIMIX RIC are the key product for the production of the best RICOTTA;
- SALIMIX N to correct the acidity of milk and whey;
- SALIMIX LG to control the osmosis process into the protective liquid of mozzarella or other white cheeses.
- **SALIMIX MAC** for the best structure of mascarpone.

SCA is an Italian food company established in Emilia-Romagna Food Valley for over 35 years. SCA has constantly produced and researched, for the dairy industry, ingredients and natural processing aids related to the Mediterranean food tradition to offer the best to the final customer who is at the top of the mission statement.

**SCA** is certified with FSSC 22.000, ISO 9001 and ISO 22.000, Organic, Halal and Kosher.

It is established both on the national and international markets.

SCA also distributes Domca products dedicated to any shelf-life problem, based on natural ingredients of vegetable origin. Starting from plant matrix, the company has developed the research and extraction of natural molecules with an antibacterial and preservative action

The long study of the Allium ssp. and its compounds has allowed the creation of standardized and natural products for the improvement of shelf-life.

They are also successfully used throughout the supply chain of the agro-food sector, from organic products to finished products such as cheeses, fresh meat and fish products.

### Visit: www.sca-srl.com



# TARNOS vibrating technology for packaging processes

lectromagnetic vibrating machines have emerged as indispensable tools in various applications, from weighing lines to alignment, calibration, and counting processes. Leveraging electromagnetic principles, these machines offer unparalleled accuracy and reliability, revolutionizing how industries approach tasks requiring precise measurements and meticulous control.

One of the primary applications of electromagnetic vibrators is in weighing lines, where precise measurement of materials is essential for quality control and process optimization. *Tarnos Electromagnetic vibrating feeders* are employed to deliver materials uniformly and accurately to weighing scales, ensuring consistent and reliable measurements. The controlled vibration and the instantaneous regulation of the flow, helps prevent material compaction and ensures proper flow, thereby enhancing the accuracy of weight measurements.

Furthermore, electromagnetic vibrators play a crucial role in aligning and calibrating during manufacturing processes with controlled vibrations, minimizing errors and improving accuracy. In industries where batch processing and precise counting are essential, electromagnetic vibrating machines offer an ideal solution. Vibratory counters utilize controlled vibrations to accurately count and dispense individual components or products, ensuring consistency and efficiency in batch production.

The use of electromagnetic vibrating machines offers several advantages in industrial applications:

- Precision: Electromagnetic vibrators provide precise control over vibrations with instantaneous regulation, ensuring accurate measurements and alignments.
- Reliability: These machines are known for their reliability and durability, making them suitable for continuous operation in demanding

industrial environments, reducing downtime and maintenance.

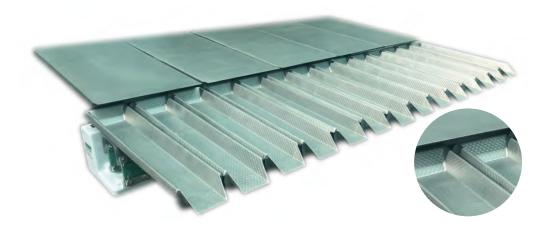
- Versatility: Electromagnetic vibrating machines can be easily integrated into existing production lines and automated systems, enhancing overall efficiency and productivity.
- Consistency: By eliminating manual intervention, these machines ensure consistency in measurements, alignments, and counting processes, minimizing errors and variability.
- **Regulatory compliance:** The specifications and finishes meet high hygiene standards with edgeless designs, dust and water protection IP-66, stainless components, and FDA paint.

Electromagnetic vibrating machines have transformed industrial processes, offering unparalleled precision, reliability, and efficiency in tasks such as weighing, alignment, calibration, and counting. They are optimizing





# Feeders and Sieves for packaging lines Dosing elevators and weighers



- Accurate feeding
- Versatility
- Product care
- Compliance with strict hygiene standards
- Customized designs

- Manual or remote control
- Instant regulation
- Zero maintance
- Water and dust protection IP-66
- Stainless steel components
- FDA painting



















(+34) 91 656 41 12

tarnos@tarnos.com

www.tarnos.com



weighing lines in food processing playing a crucial role in enhancing product quality and process efficiency across diverse industries. As technology continues to advance, the integration of electromagnetic vibrating machines with automation and digitalization trends will further elevate their role in shaping the future of industrial automation and production.

TARNOS has designed and manufactured this kind of Vibrating Material Handling Equipment for more than 60 years with the support and knowhow of a strong pioneer in this field, Syntron.

The participation in many projects and applications through all these years, and even in different industries, provide the company with experience to solve problems in many critical handling processes.

www.tarnos.com







# C&G, PLANTS for the treatment of industrial wastewater

&G Depurazione Industriale Srl is an Italian company which has been designing and manufacturing plants for the treatment of industrial wastewater around the world for over 40 years, with the aim of providing clients with a complete, personalised service which fully respects the environment around us.

The company has a team of engineers and highly specialised personnel that follows each client from the design to the construction and installation of the machine, including assistance and post-sales maintenance.

C&G supplies machinery and support technologies to a wide variety of production sectors with one common objective: to treat and improve the quality of a particular liquid.

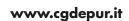
The main sectors where our products are applied include galvanic industries, where it is possible to recover Chrome VI, Nickel, Brass, Copper and precious metals, while treating the wastewater produced by these industries. Other fields of application include graphic arts, mechanical, chemical and petrochemical indus-



tries, pharmaceutical, cosmetic and food industries.

C&G is a pioneer in vacuum evaporation technology, and offers a wide range of evaporator models all of which are characterised by low electrical consumption, the use of elec-

tricity or alternative energy sources, automatic 24 hour functioning, compact, robust design, constancy and quality in the results obtained, and absence of smell or vapours. The principal objectives of C&G are: to reduce the disposal costs and water consumption costs of a company up to 90%, to recycle the water used in an industrial line; to recover precious metals, to eliminate any possible risk of sanctions by environmental control authorities, to modernise production and to improve the image of a company.







# SATINOX. Knowledge, technical expertise and quality: product identity

atinox has been manufacturing perfectly welded stainless steel bowls for more than 30 years.

They are made by hands to fit the machines used to knead and mix dough for the **bakery** and **pastry** sector as well as for the **chemical** and **pharmaceutical** sector.

The company was founded in 1982 and since then it has been a strong believer in the value of manual metalwork fabrication.

All bowls are made by **expert and specialized workers**, able to manufacture **robust**, **versatile** and **long-lasting tailor-made** products.

Satinox can count on a team that works together with **passion** and **professional expertise**, uses **high-quality materials** and is continuously fine-tuning its metal fabrication and welding techniques.



In fact technical expertise and knowledge go hand in hand with the **quality of the materials** and the ability to turn traditional artisan metalwork fabrication into expert joining technique.

From project development to product manufacturing careful examination of any special production needs is definitely essential to find the ideal solution to optimize bowl performance, and consequently machine performance.

Strict compliance with the drawings, the painstaking attention to tolerances along with machining precision guarantee tailor-made products of any shape and size.

www.satinox.com







# AMS Ferrari: technology and passion for more than 90 years



Rinsing/filling/capping triblock mod. Infinity ultraclean for dairy and delicates

or more than 90 years AMS Ferrari's passion has never stopped growing, driven by those unique values typical of the Emilian people, who have successfully exported the best bottling line technology throughout the world. The demanding achievements, experiences lived alongside clients and tough international competition have shaped our character, helping us to develop the characteristics setting us apart today: great production flexibility combined with high innovative capacity, assiduous quality control of the entire production process and applied materials, and above all, a complete focus on customer.



#### **AMS Ferrari for dairy products**

The delicate nature of the product inspired us to develop a filling valve without any gaskets.

The absence of any gaps and the internal end of the valves facilitates decontamination. The machines can be built either traditionally or in the Neck Handling version, depending

on the type of container and target production.

The latest novelty for the milk and delicate liquid filling system is the electronic filling machine, the INFINITY series, specifically formulated for an extremely broad range of sensitive products such as milk, flavoured milk, yoghurt, yoghurt drinks, fruit juices





Hydrogen peroxide injection star - for empty bottles sterilization



Ultraclean filling carrousel with electronic flow meter - contactless filling

and dairy products with fruit pieces. Electronic flow meters control the filling process.

Machine cleanliness is guaranteed by an efficient sterilisation system (CIP / SIP). In terms of precision and reliability, the "Infinity" series is superior to any other filling system.

The technology has been developed to satisfy all specific "shelf life" requirements.

The main feature of this machine is the electronic filling system with flow meters. The quantity of product is measured with high accuracy. The simplicity of construction of the machine ensures accurate washing external and internal.

The large capacity of sanitization and sterilization, make INFINITY the ideal machine for the filling of dairy products in general. The range of INFIN-

ITY models covers from 6 to 40 filling valves. The wide choice of optional constructions, make the machine customizable, tailored to the customer.

#### How is structured mod. Infinity?

A volumetric pump with pushes the product from aseptic tank to the filling carrousel.

With an electronic flow meter, one on each filling valve, the product is filled into the bottle (both of glass & PET with the same machine) contactless, ensuring a perfect cleanness of the filling system.

Bottles are previously cleaned with sterile water or using the peroxide who is dosed in the bottle by a pump with electric control. Then, a subsequent injection of steam activates the peroxide.

Finally, bottles are rinsed with water to remove any residue from the inside. Caps are washed and then sterilized by an UV lamp as the washing water. Many types of closures are available on customer's request.

The machine cleans itself with an external washing circuit without recovery using a sanitizing product.

The upper part is provided with a hood for the aspiration of any residues.

Our machines are also provided with tempered glass safety protection doors resistant to acid washes and scratches and is perfectly washable. This protection system adds value to the customer's investment.

Electronic, mechanic, materials and production cycle, ability to listen to and responsiveness. Everything contributes to realize a high-quality standard that meets customers' needs and satisfies all the employees of the company.

www.amsferrari.it



# PLP SYSTEMS, offers complete and customized solutions for dosing, coating and weighing of powders and liquids

ur teamwork, the technical competence and flexibility of our engineers are the key to our success. We attach great importance to being open to new ideas and unique solutions, this being an integral part of our PLP culture, but also innovation, precision and reliability.

PLP SYSTEMS continues to establish itself as one of the world leaders in the dosing of liquid components and in the micro dosing of ingredients in powder or granules, presenting to the market the most advanced technological solutions in the sector.

Both liquids and powders play a fundamental role in the creation of the final product and that is why the production processes of dosing, mixing and coating must be managed in an accurate and precise manner.

### These are some of our solutions:

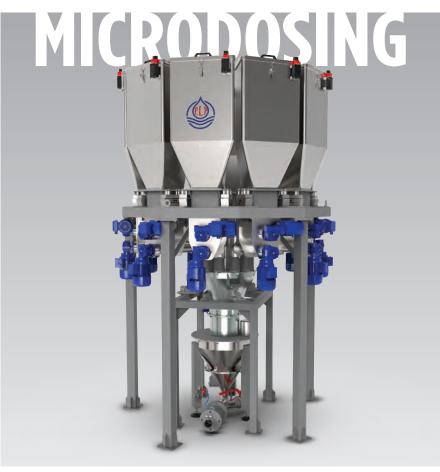
MDP, Micro Dosing for Powders (powder micro dosing) is a system used for the micro dosing of different types of powder ingredients.

Size, capacity and logical function can be designed and adapted to meet customer needs.

The system is normally used as a batch dosing scale, dosing each powder individually into the weighing hopper. Other types of configurations are possible such as loss-in-weight dosing, continuous dosing and volumetric dosing.

The MDP has been designed with the aim of achieving a smooth manufacturing process and a simple maintenance system. A various range of products





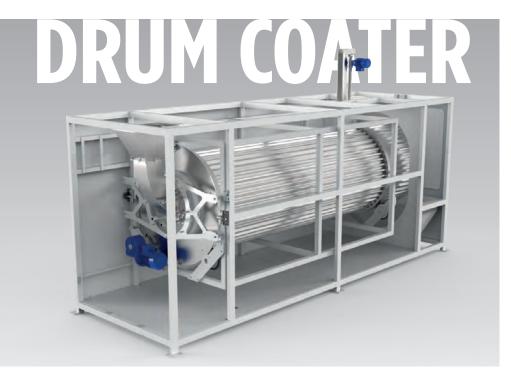
such as size, grain size and physical / chemical characteristics can be processed. It has a wide dosage range, from a few grams to several kilograms and the hoopers dose up to 500 kg in just 3 minutes and the system is also able to handle special products thanks to the specific design of the individual hoppers. The system is very compact, in fact a carousal of 12 dispensers can be housed in just 4 square meters.

The manufacturing process is very simple, as the system can be supplied with the automation program complete with safety switches, barcode readers, alarms, reports and traceability database of the production process.

#### **Proboera Description:**

The proportional doser "ProBoera 1A" was introduced on the market to satisfy the expectations and needs of the





tives such as oil, dyes, chocolate, caramel, etc., and the addition of powder additives such as flavorings, spices, salt, dyes.

The drum has a valve system located on the discharge, which allows small batch mixes of the product with longer retention times.

This guarantees excellent coverage over the entire surface, even with a high percentage of additives.

The system is designed according to the production capacity by completely dimensioning the drum.

For more information, please visit our website **www.plp-systems.com** 

wine sector. The technology used is the result of PLP's extensive experience in dosing liquids in various sectors.

This machine is designed for use in oenology and in the beverage sector and more specifically for the dosage of gum arabic, sulfur dioxide, enzymes, dyes, acids, flavors or other liquid additives.

The PRO BOERA can be installed just before the bottling line, after microfiltration. It identifies the flow of wine (or other drinks) and automatically adjusts the addition of additives, up to 3 at the same time.

The operator will only have to set the percentage of product to add, after which the machine works in total autonomy.

#### **Drum Description:**

The "DRUM COATER" drum coating system is a complete machine, capable of mixing in line croquettes, potato sticks, diced vegetables, oat flakes, cornflakes, puffed rice, cereals, rice, croutons, almonds, chips, walnuts, etc. This type of system is used for the addition of liquid addi-





### **PELLACINI:** food tech in Food Valley

Skills gained over time for food processing technologies

he Pellacini family began their operations at the end of the 19th century in Parma, in what is today known as the Food Valley. Pellacini Engineering has been a key player in all the growth phases of this sector, focusing its production activities exclusively on the canning industry for over a century.

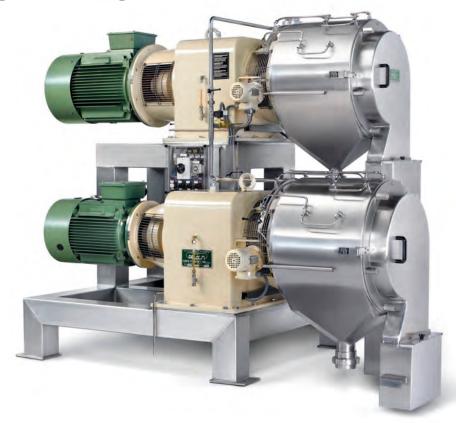
Only authentic, specific, and in-depth know-how enables the offering of effective solutions for productivity, safety, and economic and environmental sustainability.

Pellacini Engineering has always been focused on the canning sector, the client, and the project, thanks to its new exclusive production method: the "Pellacini Tayloring System." This system eliminates costly production constraints and allows for the creation of tailor-made equipment that perfectly suits each customer. Production is entrusted to carefully selected laboratories specializing in individual processes.

If we want fruit to have a long life, we must preserve and respect the earth that produces it.

That's why Pellacini Engineering is now directing its research towards sustainability, as evidenced by its well-established projects for the recovery of production waste and the production of pulpers and refiners with rotating sieves.

With its specific experience, gained over more than a century, Pellacini Engineering effectively responds to the global food processing sec-





tor, which demands technologies attentive to energy and production efficiency, as well as environmental aspects.

The historic Pellacini technology is extremely flexible, reliable, easy to maintain, updated, and present in the major international markets: Europe, South America, North Africa, the Middle East, and the Far East.

Pellacini's production ranges across many fields of the process industry, designing and manufacturing machines and plants for:

- Fruit single-strength purees and pulps, nectars, natural fruit juices, flat drinks, jams, and concentrates made from fruits grown in both temperate and tropical climates;
- Tomato paste, "Passata", pizza sauce, tomato pulp and cubes;
- Other tomato derivatives, such as ketchup, spicy sauce, and various other sauces;
- Vegetable sauces, pepper sauces,







baby food, canned legumes, harissa

- Production lines for both clear and cloudy juices, starting from fresh products or puree.

#### **Aseptic Packaging Machines:**

- Aseptic fillers in various models featuring one or two heads, suitable for liquid, dense, semi-dense products, products containing pieces, and fruit and tomatoes cut up to 25 mm. These are compatible with flexible aseptic bags of 200 kg (Bag-in-drum) or 1000 kg (Bag-in-bin).

#### **Machines and Plants** for Defrosting and Cooking:

- Vacuum cookers for jams with a double bottom and rotating coil;
- Rotating coil defrosters for IQF and products in pieces;
- Blanchers with rotating drums for legumes;
- Cooking groups;
- Continuous multi-effect evaporators for heat-sensitive products, even with high viscosity.

#### **Machines and Plants** for Extraction, Milling, and Pitting, specifically:

- Centrifugal and turbo extractors for fruits, tomatoes, and vegeta-
- Mills and crushers for fruits and vegetables;
- De-pulpers for peach stones, apricots, cherries, plums;
- Roller pitting machines.

#### **Machines and Plants** for Enzymatic Treatments, specifically:

- Specific enzymatic inactivators for fruits and tomatoes;
- Enzyme treatment and dosage groups. 🟛

For more information, visit:

#### www.pellacini.com





# THE WORLD OF FRUIT: MARKET TRENDS AND TECHNOLOGICAL INNOVATIONS 99

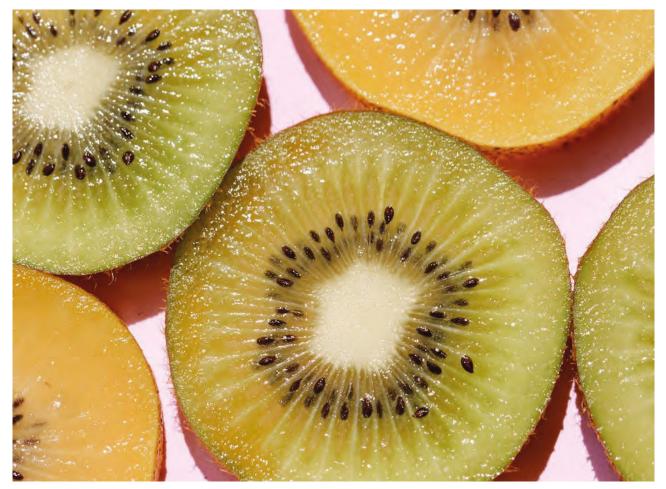
The world of fruit is constantly evolving, with many opportunities and challenges at an industrial level. In this article, we will explore the key market trends and the importance of technology in the fruit processing process.

n recent years, we have witnessed a growing diversification of fruit-based products. In addition to classic fruit juices and smoothies, companies are experimenting with fruit extracts, dried snacks, energy bars, and much more. This trend is driven by the increasing consumer awareness of a healthy lifestyle and a balanced diet.

Health and well-being have become major drivers in the industrial fruit sector. Consumers are looking for



by Walter Konrad



Il images: pexels.com

#### latest news



products that are not only tasty but also healthy. This has led to greater attention to the quality of ingredients, reducing added sugars, and using less invasive preservation techniques.

Fruit processing is a crucial process in the food industry. Here, technology plays a fundamental role. Modern production lines are equipped with advanced machinery that allows for efficient and hygienic cleaning, peeling, and cutting of fruit. These automated systems reduce processing time and minimize waste.

Fruit preservation is a key step in ensuring freshness and shelf life. Refrigeration, freezing, and drying are some of the techniques used. Additionally, vacuum packaging and modified atmosphere technology help extend the life of fruit-based products without the use of artificial preservatives.

Technology plays a crucial role in monitoring and tracking fruit-based products. Sensors and cold chain management systems allow for tracking temperature and transport conditions, ensuring that products maintain their quality throughout the entire distribution chain.

Finally, the fruit industry is facing sustainability-related challenges. Companies are seeking ways to reduce the environmental impact of production and packaging by adopting more eco-friendly practices and using recyclable packaging.

In conclusion, the world of fruit is constantly evolving to meet the needs of modern consumers. Market trends reflect a growing focus on health, quality, and sustainability. Technology plays a crucial role in ensuring efficient processing and high-quality products. With a combination of innovation and environmental awareness, the fruit industry continues to thrive.



### PND Mango Peeler: efficiency, speed, versatility

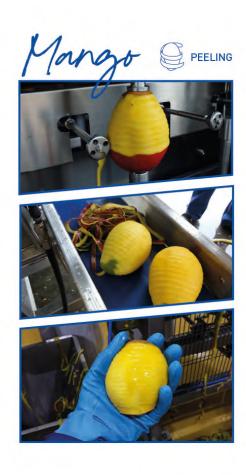
he PND mango peeler positions itself in international markets as a paragon of Italian engineering ingenuity. This machine, the best-selling of its kind, stands out as the ideal solution for the food industry, thanks to its ability to adapt to fresh, frozen, and dehydrated sectors.

#### A range for every need

From the compact PL4M model with 4 heads, capable of processing 700 kg/h, to its larger counterpart with 8 heads nearing 112 fruits per minute, PND has considered everything. Each machine in the line is a powerhouse of strength and precision, designed to optimize produc-











tion processes without compromising the quality of the finished product. These machines are the key to an industry aiming for peak efficiency while maintaining high processing standards.

#### **Efficiency and environmental** respect

The PND mango peeler is distinguished by its ability to handle fruits of any ripeness level, ensuring a near-perfect yield post-peeling. This not only ensures resource optimization but also places the company at the forefront of promoting sustainable practices, minimizing food waste.

The ease of maintenance and cleaning, thanks to the use of stainless steel and intuitive design, translates into reduced machine downtime and greater longevity of the machinery, essential aspects in a modern production context

#### International success

The secret to PND's success lies in the versatility of its peelers, which have conquered markets around the world, from South America, rich in mango plantations, to Europe, where the demand for technologically advanced solutions is constantly rising. This spread testifies to the universality of the solution proposed by PND,





capable of adapting to different contexts and production needs.

#### Beyond the machine: assistance and support

PND does not limit itself to provid-

ing cutting-edge machinery; it also offers top-level post-sale assistance, with remote support to ensure operational continuity and efficiency for its clients. This customer-focused approach confirms the company's philosophy: to innovate not only in products but also in service.

#### The excellence of Italian innovation

The story of the PND mango peeler is a shining example of how the company is capable of creating solutions that significantly improve the modus operandi and efficiency of hundreds of companies in the fruit processing world. With a constant focus on sustainability and efficiency, PND reaffirms itself as a benchmark in the sector.

Visit: pndsrl.it





### TECNOAGRI **MRS Hydraulic Side Tipper**

ecnoagri has been operating in the sector of agricultural and food-mechanization for over 35 years with a turnover of 47% coming from the sale to international customers.

A great innovation for the Ravenna-based company was the launch on the market of a brand new product: the MRS hydraulic side tipper.

The "latest member" of the Tecnoagri family of tippers is designed to manage the overturning of containers, bins and boxes, and it is designed for the agri-food sector, especially agri-food companies, oil mills, wineries and for the canning industry.

Thanks to a specific grips and double locking system, the MRS side tipper prevents the overturned content from coming into contact with the mechanical and hydraulic components of the machine, in accordance with the strictest food safety regulations.

The device for automatic grip height adjustment and gradually dispenser of the product ensures extreme accuracy in overturning, preventing products from getting damaged.

The MRS hydraulic side tipper can be attached to all types of tractor forklifts, forklift trucks packaging lines and operating machines.

The easy locking and unlocking hydraulic system allows the locking and the overturning with just a single lever, optimizing the ma-









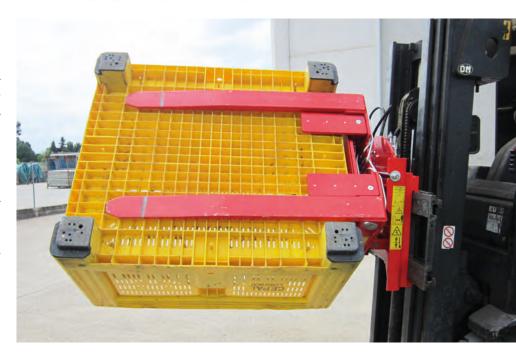


chine control devices and its use in environments with reduced heights.

To complete the range of side tippers, Tecnoagri also offers other effective models, including a mechanical arm side-tipper featuring a third side fork and a hydraulic arm side-tipper.

Among the equipment for the agrifood sector, Tecnoagri produces several lines of hydraulic buckets, designed for handling different products, such as wheat, flour, cereals and others.

#### www.tecnoagri.it







# DARMEC TRANSPORTER, versatility and efficiency in harvesting



# **MARMEC**



he Transporter is an innovative self-propelled agricultural machine designed by Darmec Technologies, an Italian company based in Latina - Lazio (Italy) – to facilitate fruits and vegetables picking up and transporting with plastic or wooden bins.

This machine can be widely used for fruit and vegetable harvesting, it can operate in row, espalier, pergola and open field.

The Transporter guarantees halving harvesting costs and increasing productivity eliminating all the disadvantages related to traditional bin handling methods.

The bins are picked up from the ground through a fork positioned in front of the machine, then raised through hydraulic cylinder up to the





height of loading bed, where can be moved by motorized chains towards the rear part of the machine, to be arranged in order to be finally transported to the collecting point.

To unload the containers, the operator has just to move hydraulically the fork/loading bed and move back with vehicle for few meters.

The real winning card of Darmec's Transporter is that all operations can be made only by one operator: load the bins (even while moving), to carry it to the unloading area, and to deposit it easily and safely.

It is versatile (adapts to the vast majority of fruit and vegetable plants), stable (even when fully loaded or on hilly ground, thanks to the hydrostatic transmission and the horizontal distribution of weight on the loading







bed), agile in its movement (it has 4-wheel steering equipped with radial tires which give it great fluidity).

Darmec Transporter is equipped with reversible driving seat and in addition to the classic loading platform, it can be equipped with quick connections to support other

applications. The handling capacity of that Machine ranges between 500/600 bins a day with the biggest model TRP 650 to 150/200 bins with TRP 325S the smallest one.

Visit: www.darmec.it





## All about food: MAXIMUM EFFICIENCY for all production lines!

ffective planning and controlling of processes are one of the most important things when it comes to fresh food. However, the reality is different: Many producers, importers or packing houses still work with manual entries in confusing Excel tables.

Planning errors are based on this and on insufficient networking of the systems. How can this be avoided?

#### Smart, individual, digital: Food production 4.0. with 30% efficiency increase

Although Industry 4.0 is a hot topic for decision-makers, there are only a few software providers dedicated to Food Production 4.0. An example of this digitalization offensive is the "PECS" tool.

The Production Efficiency Control System covers the complete production control and networks plants and machines - regardless of the maker. Production lines are set up in just a few clicks, personnel planning is carried out in no time, and the performance data of the respective production is made available in a clear manner.

Future orders and activities can be forecast to the minute. An average 30% increase in production efficiency can be expected.

#### Import & maturity planning: Preventing sources of error that often cannot be taken into in the daily business routine

Especially in the case of perishables, it's necessary to know exactly at which time which quantity is available



Effective planning and controlling of processes are one of the most important things when it comes to fresh food.







at which location. This is the only way to minimize over- or underdeliveries and the spoilage of goods. Planning is usually based on Excel lists, which then have to be manually converted into orders in the ERP system. The fact that errors happen here can hardly be avoided. The changeover to a database-based solution opens new potential.

The Fruit Import Planning System "FIPS" generates orders based on a

planning quantity and considers live data such as sales quantities, spoilage, lead times, transport times and ripening cycles.

This guarantees supply chain traceability and detailed planning of ripening chamber utilization. Underdeliveries are immediately apparent and appropriate replacements can be provided at an early stage.

#### ERP: Making yields visible even before the harvest

In many ERP systems, a comprehensive data exchange and thus a continuous, clear planning and control is only possible to a limited extent. The step towards an industry-specific solution such as "traceNET", which can map the processes of food-producing companies, is therefore obvious and necessary. Instead of manual entries, it works with automatisms that make everyday production easier. The complex processes of food producers are mapped and optimised in detail. Crop and harvest reporting, ordering, packaging material planning, batch tracing and certificate management are just some of the comprehensive functions.

Individual software solutions for food producing companies, mobile solutions, realtime overview & business intelligence tools can be found at "activeIT-Software & Consulting GmbH". fine

www.active-it.at





Photos: activeIT, SH Pratt, Depositphotos



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# MAKING A BETTER MACHAEL MACHA





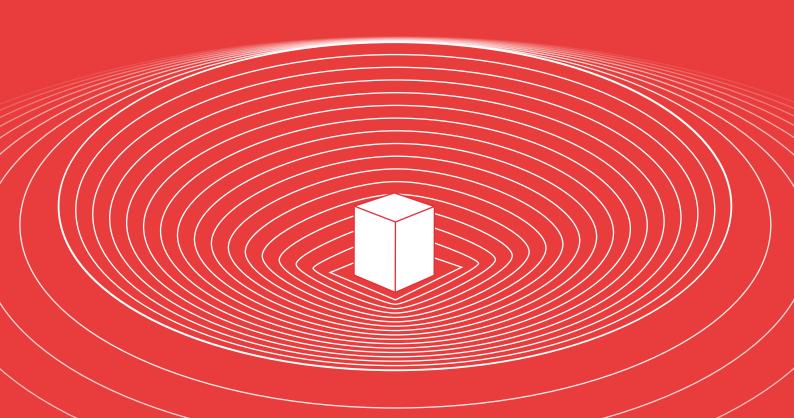


Industrial Packaging



Labelling & Bottling







### LINBO® MANDARIN: setting new standards in quality and sustainability

distribution of the LINBO® branded mandarin has begun and it will be a qualitatively exceptional campaign: the medium-late Linbo® branded mandarin has started the 2024 season and the expectations are the best, as explained by Francesco Paolo Gallo, president of the Consortium who expresses the premium brand. "At a qualitative and quantitative level the prospects are excellent and we will reach the consumer with our 3 lines: conventional, zero residue and organic.

The latter two together are worth 40% but the objective year after year will be to significantly increase the share linked to the zero residue.

To reach the targets we have worked and are working hard in our citrus groves with our technicians".

The consortium, which is based in Massafra (Taranto), was created to create a club that includes Italian producers of premium mandarin varieties, including the Tang Gold variety, with the aim of guaranteeing consumers a premium, sustainable and 100% product Made in Italy.

Linbo® is synonymous with quality and sustainability, it represents a premium product which, on the basis of the rigid production regulations to which all the producers of the consortium adhere, will offer a fresh fruit with a very high shelf-life to our



consumers, in total respect of environment. The entire Linbo® product is totally traceable from the consumption table to the tree, in this way the consumer can be certain of the origin and specific agronomic techniques adopted for the production of the single mandarin he purchases.

The product will be distributed by commercial partners Carpe





Naturam, Giacovelli, Orchidea Frutta and Zuccarella Cooperativa. The numbers are growing: "This year the consortium has expanded - Francesco Gallo points out - with the entry of 11 other companies which bring the total number of associated producers to 36. The club is proceeding quickly: we expect to reach a harvest of over 4,000,000 kg".

In short, creating a system in the citrus sector in Southern Italy is possible: "Linbo is a unique independent aggregation reality in Southern Italy and is ensuring good results also in economic terms. Speaking of prices, we are recording better prices than last year due to the high quality and size of the calibres, which will be decidedly higher, with great product uniformity". A uniformity favored by the climate which, unlike other crops, has not compromised the normal development of the

fruit: "No damage from hail or other weather-related problems", from a phytosanitary point of view the technical coordination has achieved excellent results, he notes Francesco Paolo Gallo again. "All of us members are very happy that our project is becoming an important reality, we are optimistic that we are going in the right direction".

www.linbo.it





### New multi-fruit line from OMIP, Boema and FME

## 'Buy one get multiple solutions free'

re you wondering whether it is possible to core, pit, slice and peel multiple fruits in a single solution? Wonder no more because we have the answer for you," claim the Italian OMIP and Boema and the Polish FME Food Machinery Europe.

The collaboration between the three companies started about five years ago. "We offer a complete end-to-end solution which allows to use state-of-the-art machines dedicated to core, pit and slice several fruits, for instance, stone fruits, and then peel them using high-pressure steam."

"The line is suitable for large producers who diversify their product range throughout the year. So far, it has been adopted in several countries around the world and customers are very satisfied with it: compared to mechanical or chemical peeling, steam peeling

100

guarantees a 20 per cent higher yield," the three companies add. "In addition, this system is costeffective because it provides you with the highest yield possible and the best quality product obtainable, while eliminating the often difficult and expensive problem of water treatment, as this system excludes the use of chemicals such as sodium hydroxide."

"To find out more about this solution and be part of those who choose the best, visit us at this year's edition of the Fruit Logistica exhibition in Berlin."

OMIP, founded in 1971, is targeted to all the fruit processing companies which need to have a more reliable product, built with quality materials and great robustness, where the cost of production, as well as that of the workforce, is minimized. For this reason it is focused in the design and construction of machinery characterized by simplicity of operation, versatility and reduction of costs.



Boema was founded in 1979 and during the years emerged as a leading company in designing and manufacturing machines and plants for the food industry.

It has its headquarters and main production in Italy but has also different commercial branches in Poland, Serbia, Ukraine, Russia, and China.







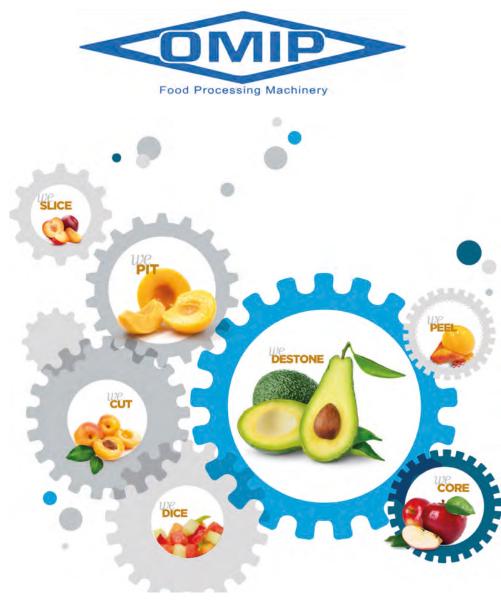
FME Food Machinery Europe began its activity in 1998. At the beginning of 2007, the company was moved to Wyz ne village located in south-eastern Poland, where a new production plant was built.

As of now, the company's leading activity is the production of machinery used in the processing of food, and beverage production.

Besides this, the company also renders installation services of machinery and equipment as well as repair and overhaul services.

For more information:

omip.net/en boema.com/en/ fme-europe.pl/index\_eng.php





### **New Success** for AKOMAG

n recent years there has been a strong growth in the market of gallon water bottles, both in Italy and worldwide

Dispensers showed a positive trend, apart from the temporary setback caused by the Covid-19, mainly involving offices, factories, warehouses and various communities.

The success of gallon bottles, in particular those of reusable PET or PC bottles, obviously involves the need to guarantee the safety of water, and consequently the cleaning of containers and dispensers. Which must be accurately and periodically sanitized. The water used to fill the gallon bottles, which can be natural spring water or water from other sources, must comply with the quality parameters defined in Community legislation on water intended for human consumption.

Used empty gallon bottles, if still intact, can be reused. But before being inserted in a new filling cycle, they must be inspected for integrity, absence of discoloration and possible odours.

After that, they must be washed with water and specific detergents and rinsed thoroughly with special machines. Like those built by Akomag, for example, an Italian company specialized in the design and production of machines and plants for the bottling industry.

Washing, rinsing, filling, capping The Monobloc washer for gallon bottles Sira has been designed by Akomag for washing and sterilizing PET or PC gallon bottles or other bottles of various sizes, to be filled with still water

The washing cycle adapts to the various production needs of the end customer and is very effective. For this machine Akomag has designed and produced a special spraying and brushing device for gallon bottles that ensures total cleanliness.

Through the use of special mobile nozzles furniture (penetrating and rotating), the machine washes the bottle internally at high pressure (5 bar). While the outside is brushed by means of nvlon brushes.

The machine can be quickly adapted to the different bottle formats by sim-





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#### To exhibit

**Eleonora FERRARI** 

eferrari@salonifrancesi.it















SIRA





ply setting the type of container to be handled on the control keyboard.

The stainless steel control board installed next to the monobloc is easily accessible for the operator.

The panel is equipped with a touchscreen for the complete management of all line functions, and the display of operating parameters and alarms

The Monobloc features an automatic de-capper in stainless steel: a pneumatic system grips the bottle neck while ejecting the cap. The system is safe, but it can be equipped with a system for the selection and ejection of gallon bottles that have not been properly de-capped.

The bottles are then filled by means of special inverter-controlled pumps.

A valve designed by Akomag guarantees a laminar flow and no contact between the valve and the bot-

The filling is carried out by means of a special metering device that ensures extreme filling accuracy.

The capper consists of soundproof vibrating hopper, a descent channel, and a tear-off pick-up head.

The closure of the bottle is guaranteed by an inclined pressure belt characterized with adjustable pres-

All adjustments are automatic and managed from the control panel. 🟛

www.akomag.com





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### PROSEAL'S FAST AND FLEXIBLE **SOLUTIONS** prove invaluable for soft fruit growers

roseal's advanced tray sealing machines are helping growers meet ever-increasing demand for soft fruit - which has been particularly strong during the current pandemic - by providing high quality, flexible sealing solutions that also deliver on sustainability.

As soft fruit volumes continue to climb, and with the market for fruit grown in the UK now estimated to be worth over £670 million a year, manufacturers are looking for flexible solutions that can meet the demanding highspeed requirements driven by the seasons. Equally important is the need to

minimise the use of packaging materials without impacting on the effectiveness of the pack, in particular its ability to provide product protection to help reduce food waste.

Proseal offers an extensive range of high-quality manual, semi-automatic and fully automatic tray sealers, designed to be flexible and incorporating a number of unique design features that maximise speeds and efficiencies.

In addition, Proseal machines' twominute rapid-tool-change means endless varieties of tray formats, materials and sizes can be sealed on one

machine, allowing users to quickly switch from one tray type to another.

"Our tray sealing machines offer fruit growers greater flexibility to seal different designs and sizes of trays with efficiency and accuracy," explains Proseal sales director Tony Burgess. "This, combined with our innovative technologies and production lead times, make us a world leader in tray sealing soft fruits.

"ProMotion™ our continuous infeed technology, for example, has the potential to increase the speed of a tray sealer by up to 30%, while creating







calm machine operations which ensure a smoother, more stable journey to the sealing station.

This is particularly beneficial to delicate produce, such as soft fruit."

Proseal also manufactures a diverse and customisable line of intelligent conveyor systems, designed to create ultimate line control and optimisation and therefore perfect for the fast-moving soft fruit industry.

The company has pioneered several important sustainability initiatives throughout its 23 years. Proseal was the driving force behind the replacement of traditional clam-shell punnets with top film sealed varieties, which has now become commonplace in soft fruit markets across Europe and now North America, helping to minimise plastic usage by around 45% in most cases.

More recently, the company has been at the forefront of the introduction of new recyclable and compostable trays and film for fruit that can further reduce plastic usage by as much as 96%.

"Proseal continues to strive to develop the most effective and sustainable sealing solutions for its customers," concludes Tony Burgess.

"We are proud of the many innovations we have developed for the effective and efficient tray sealing of soft fruit. And we will continue to develop the appropriate technologies to help support sustainable solutions that deliver quality."

Proseal is part of the JBT Corporation family, a leading global technology solutions provider to high-value segments of the food processing industry, committed to providing a service that surpasses customer expectations. 🟛

www.proseal.com www.jbtc.com







## **RAYTEC VISION introduces** Opportunity: al-driven optical sorter setting new standards in food sorting

Cutting-edge technology redefines precision and quality assurance

aytec Vision, a leading provider of optical sorting solutions, proudly announces the launch of Opportunity, an innovative optical sorter that harnesses the power of artificial intelligence (AI) to revolutionize food sorting. Designed to meet the highest standards of accuracy and quality, Opportunity is

set to transform the food processing industry.

Opportunity combines advanced imaging technology with state-of-the-art Al algorithms, enabling it to analyze and sort food products with unprecedented precision. Its intelligent system learns and adapts to various sorting

requirements, ensuring consistent and reliable results. With this revolutionary technology, food producers can achieve optimal product quality, reduce waste, and enhance overall operational efficiency.

"At Raytec Vision, we are committed to pushing the boundaries of opti-





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PROCESSING & PACKAGING 18<sup>10</sup>20 NOVEMBER 2024 SHANGHA

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cal sorting technology," said Nicola Avanzini, Head of Sales at Raytec Vision. "Opportunity represents a significant breakthrough, as it leverages Al to deliver unmatched results, setting new standards for the food processing industry."

The Al-driven capabilities of Opportunity enable it to identify and eliminate defects, foreign objects, and contaminants in real-time. By swiftly and accurately removing imperfections, companies can en-hance product quality and safety, thereby protecting their brand reputation and ensuring consumer satisfaction.

In addition to its precision sorting capabilities, Opportunity also offers a user-friendly interface, making easy for operators to monitor and manage the sorting process. Its intuitive controls, coupled with real-time data visualization, allow for efficient decision-making and quick adjustments, resulting in increased productivity.

"With Opportunity, we aim to empower food processors to deliver the highest quality products to their customers," added Nicola. "By leveraging Al and cutting-edge technology, we are re-defining what is possible in food sorting, while simultaneously improving efficiency and reducing costs."

Raytec Vision continues to innovate and develop advanced solutions that address the evolving needs of the food processing industry. With Opportunity, food industries can embrace the future of optical sorting and achieve the utmost precision, quality, and efficiency in their operations.

For more information about Raytec Vision and their Al-driven optical sorter, Opportunity, please visit.

www.raytecvision.com/en/



AN **ATS** COMPANY





## **COCONUT WATER**, it's more than just water.

at ORION ENGI-NEERING develop "tailor-made" solutions to completely transform an extremely widespread fruit with an increasingly growing market trend: the coconut. Today, we are pleased to explore with you the main stages of obtaining one of its derivative products: natural coconut water

Coconut water, also called coconut juice (not to be confused with coconut milk), is a sweet refreshing drink taken directly from the inner part of coconut fruits. It differs from coconut milk, which is the oily white liquid extracted from the grated fresh kernel. The coconut water consumed as a beverage usually comes from immature coconut fruits.

Coconut water has traditionally been consumed as a refreshing beverage in most coconut countries. Growing consumer interest in the product both as refreshing beverage and as a sports drink has considerably broadened its market opportunities.

Coconut water within the nut is sterile. This means that it is free from microorganisms. Whenever exposed to the air, or to the external environment, the product is subject to microbiological contamination and deterioration.

Proper handling and temperature management throughout the postharvest and processing chain are essential to allowing coconut water to retain its inherent qualities prior to processing.

Proper sanitation management throughout the chain is also critical to assuring the quality, safety, and shelflife of the bottled product.





The coconut water is collected through a drilling extraction process with the water immediately entering a filtration system and then quickly transferred to material receiving storage tanks.

Next, the coconut water is pumped from the material storage tanks into cooling system at 40°C and then through an oil separator to extract the highest quality pure coconut-based water product. Once the purification process is complete, the coconut water is then piped to an insulated industrial storage tank.

The coconut water can be enriched with the best fresh fruit extracts to obtain a flavoured drink: for this purpose, the natural water is sent to a blending process just before being piped into insulated industrial storage tanks.

The final stages of coconut water production involve a cooling process at



the temperature of 8°C - 100°C. in preparation for an integrated UHT pasteurization process. The water is then filled into an aseptic tank that supports an aseptic filling process performed under strict aseptic processing requirements.

Once the product has been filled into aseptic containers, there is an automated packaging process that is equipped with preset parameters and standardized, so that it will only operate when all safety conditions are complying.

Another alternative to natural coconut water can be tender coconut water or concentrated water.

The tender coconut water is valued both for the refreshing drink and gelatinous kernel, which is a delicious food. The tender nut water is rich in potassium and minerals. Glucose content is maximum in 29 - 31 weeks months of maturation nuts and hence the best stage for drinking. The dwarf coconut variety, Chowghat Orange Dwarf (COD) is a tender nut variety. The tender coconut water concentrate was prepared using fresh coconut water collected under hygienic condition.

Suspended solids and oil in the samples were removed by means of three-way centrifuge. The removal of the solids and oil was necessary to minimize fouling of the membranes. The salts present in coconut water may be removed if desired, prior to concentration, to produce a very sweet product.

This is achievable by passing the centrifuged coconut water through a mixed-bed ion exchange resin. The concentrate can be frozen or preserved in cans and used as base to produce carbonated and non-carbonated coconut beverage.

The multidisciplinary technical staff of ORION ENGINEERING has been carrying out R&D for some time to maximize the type of products and by-products obtainable from coconut. At the same time, it pursues the objective of reducing the processing waste generated to minimize their impact on the environment. We will develop for you the best solution tailored to your objectives and needs.

#### Visit: www.orion-eng.it





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28-31/01/2024 n

Fair for the sweets and snacks industry.

#### **FRUIT LOGISTICA**

07-09/02/2024 m BERLIN

Fair for fruit and vegetables.

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18-20/02/2024 **n** RIMINI

Fair for beers, drinks, food and trends.

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International wine & spirits exhibition.

#### **ANUGA FOODTEC**

19-22/03/2024 ncologne

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#### **VINITALY**

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#### **CIBUS**

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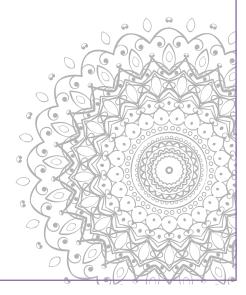
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Fair of Hospitality and HORECA.

#### GULFOOD MANUFACTURING

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Fair for packaging and plants.



#### SIAL

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Fair on food products.

#### **SUDBACK**

26-29/10/2024 STUTTGART

Fair for bakery and confectionery.

#### **ALL4PACK**

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Exhibition about packaging technology.

#### SIME

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Fair for vine-growing, wine-producing and bottling industry.

#### **BRAU BEVIALE**

26-28/11/2024 nuremberg

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#### **TUTTOFOOD**

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Fair B2B show to food & beverage.

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Technology focused on packaging, bakery, pastry technology.

#### **IBA**

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Fair for the bakery and confectionery industry.

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Exhibition about food and non-food processing and packaging.

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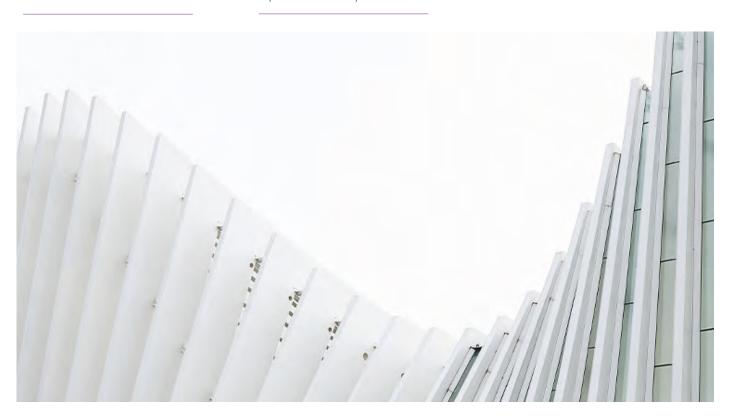
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