

FOOD

PROCESSING

it. MAGAZINE

n° 1-2024

BEVERAGE & PACKAGING

**PROCESS
AND PACKAGING**

**FRUIT
LOGISTICA**



**HALL 1.1
BOOTH B-50**



**TOTAL HYGIENIC
SORTING
TECHNOLOGY**
for fruits & veggies

PEELING MACHINE

MANGO LINE | Mod. PL8M



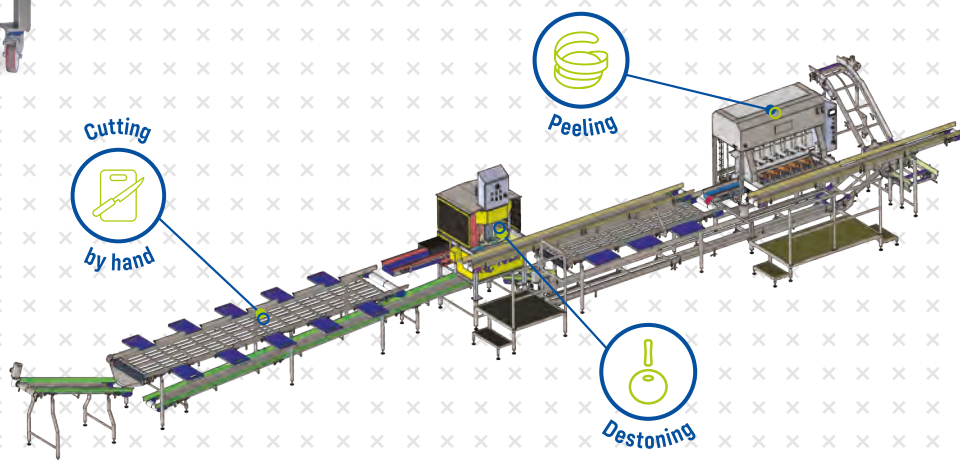
NEW APPLICATION

CUTTING MACHINE

MANGO LINE | Mod. SS8M

MANGO LINE

PL6M + SS8M



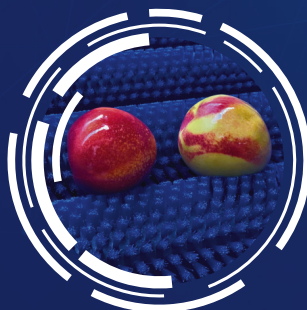


Siat S.r.l. Industrial brushes

Development aimed at perfection.

**FRUIT
LOGISTICA**

Visit us at Fruit Logistica
February 7-9, Berlin, DE
Booth C-42, Hall 4.1



Custom solutions

The choices that the **Siat team** makes are the result of more than **50 years experience** in the fruit and vegetable industry. We are at the side of all fruit processing line manufacturers, offering solutions that add value.

Teamwork divides tasks and multiplies success, we are there and we are ready to write the future **together with you**.

www.siat.it - Customer satisfaction has always been our success.



Food Processing Machinery for the food industry

STEAM PEELER FOR FRUITS



principal fruits processed
Peach - Pear - Apple - Kiwi
whole and half

FOOD

PROCESSING it. MAGAZINE
n° 1-2023

BEVERAGE & PACKAGING **PROCESS
AND PACKAGING**



**magazines
and web portal
focusing on
PACKAGING
and on the
FOOD&BEVERAGE
technology**



itfoodonline.com





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NAVATTA GROUP FOOD PROCESSING SRL

TECHNOLOGICAL EXCELLENCE IN FOOD PROCESSING.

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TECNO PACK SPA

TRADITION, INNOVATION AND QUALITY.

PG. 52/55



SONIA V. MAFFIZZONI
Editorial Manager

The reduction of environmental impact in food processing will be a crucial goal for 2024, especially in the fruit and vegetable sector, where the adoption of sustainable practices can truly make a difference. Some keywords summarize the main actions to be taken: energy efficiency, resource management (with water, the precious blue gold, in the first place), and packaging sustainability, in terms of minimizing its presence, reducing waste, and extending the shelf life of the product.

Furthermore, it is true that optimizing supply and distribution chains can reduce emissions related to product transportation and handling, but it is also true that the sustainability of raw materials, corporate social responsibility, attention to local communities, and conscientious land use remain the true cornerstones. This year as well, collaboration between industries, institutions, and consumers will set the pace in a network where everyone can gain an advantage.

Happy 2024!



FOOD PROCESSING

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OFFERS COMPLETE AND CUSTOMIZED SOLUTIONS FOR DOSING, COATING AND WEIGHING OF POWDERS AND LIQUIDS.

PG. 92-93



ANUGA FOODTEC 2024

SHAPING THE FUTURE OF RESPONSIBLE FOOD& BEVERAGE INDUSTRY.

PG. 98-99

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**EDITRICE
zeus**



TROPICAL FOOD MACHINERY: leading in the global field of fruit processing machinery

Tropical Food Machinery is an international company with two headquarters in Italy and Brazil, leading in the global field of fruit processing machinery. The company currently has liaison offices in India, Costa Rica and the Asia-Pacific and West African regions.

TROPICALFOOD MACHINERY



Thanks to its decades know-how, the Company offers complete production plants for the industrial process of tropical and continental fruit, producing finished products such as natural juices, concentrated juices, purée, fruit in syrup or jams.

The Company's success over the years is certainly due to the pineapple processing plants: Tropical Food Machinery can vaunt dozens of active plants all over the world, with machines entirely designed around the pineapple juice extraction and that can guarantee a very high extraction yield and a high-level quality of the finished product.

Tropical Food Machinery production also includes the development of multifruit processing lines.

These systems combine different extraction machines, each one dedicated to a specific type of fruit – whether with thick skin like pineapple, or stone fruit as mango or even fruit with seeds like maracuja. In this way, it is possible to use a single multifruit line for the processing of different types of products according to the harvesting season, guaranteeing a continuous productivity at high efficiency.

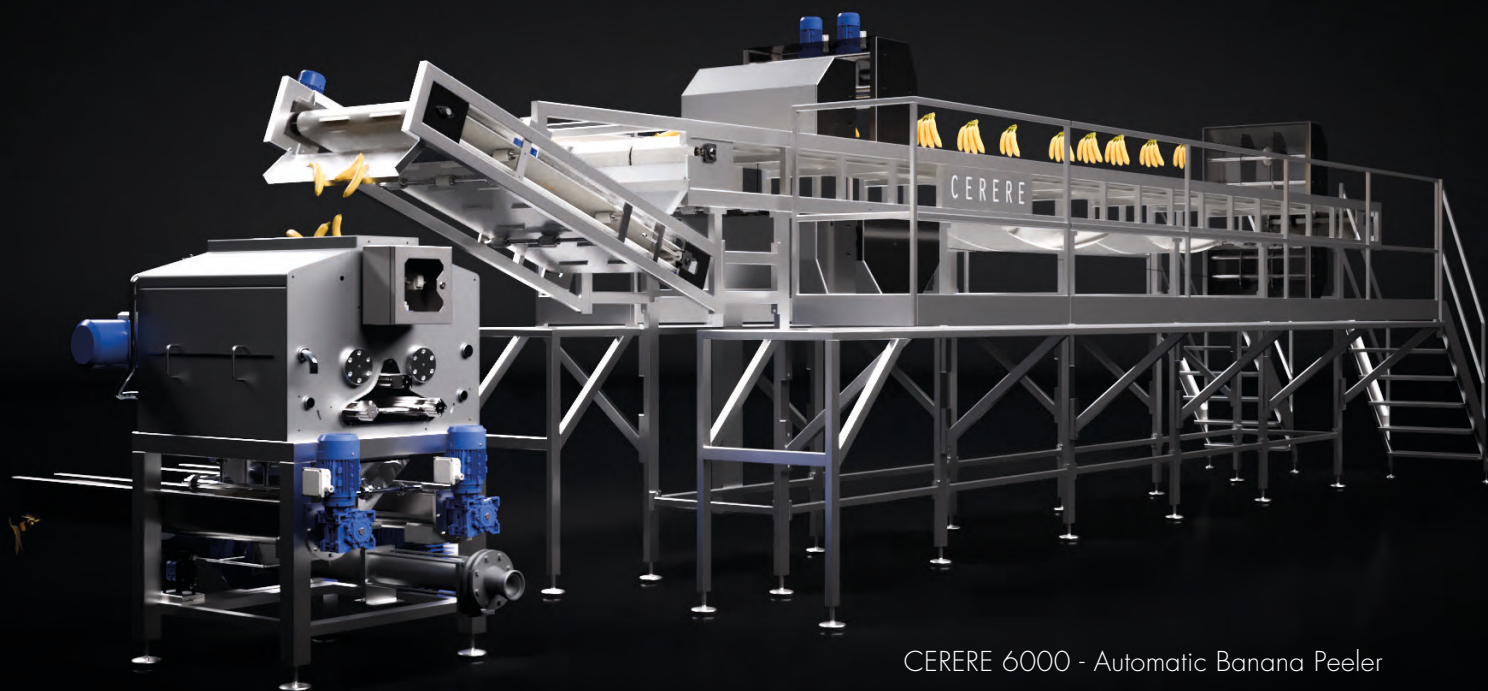
Every production plant is designed and built in-house to satisfy a wide



range of multipurpose technological solutions: mobile small-size plants can be used by producers or farmers in decentralized areas, diminishing management costs and gener-

ating local economy; large-scale plants can meet high production demands, optimizing energy consumption and expanding the producers' market.

In R&D, the most important progress in recent years has been the development of Cerere 6000, an automatic banana peeling system. Cerere 6000 guarantees a precise



CERERE 6000 - Automatic Banana Peeler



Aroma Recovery System



and complete automatic fruit peeling and a safe pulp processing in inert atmosphere with antioxidant treatment: the system can peel about 6 tons of fresh bananas per hour. For this reason, in 2021 the Company received the prestigious International FoodTec Award by the Deutsche Landwirtschafts-Gesellschaft, a German agricultural company.

Another important achievement of Tropical Food Machinery is the development of Aroma Recovery System, an innovative and compact automatic machine that can be integrated into new or existing production plants.

The system does not involve waste of juice and can extract and concentrate natural aromas and essences that would, otherwise, be lost in the juice extraction process.

The extracted aromas can be reintroduced into the product during the final processing stages, improving its characteristics, or it can be sold

separately with an exceptionally fast return on investment. Indeed, high-quality natural flavours can command a considerable price for use markets such as food, beverage and cosmetics. 🏠

www.tropicalfood.net



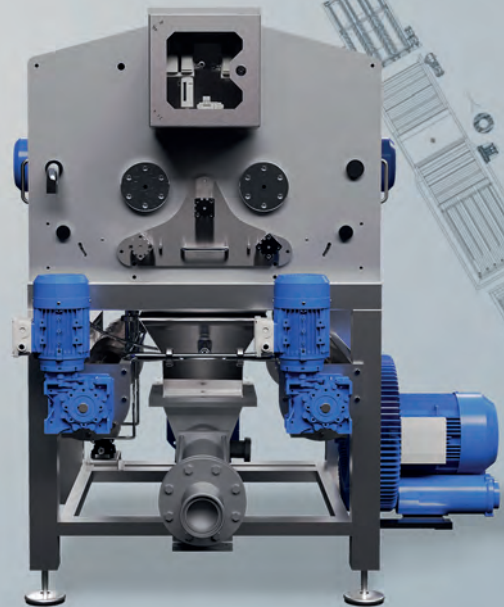
CERERE 6000

AUTOMATIC BANANA PEELER



UP TO 35.000 BANANAS/H... BOOST YOUR PRODUCTIVITY

CERERE 6000 guarantees a precise automatic peeling system in inert atmosphere for banana puree of excellent final quality.



TROPICALFOOD
MACHINERY

Tropical Food Machinery Srl

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Parma - Italy

www.tropicalfood.net

we are expecting you

**FRUIT
LOGISTICA**

07 - 09
February 2024
MESSE BERLIN
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4.1 D41

“BRIEF JOURNEY INTO THE INNOVATIONS OF THE AGRI-FOOD SECTOR. BETWEEN ROBOTS AND AI, THE FUTURE IS HERE”

Artificial Intelligence (AI), followed with critical attention, is proving to be a tool capable of supporting and maximizing every aspect of the agri-food ecosystem. From precision agriculture to crop monitoring, through safe production systems to traceability, AI can influence the entire system. Understanding its potential means optimizing its use.

We know that Artificial Intelligence (AI) represents the cutting edge in many sectors (cultural, productive, manufacturing, etc.) and is followed closely due to the enormous and not always easily predictable consequences it can have in various markets.

In reality, under our eyes, AI technologies have already made a definitive turn in the way we produce, distribute, and consume our products, including food. However, whether viewed with suspicion or enthusiasm, AI undoubtedly represents an



by
Elisa Crotti



opportunity. This is also true in a sector that seems light-years away from technology because it has always been tied to the rhythms of the earth, plants, animals, and nature in general, namely the agri-food sector.

But not everything is as it seems, because AI and the Internet of Things (IoT) are already a reality that allows monitoring every aspect of the production cycle. From sensors that detect soil composition and moisture to devices that monitor animal well-being and weather conditions, every detail can be under control, with real-time data and shared information.

Because of the challenges it must face, connected to the natural perishability and fragility of products, cost pressures, distribution issues, the significant decrease in operators, climate change, and the simultaneous need to feed an ever-growing global population, the agri-food sector is ready to fully embrace AI.

The Digital Revolution in the Agri-Food Sector

The application of AI and digitalization and robotization starts from the land, right from the very first stages of production.

Thanks to AI, farmers and breeders have detailed analyses, proactive suggestions, and precise forecasts at their disposal, customized to the specific needs and characteristics of each individual company. For example, digital simulators are now available that allow testing crops even before proceeding to cultivation. Furthermore, machine learning algorithms offer data

analysis that allows identifying the ideal periods for sowing, predicting yields, and early detection or recognition of plant diseases, contributing to improved agricultural management and waste reduction. Thanks to robotized systems and the use of drones equipped with specific sensors, precision agriculture allows monitoring soil conditions, water consumption, and crops, making corrective interventions where necessary. Even AI-based irrigation systems, capable of determining when and how much plants need to be watered, are now a reality, as well as measurement tools to quickly determine the ripeness and quality of vegetables or fruits.

An important role is then played by automation, which has made routine activities simpler, “lightening” the agricultural work considerably compared to the past. Automated equipment guided by artificial intelligence can perform specific tasks such as sowing, harvesting, thinning, and weeding. All this, with extreme precision and little, if any, assistance from operators.

A particular mention goes to the use of these technologies in vertical farms, where environmental parameters are monitored and managed meticulously, evolving into true “precision agriculture.”

Packaging and Food Processing

We know that AI and automation are a valid solution to optimize consumption and minimize waste – think, for example, of the possibility of administering the exact quantity of pesticide, based on data detected by sensors and the consequent calculation of the population of parasites that are likely to attack a given crop.





Energy optimization and waste reduction certainly also concern the phases of food processing and packaging, where there is a shortage of specialized operators. Here, repetitive and complex tasks can be performed with greater speed and efficiency than by humans, for example, in the sorting and cleaning of fruit and vegetable products.

The use of artificial vision systems and machine learning algorithms can also become crucial in the visual inspection of various types of fruit and vegetables, detecting defects or contaminants. In this way, high standards of quality can be guaranteed, along with a significant reduction in waste and consumption, allowing real-time optimization of process parameters.

Predictive maintenance, as opposed to preventive, is one of the advantages offered by artificial intelligence. Based on real-time data analysis, predictive maintenance accurately anticipates the need for maintenance of plants, reducing downtime and optimizing operational efficiency. This proactive approach not only lowers the costs resulting from unforeseen interventions but also contributes to maximizing productivity and ensuring food safety. And on the topic of safety, the attention is always very high.

Finally, an important role of technologies is that played with respect to traceability and information management along the entire supply chain. Through the implementa-

tion of recognition and monitoring systems, it is possible to identify the origin and journey of each product, from its source to distribution, especially through integration with Blockchain technologies.

New Products and a Look at the Future

There are many other opportunities offered by artificial intelligence in terms of innovation. Among these, one concerns the development of new products. Through the analysis of market data, consumer preferences, and emerging trends, companies in the sector can adapt their offering to respond more specifically to the public's needs. This not only favors the diversification of the offer but also contributes to a better understanding of the sector, facilitating strategic decisions.

Operators in the sector can draw from digital technologies to optimize their work, from non-destructive controls of fruit with spectral photography, to AI technology to estimate fruit yields, from monitoring and digital prediction of insects, to a wireless platform for irrigation automation, to post-harvest quality control with AI. Artificial intelligence, drones, IoT, and machine learning algorithms are literally revolutionizing the agri-food sector. This is just the beginning of a new approach, with contours that are becoming increasingly defined, but with unlimited potential.



TECNINOX, machines for the food and beverage industry

Tecninox has been building machines for the food and beverage industry, as well as the pasteuriser for beer, and is willing to examine any customer's enquiry and request of supply.

Tecninox plants and pasteurisers for beer are built according to the latest manufacturing technologies and are used for the beer heating processing and the pasteurisation lines in full bottles or cans.

The strength of Tecninox is in heat treatment.

Tecninox builds single machines and complete lines.

The Tecninox machines are built entirely of stainless steel and are made to the customers' requirements. At the basis of the Tecninox work is the great production flexibility, combined with a high degree of professionalism in order to offer the most advanced technology in realising pasteurisers for beer.

Information: main production range:

Machines for food and beverage industry. Additional production range:

- machineries for tomato processing;
- machines for fruit processing;
- machines for jam processing;
- machine to process vegetables, mushrooms, vegetables with oil or vinegar pickle;
- pasteurisers for beer cooling tunnels for any type of container and product;
- pasteurisers tunnel coolers for beer and beverage;
- static sterilizers for any type of container and product;
- batch evaporators;
- cooking vessels;



TECNINOX®
macchine per l'industria alimentare

di A. Namaziano s.r.l.

- autoclaves; cutters;
- cooker for snails and other food products, autoclaves, linear filling stations, linear filling stations by water rain, circular and volumetric fillers;

- electrical and gas roasters for vegetables;
- steamy and electrical concentration boules;
- oil immersion deep fryers;
- bratt pans. 🏠

tecninoximpiantialimentari.it



Big news in the post harvest sorting: the concept of “**TOTALLY HYGIENIC DESIGN**” is born with the “curiosity” sorter

Raytec Vision S.p.A. , active since 2001 as a manufacturer of optical sorters and X-ray inspection machines, has always made the “quick adaptation to the market needs” one of its main features.



It was just following this rule that in 2019 at Cibus Tec show, Raytec Vision presented the Curiosity, the very first optical sorter based on the multispectral analysis of fresh-cut products, built in full compliance with the EHEDG guidelines and following

the rigid dictates of “totally hygienic design”.

The great advantage of Curiosity is that it can be quickly sanitized. Each component of the machine is designed to be disassembled and

cleaned by the sanitation team, without the use of tools.

The most important example is about the inspection belt that carries the raw material that must be cleaned frequently and quickly to





avoid to generate too long stops on the production process.

The Curiosity main belt can be disassembled, cleaned and reassembled in a very short time with a considerable saving of water and without the use of chemical detergents.

To all these important features we must also add the ability to sort a wide range of food products thanks to the Decaray, the 10 frequency multispectral technology developed by Raytec for many of its latest sorting machines.

In order to make the Curiosity even more functional, the Unyco software enable the analysis and storage of statistics and production data, a very useful tool to improve the production and keep it under control.

These and others reasons led our customers to purchase this sorter featured by a totally hygienic design.

The first company taking profit of these advantages and innovations was



Dole who wanted the Model 1800 for the Soledad plant in the United States, in order to be the first salad plant to comply with the EHEDG guidelines.

Regarding this collaboration, Mark Martin Director of Engineering and Maintenance Dole said: "Having developed this type of machine was a challenge, but we have found in Raytec a partner able to under-

stand and create a product that fully meets our needs".

But we can also count cases many other cases worldwide, with customers who have instead relied also on the compact 600 version capable of minimizing the size and capacity of the product while maintaining a very high level of food safety. 🏠

Visit:
www.raytecvision.com





PELLACINI: Food Tech in Food Valley

Transforming food in an intelligent and sustainable way

The Pellacini family started the business at the end of the 19th century, in Parma, in today's Food Valley. Working in synergy with the first canning industries, Pellacini has experienced all the growth phases of this sector.

Thanks also to an experience gained in the international field, today it is able to respond to the demands of a market that is increasingly attentive to productivity, safety and economic and environmental sustainability.

Pellacini technology is extremely flexible, reliable, easy to maintain, updat-

ed and present in the main international markets: Europe, South America, North Africa, the Middle East and the Far East.

Customer and project are the heart of the Pellacini philosophy, thanks to the new production method, "Pellacini Tay-

loring System": a process that, having eliminated its production constraints, allows you to create the perfect equipment for each customer, entrusting its production to workshops carefully selected and specialized in individual processes.

The global food process sector is made up of consolidated and established technologies in which the residual space for innovation would seem little, but today more than ever with the affirmation of the issues of sustainability and energy and production efficiency, a space for evolution opens up in the production processes which concern in particular the food sector.

And it is precisely in this direction that Pellacini directs its research more, as evidenced by some projects already established on the market concerning the recovery of production waste and the production of rotary sieve pulpers and refiners.

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

- fruit single strength purees and pulps, nectars, natural fruit juices and flat





drinks, jams and concentrates, both of fruit in a temperate and tropical climate;

- tomato paste, "Passata", pizza sauce, tomato pulp and cubes;
- other tomato derivatives such as: ketchup, spicy sauce and different sauces;
- vegetable sauces, pepper sauces, baby food, canned legumes, harissa sauce;
- production lines of clear and cloudy juice starting from fresh product or puree

Aseptic Packaging machines:

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





Machines and plants for de-frosting and cooking:

- vacuum cookers for jams, with double bottom and rotating coil;
- rotating coil defrosts for IQF and products in pieces;
- blancher with rotating drum for legumes;
- cooking groups;
- continuous multi-effect evaporators for heat-sensitive products even with high viscosity.

Machines and plants for extraction, milling and pitting, in particular:

- centrifugal extractors and turbo extractors for fruit, tomatoes and vegetables;
- mills and crushers for fruit and vegetables;
- de-pulpers for peach stones, apricots, cherries, plums;
- roller pitting machines.

Machines and plants for enzymatic treatments, in particular:

- specific enzymatic inactivators for fruits and tomatoes;

- enzyme treatment and dosage groups. 

www.pellacini.com





WE GIVE LONG LIFE TO THE FRUITS OF THE EARTH

in the Food Valley since 1896

We design
and produce technologies
to keep the taste of fruit,
tomatoes, legumes
and vegetables alive



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

'Buy one get multiple solutions free'

"Are 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

guarantees a 20 per cent higher yield," the three companies add.

"In addition, this system is cost-effective 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



FOOD
processing



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

Effective 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, real-time overview & business intelligence tools can be found at "activeIT-Software & Consulting GmbH". 

www.active-it.at

activeIT 
Software & Consulting GmbH

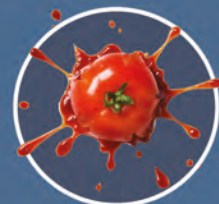


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KETCHUP, SAUCES AND JAM PROCESSING LINES



COOKING & EVAPORATION "BOULE"
WITH VERTICAL MIXER
TO WORK UNDER VACUUM
OR ATMOSPHERIC PRESSURE



ROTARY COIL EVAPORATOR IDEAL TO PRODUCE
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KETCHUP AND BABY FOOD



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WWW.NAVATTAGROUP.COM

visit us



Thank You for Your like!



NAVATTA: technological excellence in food processing

The company Navatta, founded by Mr. Giuseppe Navatta in 1983, produces and installs fruit and vegetable processing lines and boasts references across the globe.

NAVATTA, THE GLOBAL SUPPLIER OF INTEGRATED FRUIT & VEGETABLES PROCESSING EQUIPMENT AND LINES, PROVIDING WELL PROVEN AND INNOVATIVE SOLUTIONS FOR A FULL RANGE OF PLANTS also thanks to the numerous companies' acquisitions over the years, such as Dall' Argine e Ghiretti in 2001, a 40-year-old company world famous for rotary can pasteurizers and tomato pulping lines;

Mova, in 2010, with extensive experience in bins handling, bins and drums emptying, palletizers and depalletizers, washing systems; Metro International, in 2012, leader in fruit and vegetables processing, boasting

international patents for juice and puree extraction, concentration plants and thermal treatment; Ghizzoni Ettore, in 2012, specialized in special batch plants for ketchup, sauces and jams.



NAVATTA GROUP
Food Processing S.r.l.

Receiving extraction group for fruit and vegetables.





MANUFACTURING RANGE

NAVATTA GROUP manufactures and commissions Processing Lines, Systems, Equipment for Fruit, Tomato, Vegetables for:

- peeled / diced / crushed tomatoes, tomato sauces and purees, tomato paste, all filled into any kind of package or in aseptic;
- diced, puree, juices (single strength or concentrated) from Mediterranean / tropical fruit, all filled into any kind of package or in aseptic;
- fruit crushing lines from IQF, frozen blocks and frozen drums;
- high yield PATENTED fruit puree cold extraction, fruit purees / juices equalized in aseptic;
- wide range of evaporators to produce tomato paste Mediterranean and tropical fruit concentrate;
- aseptic sterilizers;
- aseptic fillers for spout bags/ spoutless Bag-in-Box 3 – 20 liters, Bag-in-Drum 220 liters, Bin-in-Box / IBCs 1.000 – 1.500 liters;
- piston fillers;
- "all-in-one" pasteurizer / cooler spirals;
- formulated products productions (jam, ketchup, sauces, drinks) starting from components unloading to dosing, mixing, mechanical / thermal stabilizing, to filling into any kind of package or into aseptic;
- processing pilot plants;
- vegetable processing as receiving, rehydration, cooking, grilling.

Navatta Group's headquarter and the two production units are located in Pilastro di Langhirano, Parma, with a total production area of 10,000 square meters.

A new area of 10,000 square meters has recently been purchased and is ready for the third processing unit to be built.

VISION:

Passion is the factor that drives us to higher targets, in terms of technology, products and services.

MISSION:

To constantly increase Customers' satisfaction and fidelity. 🏛️

www.navattagroup.com

Triple effect forced circulation evaporator mod. EFC 6003 complete with sauce extraction unit mod. GES15 – Industry 4.0 Conformity





PRECISION SECONDARY PACKAGING: FITS THE PRODUCT, FITS THE PLANT, FOR PURPOSE

At a recent dairy-snack packaging application in North America, secondary & tertiary packaging specialist Cama Group was presented with a multi-faceted challenge.

Primarily, the customer wanted to replace its existing sleeving machine, and initially wanted to keep the sleeve blank format the same. The new machine had to fit into the current real estate as well as accept products coming from downstream primary packaging at 180° to 'normal' infeed. Compounding these challenges was a requirement to package two different tray types flat into sleeves in threes or sixes, or standing into shelf-ready carton trays in eights or twelves.

Finally, during the project's design process, the marketing team at the customer decided it wanted a modified sleeve design similar to that of a leading competitor, which added further complications to the machine's design, especially the closing and gluing processes, which had to be faultless in order to maintain the shelf appeal.

Individually, these would present big problems to a machine builder, but this is Cama we're talking about here. According to Davide Di Lorenzo, Sales Engineer Manager at Cama Group: "Not only have all the functional issues and demands been addressed, but the customer now has a sleeve / case packer combination that offers a throughput of some 360 packages per minute."

The turnkey line developed by Cama comprises a two IF318 top-loading sleeves followed by an

When it comes to secondary packaging machine design, there is more than just the product to consider. Machine builders must also take into account the factory shape and real estate, as well the orientation and flow of the products from the upstream processes.

FW748 wraparound case packer. "When you develop a line for customers, you must connect with upstream machines," Di Lorenzo explains, "and it is perfectly normal to request a particular product orientation. But in this case, due to sleeve change, the products would be entering at 180° to what we needed. The customer could not change the complete line for Cama, so we changed our machines to suit their needs."

Upon machine entry, the prod-

ucts enter a snake conveyor which 'corrects' the in-feed orientation. In parallel, carton sleeves are picked from a carton magazine and placed six at a time into a mono-axis shuttle conveyor. The incoming trays are then placed into a racetrack using robots equipped with grippers from Gimatic; designed using specific requirements





from Cama's engineers. These grippers take hold of the trays at their edges – to avoid any damage to the packaging – and stands them in an upright brand-forward position ready for loading into the six pre-formed sleeve packs.

Once loaded, hot melt is applied to the lateral flaps, which are then closed using servo-driven pressure plates.

The customer had a specific demand that there were to be no flaps overlapping any of the external front faces. As a result, Cama's engineers designed a clever procedure where a robot head pushes the face panel outwards so that the glued upper flap can be tucked inside, maintaining the all-important smooth outward appearance demanded by the customer.

"This capability is unique to Cama," Di Lorenzo explains. "The previous supplier tried to modify its machine to achieve this functionality, but was unable to attain the necessary quality levels; the machine was simply not doing what the customer wanted. The customer was adamant that the sleeve shape was not to change, so the end result was its appointment of a machine builder that could tick all the boxes."

Following the secondary packaging, the multipacks are then transported to the case packer where more Cama

magic was to take place. "The customers original tertiary packaging involved the use of RSC cases," Di Lorenzo continues, "but these are not efficient in terms of material use and storage, as they are supplied pre-glued. Our solution was to design a wraparound case format that could be constructed from flat blanks. Not only does this save 43% in material use, but 25% more cases can be stacked in each palette layer – 5 x 4 compared to the original 4 x 4."

Every application is unique, as are the resulting solutions. So, in order to offer solutions that address even the most stringent needs, you must have broad capabilities and knowledge, not just of the markets and their products, but the technologies and processes used to package them.

"This application demanded a fully digitalized solution; therefore, we deployed our full Industry 4.0 offering. This was not just on the technology front, but also as a consultant, running a seminar for engineers and operators at the customer, so they could get the very best out of this very capable platform. The digitalized approach also makes operator

training, machine interactions and maintenance routines far simpler, thanks to immersive augmented reality (AR). And, to keep uptime to an absolute maximum, it exploits our 'toolless' RFID-managed changeover solution, which makes the minor re-engineering required between format changeovers as quick and intuitive as possible.

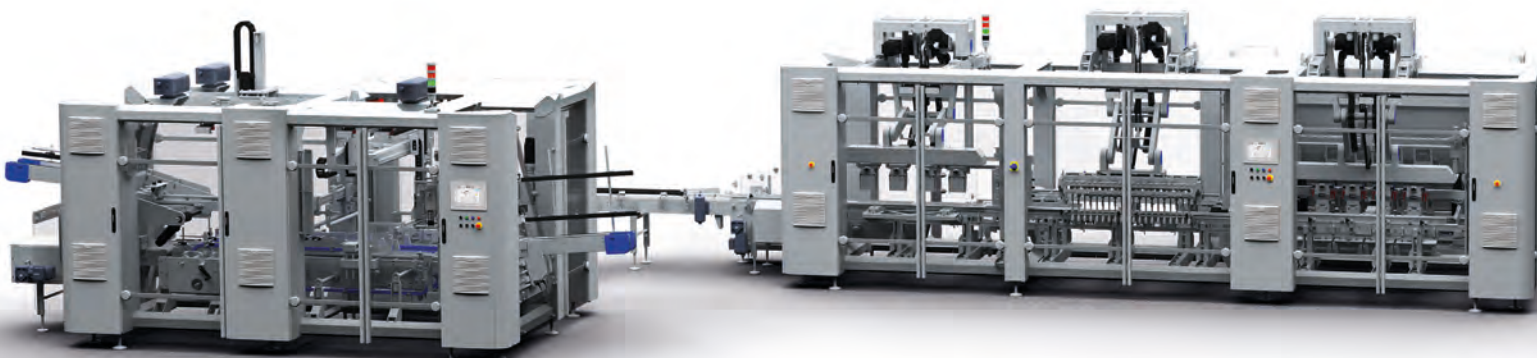
"As well as highlighting our capabilities as a machine builder," Di Lorenzo concludes, "this application is a graphic example of our capabilities as a packaging consultant too.

Customers should not have to put up with the limitations of a machine builder; instead, machine builders must develop solutions that match the precise needs of the customer. It is for this reason that we see so much repeat business from some of the world's biggest brands.

They know they will get the precise features and functionality they need, as opposed to a mixture of near misses." 🏢

Visit:
www.camagroup.com

cama
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DARMEC TRANSPORTER, versatility and efficiency in harvesting





The 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





TRANSPORTER 650



darmec.it

DARMEC



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



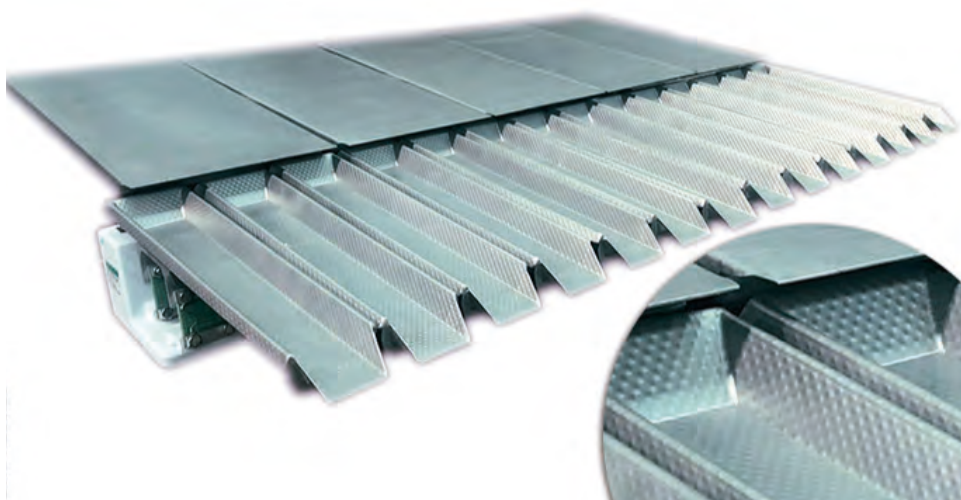
Transporter 325s

FOOD
processing



Vibrating solutions for the fruits and vegetables industry

TARNOS



The features of the new generation TARNOS vibrators, which have been manufactured at its facilities in Madrid for more than 60 years, have given a strong boost to its applications within the food sector, and specifically for the Fruit and Vegetable Industry.

These are compact vibrators prepared for larger trays, whose high-frequency amplitude and low amplitude transport and dose the product without damaging it, with instantaneous speed control, and in optimal cleaning conditions.

This product care is especially important for the handling of fruits and vegetables so that they are not damaged throughout the process until they are packaged.

The specifications and finishes of the equipment meet the most demanding hygiene standards in the sector, protection against dust and water IP-66, stainless components, FDA paint, among the most common.

Precisely due to the high sanitary requirements, vibrating equipment is

especially suitable for the food sectors, since, not only are they easy to clean, but they also avoid product remains and traces along the surfaces in contact with the material manipulated.

The instantaneous regulation units' present variants depending on the needs of the installation: double speed, manual or signal regulation, different IP finishes, etc.

The electromagnetic vibrating system shown in the image includes a product reception and distribution section, followed by dispensers with independent speeds and start-stops that make them ideal for product weighing or counting equipment.

There has been recent cooperation with packaging companies on projects that respect the environment, in which efficient electromagnetic technology, the high hygiene standard, and the most innovative packaging that makes use of recycled, compostable and biodegradable materials, make the perfect combination to take care of our planet. 🏠

www.tarnos.com



TARNOS

Vibrating machinery for the fruit & vegetable industry



**Storage, extraction, mixing,
transportation, sprinkling**



Alignment and positioning



**Sieving, dusting, selection
and classification**



Washing



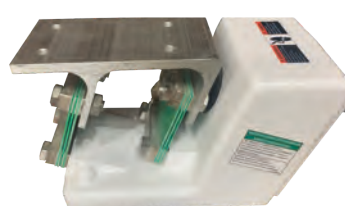
Orientation and separation



Washing and defoliating



Draining



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to include in own designs**



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Heating & cooling**

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Editrice Zeus **INTERVIEW**

Fruit Takes Shape with **PND's** Know-How, a Market Leader for Twenty Years



Virginia **Cascella**
Export manager - **PND**

Fruit processing through simple, reliable machinery, backed by top-tier support. At PND, issues are resolved within hours, while the customer becomes a partner in the company's success. An experience that spans 63 countries and involves more than 570 companies worldwide.

Founded in 2000 through the ingenuity of its founder, who instilled a technical vocation, PND designs and develops advanced systems for fresh cut companies and for the canning, freezing, and dehydrating industries. Coring, peeling,, segmenting, as

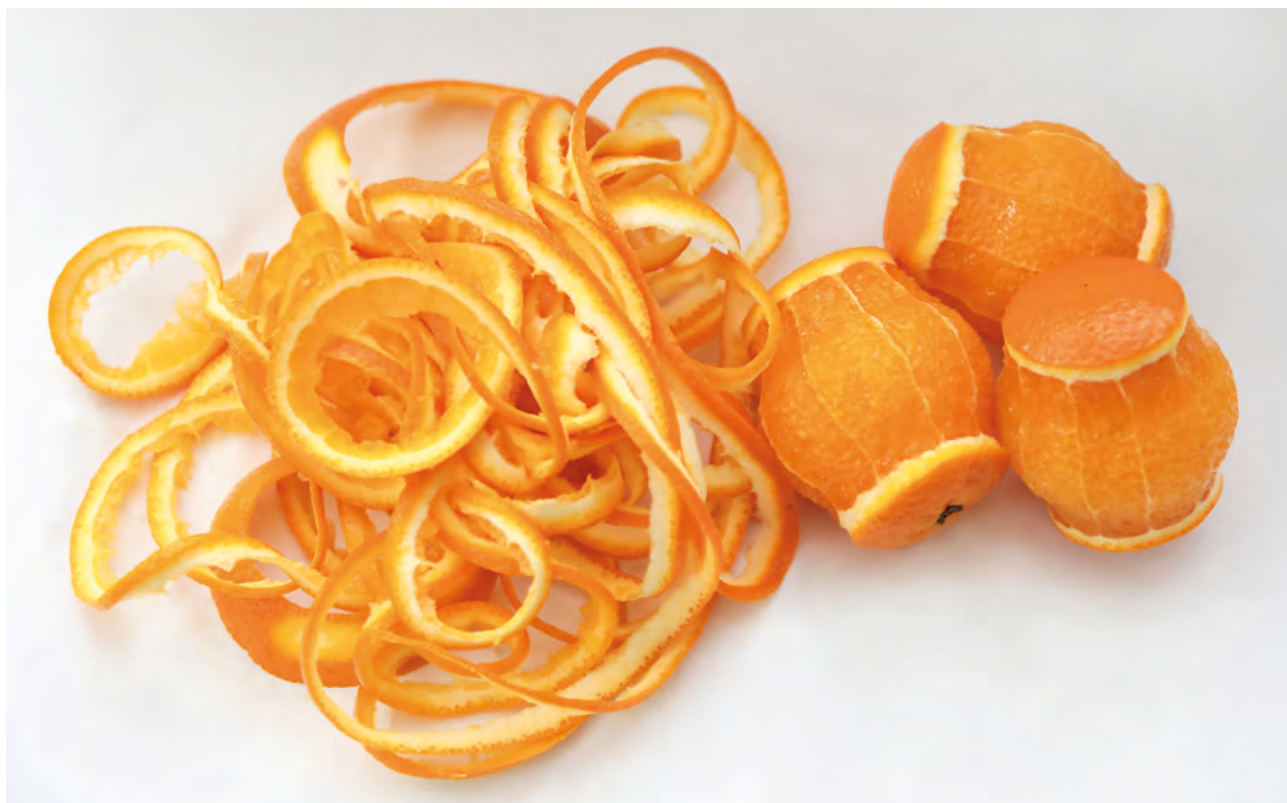
well as cutting and destoning: while the fruit finds new shapes (from 500 kilos to three-four tons per hour), PND's clientele expands, reaching across all five continents.

What's the secret to their success? We asked Virginia Cascella, Export Manager.

What makes a company like PND special? Why have customers maintained their trust over time?

"Our strength, recognized by our clients, is ease of use. Our owner was previously a technician, so he proposes a low-profile corporate po-





lity that takes into account the person tasked with operating the machine. Sophisticated equipment is pointless if the technician doesn't know how to handle it.

Our machines are built on simplicity: few electronic parts, reliability, and safety, even in environments with extensive water use. Another significant strength comes from our dedicated after-sales team: the relationship with the customer is handled with great care, and in case of issues, we offer phone support, online assistance, and direct consultation."

So the company is structured for effective after-sales service?

"Exactly. We boast a team of field engineers who speak the customer's language, without needing interpreters.

Additionally, two in-house contacts are always available via WhatsApp; this ensures speed: the technician contacts us, sends a video, and we can immediately identify the issue. Even from the other side of the world,

the response comes at most within two hours."

How significant is export to PND?


"It accounts for 95% of our turnover. We started with the Polish market and apples, with about 65 automated lines; then came Switzerland, and now we're all over the world: Chile and Argentina with pear peelers, followed by the Netherlands, Spain, UK, Portugal, the United States, and Canada. We have also recently landed in Australia."

Let's talk about innovation: how does it manifest in PND?

"Through listening to the customers: they make the requests, they issue the challenges.

We respond with constant research and designing user-friendly machines. For example, eight years ago a client asked us for a solution to remove the top of radish; based on our expertise, we got to work: with minor adjustments, the strawberry machine now also works for radishes.

Essentially, by adapting the spindle or other tools, the machinery can process different fruits, making them more versatile and allowing companies to amortize costs.

Today, apples, pears, kiwis, and peaches effectively use the same machine." 

Visit:
www.pndsrl.it





New Success for **AKOMAG**

In 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 nylon brushes.

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



SIRA

AKOMAG

**SIRA****AKOMAG****SIRA****AKOMAG**

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 touch-screen for the complete manage-

ment 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 bottle.

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 pressure.

All adjustments are automatic and managed from the control panel. 

www.akomag.com

“ THE WORLD OF FRUIT: MARKET TRENDS AND TECHNOLOGICAL INNOVATIONS ”

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.

In 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](#)





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.





RETIFICIO PADANO: we produce nets for different application fields

We have been manufacturing nets from the 80s. We are specialized in the production and trading of nets for agriculture, horticulture, building industry and other industrial uses, sport and entertainment nets. Our business card is client satisfaction, in fact we are proud to have been serving most of them since a long time. We offer our clients goods reasons to choose us.

HIGH PRODUCT QUALITY. The nets are manufactured in the factory in Ospitaletto (BS) Italy, they are entirely made of High Density Polyethylene (HDPE) monofilament. The yarns are obtained from the extrusion of polyethylene granules inside our factory. In this way we can guarantee the product quality control during the entire manufacturing process. The HDPE monofilament is the ideal raw material to produce nets with strong resistance to atmospheric agents. In fact, the polyethylene granules are carefully mixed with anti-oxidant additives thus granting a high resistance to the damage determined by UV rays.



Anti-insect net

Anti-insect net

These nets are generally used to protect cultivations from insects. It is a very thick mesh net. It is the best protection against insects as it avoids the use of insecticides. In white colour it has a low shading factor (9-10%), while in black colour it can also be used as a shading net (60-80% shading factor).

Available:

- ANTI TUTA ASSOLUTA NET

- ANTI APHID NET
- ANTI CARPOCAPSA NET (*Cydia pomonella*)
- ANTI ASIAN BUG NET (*Halyomorpha halys*)
- ANTI-DROSOPHILA SUZUKII NET
- ANTI POPILLIA JAPONICA NET
- ANTI BEMISIA TABACI NET
- ANTI BUMBLEBEE NET

Entirely made of polyethylene monofilament stabilized against UV rays, it is a very thick mesh to prevent insects passing.



Anti-hail net for orchards and vineyards

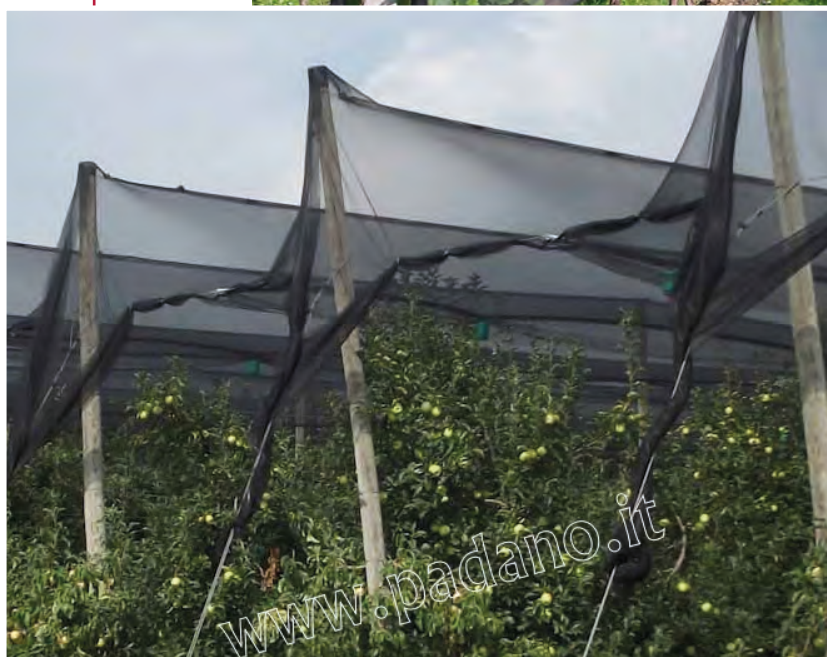
ANTIHAILE NET FOR ORCHARDS.

These nets are used to protect crops from damage caused by hail. Entirely made of virgin polyethylene monofilament, stabilized against UV rays. They are mainly used for covering orchards such as: Grapes, Kiwi, Apples, Pears, Cherries, Peaches etc. The net can be of two types: ladder-proof (Raschel) or english row (Leno), both types are very resistant.

THE NETS FOR VINEYARD PROTECTS:

- from hail
- from the birds
- from animals
- from sunburns

Nets available with English row (Leno) and warp-knit weaving, the latter (art. Salvigna) is the most suitable to use on the vineyards as it does not spread during the lifting of the net. Supplied in black color. The costs are extremely affordable. Accessories for fixing the net are also available. Installation is simple and fast, it does not require specialized personnel.



Anti-hail net for orchards and vineyards.



QUICK DELIVERY TERMS. The wide warehouse permits to store a good quantity of nets in order to satisfy orders quickly. Moreover, an efficient organization of production department allow to dispatch easily also the requests of non standard products.

WIDE PRODUCT RANGE. Thank to the long-time cooperation with our partners, we are able to offer a wide

product range for different uses such as agriculture, horticulture, building, industry, sport and entertainment.

AD HOC PRODUCTS. Didn't you find the net suitable for your purpose? Would you like to have some of your standard net in any other colour? Please ask us, we could find the right solution for you.

PACKAGING. The rolls have a

plastic core and external transparent plastic film. Moreover, the nets whose widths are over 2 m, the net is folded to obtain shorter rolls in order to ease the transport and the storage. The sheets are folded and packed in plastic bags of paper boxes.

PRICE. We can grant an excellent price-quality ratio. 🏠

www.padano.eu



Olive falling fruit harvesting net

Olive falling fruit harvesting net

Our nets are made in polyethylene (HDPE) monofilament stabilized against ultraviolet rays, we only use virgin raw materials which are free of any harmful substances. Various types of meshes are available in order to optimize the collection of different types of fruit. Particularly suitable for the collection of olives, almonds, walnuts, hazelnuts, Haselnüsse and

other fruits. The nets can also be used for manual or automated collection. They are available in various weights and colors and can be supplied in rolls or in sheets already sewn of the required dimensions, with or without central slit.

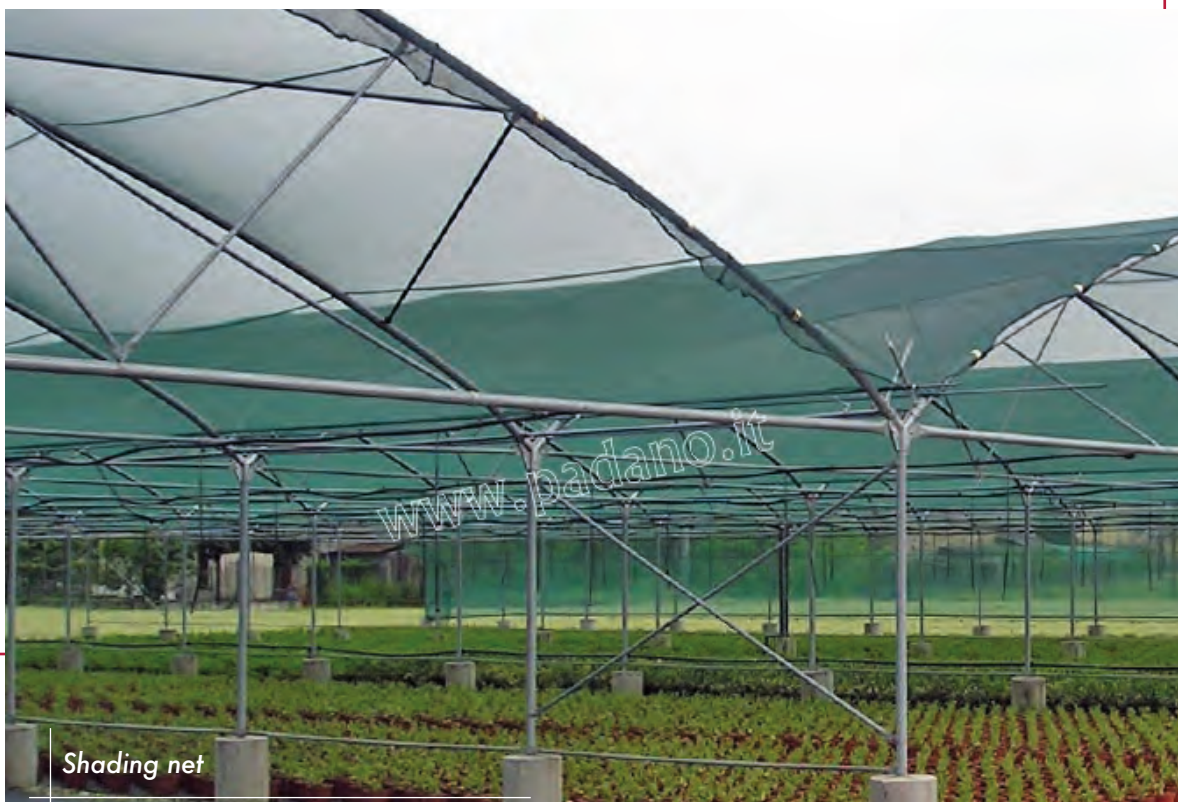
ALL OUR NETS ARE NON-TOXIC, SUITABLE FOR CONTACT WITH FOOD ACCORDING TO EU REGULATIONS. IDEAL FOR BIO CULTIVATIONS. 100% MADE IN ITALY.



Shading net

These nets are suitable to reduce the sun light intensity in greenhouses, sheds, parking, etc. and to protect private properties from external sight.

- SHADE NET. Entirely made of UV stabilized polyethylene monofilament yarn. It is a thick mesh net that does not ladder and has a high breaking and light resistance. It is manufactured in three different weights corresponding to a different rate of shading factor (50%, 70% e 90%).
- SHADING NET TITANIUM WHITE. Made of virgin HDPE monofilament UV stabilized, COLOUR WHITE TITANIUM. The TITANIUM white colour, much brighter than the normal white, reflects more sunlight and reduce the temperature inside the greenhouse.





TECNOAGRI

MRS Hydraulic Side Tipper

Tecnoagri 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-



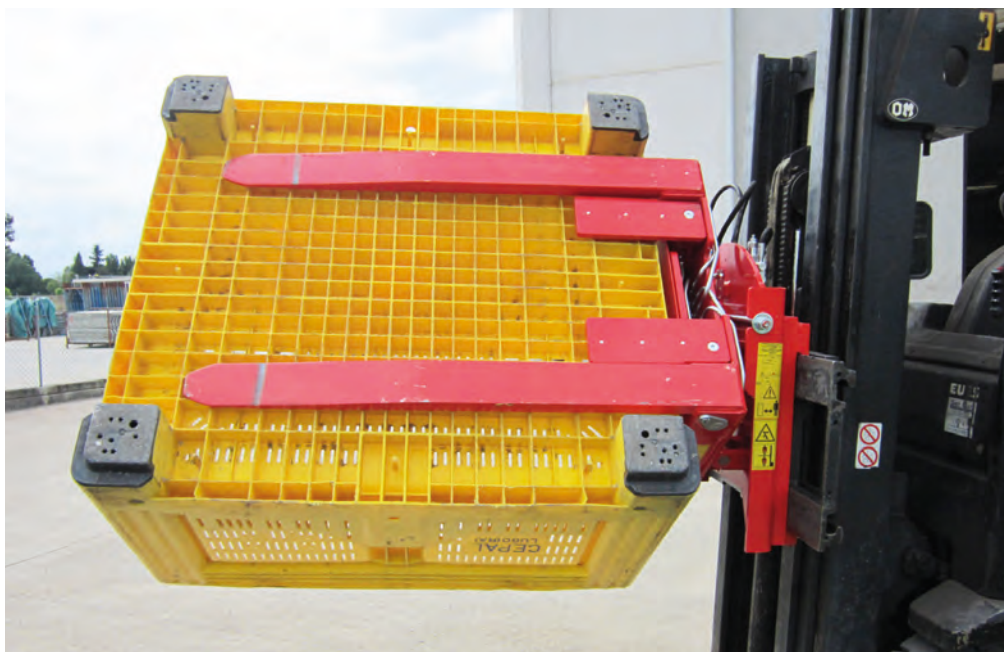


chine control devices and its use in environments with reduced heights.

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 agri-food sector, Tecnoagri produces several lines of hydraulic buckets, designed for handling different products, such as wheat, flour, cereals and others. 🏠

www.tecnoagri.it





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

Proseal'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 high-speed 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' two-minute 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





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*WHY CHOOSE
ORION ENGINEERING?*

ORION Engineering s.r.l. is specialized on the development of «tailor-made» solutions for agri-food prototypes and installations for middle and large production.

The daily effort, together with a constant activity of research and development, marked the company's worldwide success.

Call us to evaluate our solutions and together outline a successful and sustainable business.

*We are looking for partnerships in different countries.
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Manufacturing area

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43039 - Gerra (PR) Italy

Phone: +39 370 371 1521 | E-mail: info@orion-eng.it





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.

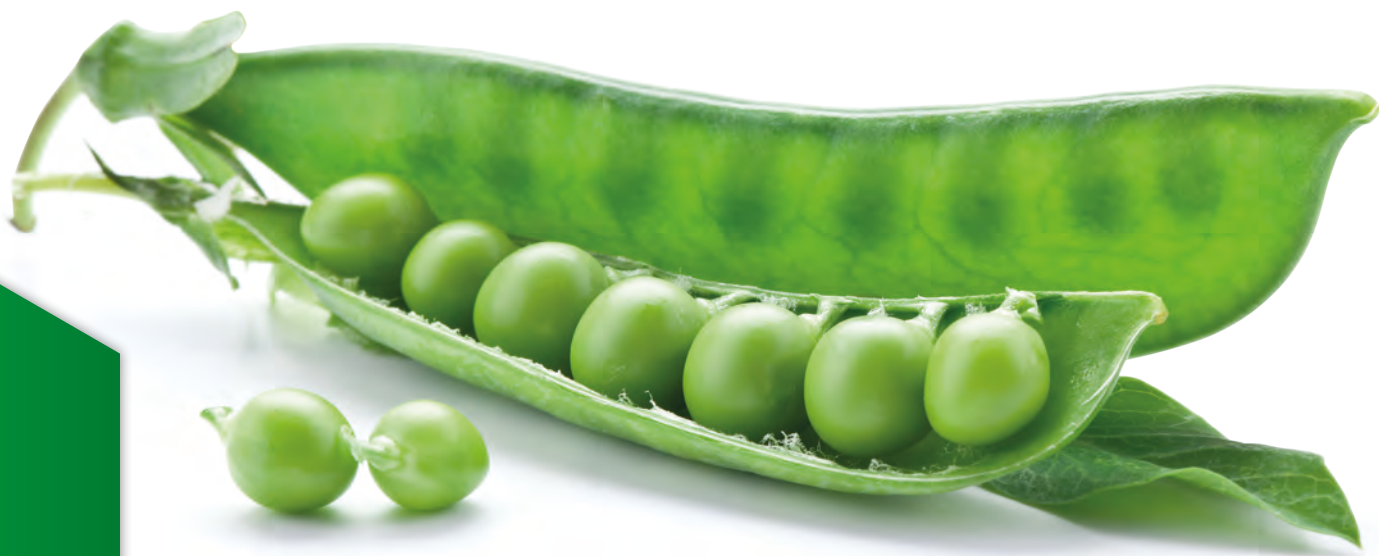
"We are proud of the many innovations we have developed for the effective and efficient tray sealing of soft fruit. And we will continue to develop the appropriate technologies to help support sustainable solutions that deliver quality."

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



NATURE PRESERVES ITS PRODUCTS,
FOR EVERYTHING ELSE THERE IS **TECNO PACK**



Find out the new **TECNO PACK** technology

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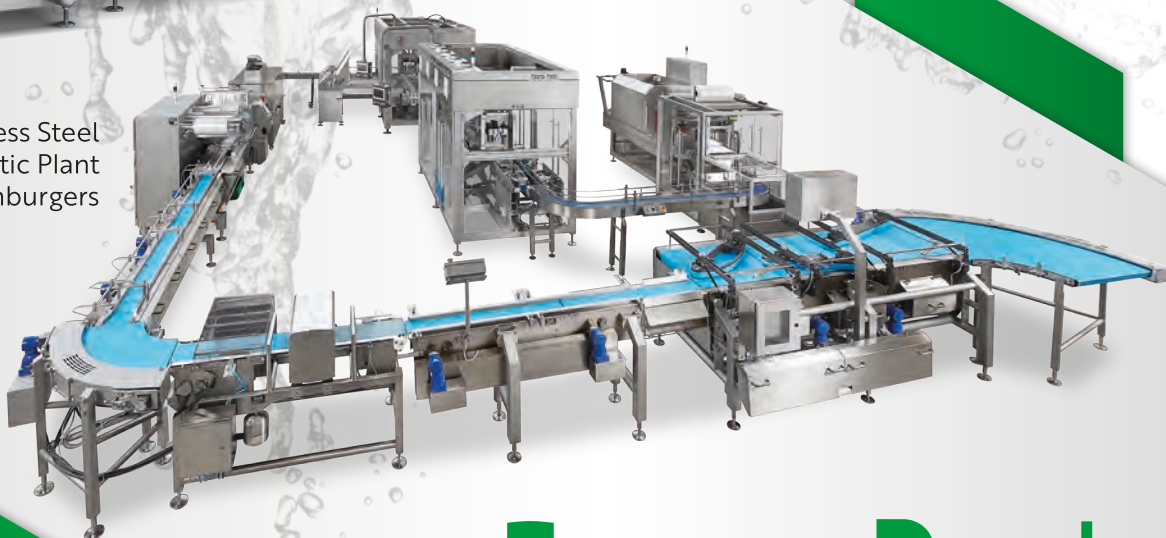
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Tecno Pack

P A C K A G I N G M A C H I N E S

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 gastronomic delicacies; it's a perfect example of how traditional art can be improved and amplified by modern technology

The 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.





**Rough pastry,
Tough Texture
...Calabrian style.**

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.

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



**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. 🏠

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FOOD
processing

NEW STANDARDS, NEW TECHNOLOGY

In the recent years we entered the era of sustainable packaging. New procedures and technologies help our market to raise its standards and as packaging machinery designer and builder we implemented new instruments to face new challenges. The need for flexi-

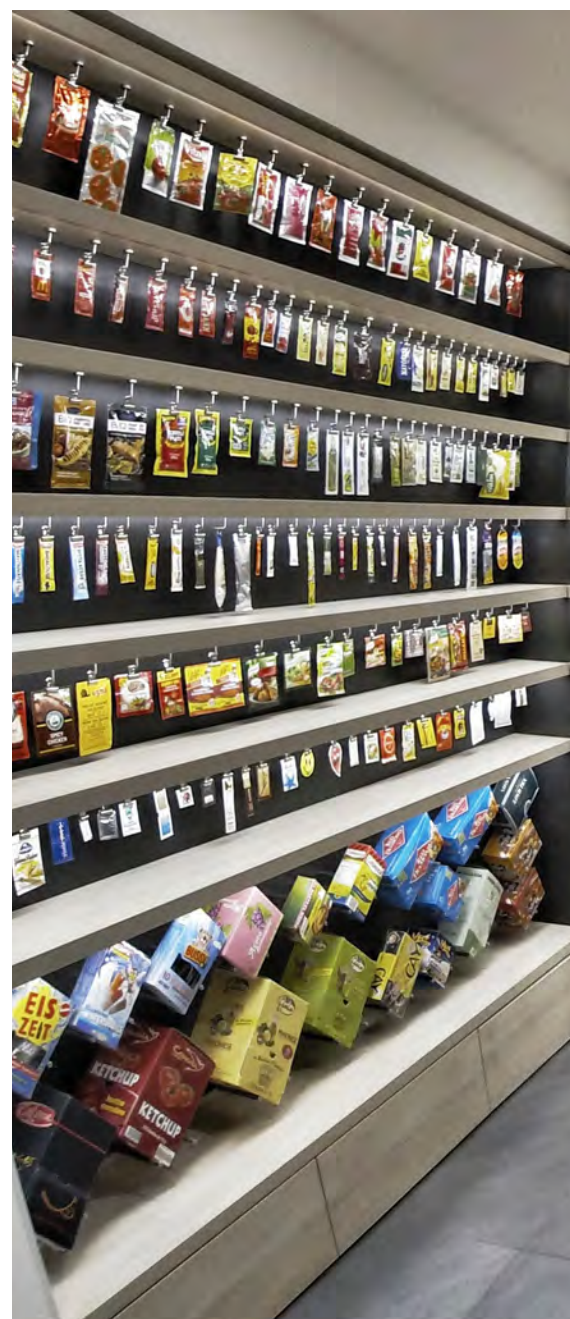
bility, traceability, sustainability and attention for consumers gave us the opportunity to improve our offer.

Simple and hygienic

Universal Pack machines are built to guarantee the highest hygienic level in the simplest manner. The R&D de-

partment has designed and developed automatic CIP systems for cleaning the inner parts of dosing systems.

As a matter of fact, these systems ensure the full equipment cleaning without the need for disassembling. These solutions are aimed to reduce machine



downtime by providing ready-to-work spare units. All cleaning systems are designed and built abiding by EHEDG guidelines and 3-A sanitary standard.

The next hygienic level available implies Ultraclean technology, equipped with laminar flow to prevent contamination of the product area by isolating the dosing and forming groups from the external environment. The hygienic proposal is also extended to the packaging: decontamination and sterilization lamps ensure the highest hygienic level of the laminated film.

Traceability and certifications

We uniquely code every single component, keep full track of it and provide documentation certifying its compliance with Pharmaceutical and Food industry regulations. An essential list includes for instance: certificates of all materials and parts in contact with the product, welding certificates, calibration certificates and parts full traceability. The provision goes beyond the latter certificates for proving the components quality and compliance, as it stretches to further documents concerning the line construction and effective-

ness. The list goes on with IQ (Installation qualification), OQ (Operational qualification), PQ (Performance qualification), FDS (Functional design specifics), HDS (Hardware design specifics) and Risk analysis, FAT and SAT ad hoc protocols.

For the planet

Our non-stop research in reducing the packaging industry carbon footprint resulted in streamlined machinery design for packing recycled, recyclable and compostable laminates. LCA (life cycle assessment) is used to measure the en-



environmental impact of our products and identify optimal ways to reduce it. It is a 360° analysis that goes beyond the mere packaging produced and involves every step of the packaging machinery production process. We develop our solutions shoulder-to-shoulder with the main global film suppliers and test them in agreement with major multinational companies in order to provide them with a turnkey solution able to produce eco-packages.

Universal lab

Over 30 years of scientific research. Our in-house laboratory was built to always ensure the most sustainable and efficient packaging solution. The research in Universal Lab allows us to optimize machine design, efficiency and reliability by studying the most significant properties of products and newly developed laminates. That's why we are ready to pack any product using the latest eco-laminates in the market and always looking out for the development of new materials.

The company

Universal Pack is an international reference in the field of packaging. The company has over 50 years of experience in designing and building vertical machines and complete automatic lines for packaging single dose products for the food, pharma, chemical and cosmetic industry. It is present in over 150 countries and has installed more than 8000 systems. It offers cutting-edge solutions for any type of package: stick-packs, sachets sealed on all four sides, shaped packs and cartons. 🏢

www.universalpack.it



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general system pack

TWO NEW FUNCTIONAL PAPERS FOR MORE SUSTAINABLE PACKAGING

Sappi introduces “Seal Light Gloss” and “Guard MH”

Packaging paper manufacturer Sappi is market leader in the field of functional paper packaging. For more than 10 years, the company has been producing functional papers with integrated barriers against oxygen, grease, water vapour, mineral oil and aromas, as well as heat-sealing properties. Sappi is now further expanding its extensive portfolio with the “Seal Light Gloss” and “Guard MH” functional papers to offer its customers solutions that are even more customised to their specific product requirements. The innovation leader is making a decisive contribution to sustainability with these two new flexible packaging papers. The packaging solutions made from renewable raw materials represent recyclable alternatives to fossil-based packaging and help minimise the use of plastic in the long term.

- Sappi “Seal Light Gloss” with a glossy surface for outstanding printing results
- “Guard MH” barrier paper for many food and non-food applications
- Both papers are being produced on the state-of-the-art barrier coating line at the Alfeld mill in Germany

“Seal Light Gloss” – a sealable paper without barriers

The one side coated “Seal Light Gloss” features excellent heat sealability thanks to a coating on the reverse side. The paper, which is available in grammages of 54g/m² and 74 g/m², does not have any barrier properties and can be easily recycled in the paper waste stream. Over the long term, it is intended to help reduce the use of plastics in secondary packaging (e.g. for confectionery) or in primary packaging for products not requiring a barrier.

Developed for flexible packaging in the food and non-food sectors, it stands out with its natural look and pleasant feel.

Thanks to its glossy surface, outstanding printing results can be achieved with “Seal Light Gloss”, which ensures a high-quality appearance with which manufacturers and brand owners can make an impression at the point of sale.

“Guard MH” barrier paper for many food and non-food applications

With its “Guard MH” barrier paper, Sappi has developed yet another sustainable packaging solution for a wide range of different applications in the food and non-food markets, which can be disposed of and recycled in the paper waste stream.

The paper is available in Natural, Silk and Gloss variants – and all three boast a high value impression. Depending on these different surfaces of the top side – from natural matt to high-end glossy – brand owners could support perfectly the brand image of their product at the point of sale. Both the uncoated Natural “Guard MH” variant and the one side coated Silk and Gloss variants have an integrated barrier against water vapour and mineral oil as well as grease (according to test result KIT 12). While Natural is available in grammages of 60 g/m² 70 g/m² and 90 g/m², the Silk and Gloss variants are available in grammages of 75 g/m² 85 g/m² and 100 g/m².

“Seal Light Gloss” and “Guard MH”: produced on Sappi’s a new barrier coater

Sappi has far-reaching expertise in paper coating technology. For more than 10 years, the company has been producing a vast portfolio of packaging papers with integrated barriers against oxygen, grease, water vapour, mineral oil and aromas, as well as heat-sealing properties – to ensure optimum product protection. In spring 2023, Sappi commissioned a new barrier coating machine at its site in Alfeld (Germany) to produce innovative high-barrier papers for recyclable packaging for food and non-food applications. Both “Seal Light Gloss” and “Guard MH” are now produced on the new barrier coating machine. René Köhler, Director Paper & Packaging Solutions at Sappi Europe: “The topic of sustainability is a hugely important priority for us as a paper manufacturer. With our two new functional papers, we are supporting our customers in their efforts to use paper-based, recyclable alternatives to non-recyclable packaging. In addition to Seal Light Gloss and Guard MH, other papers for special applications are currently being developed that will benefit both consumers and branded goods manufacturers. We will be introducing these to the market soon.” 🏠

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PACKAGING

Mondi & Henkel partner to launch fully recyclable mono-material refill pouch for Pril

Mondi, a global leader in packaging and paper, and Henkel are helping consumers to wash dishes more sustainably by creating a completely new reuse packaging concept. The two companies worked together on a packaging solution for Henkel's hand dishwashing products that allows refilling plastic bottles from flexible pouches.

This supports Henkel's sustainability targets of making 100% of its packaging recyclable or reusable and reducing 50% of fossil-based virgin plastic by 2025.

Since January, consumers can purchase a new keep-at-home refillable pump dispenser with refills in the lightweight, mono-material pouch produced by Mondi. The flexible stand-up pouch reduces plastic by 70% every time it replaces rigid plastic bottles and is easy to recycle where existing infrastructure exists.

Convenient and lighter to carry home, the pouch completely empties thanks to its shaped design, leaving no residue. It is soft touch with a sturdy base so it can easily stand in-store, offering retailers attractive and eye-catching on-shelf appeal while also communicating all the brand information including sustainability benefits.

Mondi's leak-proof pouch is certified according to ISTA 6, providing a highly durable packaging for both in-store and online shopping.

Muriel Joncheray, Global Key Account Manager Consumer Flexibles,

Mondi says: "Sustainability is a vital element in the homecare industry and a trend that is shaping the whole market - and rightly so.

At Mondi, we have defined sustainability goals that focus on circular driven solutions in our MAP2030 action plan. This includes a target to make

100% of our products reusable, recyclable or compostable by 2025 – just like the recyclable pouch for Henkel. Our EcoSolutions approach meant that we worked very closely with the Henkel team to create the new packaging. While the aim was to provide a solution that helped Henkel reach its



The new packaging concept is being launched for Henkel's brand Pril in Germany. It has been certified by "Blauer Engel", the independent ecolabel of the German Federal Government



sustainability targets, we also needed to ensure the materials and structure would protect the product in transit and on-shelf, preventing leakage and minimising waste."

Carsten Bertram, Head of Global Packaging Innovation Dishwashing at

Henkel added: "At Henkel, we recognize our responsibility related to packaging. We're committed to driving sustainable packaging and have a set of ambitious targets.

Our strategy is based around circular economy and focuses on integrat-

ing recycled plastics, reducing the amount of plastic packaging, having reusable packaging and using fully recyclable packaging concepts to close the loop.

Mondi was the obvious partner to help us with their expertise in creating the best possible solutions - for the product, the planet and the customer."

The new packaging concept is being launched for Henkel's brand Pril in Germany. It has been certified by "Blauer Engel", the independent ecolabel of the German Federal Government that sets stringent standards for environmentally responsible products and services. 

www.mondigroup.com

- Mondi has created a recyclable refill pouch enabling Henkel consumers to reduce plastic by 70% and helping Henkel to move closer to its sustainability targets
- Henkel's Pril hand dishwashing liquid is available in a 100% recycled PET pump dispenser bottle which can be re-used many times using refills packaged in Mondi's recyclable mono PE refill pouch
- The innovative pouch is light-weight, convenient to use, certified as leak-proof and highly durable even for home deliveries



FreshSAFE packaging concept for equilibrium atmosphere packs

EXTENDED SHELF LIFE for delicate natural products

Fruit and vegetables continue to live after harvesting. If the product is to remain fresh and appetising in the pack up to the point of consumption, the metabolic processes must be controlled by an innovative method.

Thanks to the FreshSAFE packaging system from MULTIVAC, there is a method of producing equilibrium atmosphere (EMAP) packs, which optimises the oxygen content in the packs in a continuous, natural and sustainable way. Les Maraîchers d'Armor, a cooperative in the French region of Brittany, uses the technology to pack its white beans, the so-called "Cocos de Paimpol", in trays under modified atmosphere, enabling the shelf life and quality of the product to be preserved for as long as possible.

Les Maraîchers d'Armor is a cooperative situated in the heart of the vegetable growing area of Les Côtes d'Armor.

More than 420 gardeners, operating in the north west corner of Brittany, cultivate over 80 types of vegetables as well as strawberries and other fruits, and the annual production quantity is around 175,000 tons. In conjunction with two other cooperatives in Brittany, the products are marketed under the well-known label of "Prince de Bretagne".

Cocos de Paimpol – well-loved and very delicate

Around 200 producers concentrate on the cultivation and propagation of white beans, which are marketed un-



der the name of "Cocos de Paimpol". These yellow and violet-flecked pulses with their egg-shaped seeds and delicately melting "bite" find their ideal growing conditions in the area between Paimpol and Tréguier. In 1998 the "Cocos de Paimpol" was the first fresh vegetable and the first Breton product to receive a special designation of origin, and several years later this became a protected product name.

"In order to be able to satisfy the demand from consumers for a ready to cook, "all-in-one" product, the idea was conceived in 2020 of packaging the Paimpol beans under modified atmosphere," explains Florian Josse, who is responsible for new product innovations at the cooperative. "The challenge was to find a reliable packaging concept for a semi-dry pro-

duct, which alters extremely rapidly after harvesting."

The solution: FreshSAFE. This process involves pre-perforated films, or films perforated mechanically on the MULTIVAC packaging machine itself, which ensure that a controlled oxygen permeability is achieved, and this can be matched exactly to the specific respiration characteristics of the particular fresh product.

The objective is always to maintain the most beneficial concentration of oxygen and carbon dioxide for the particular product.

This equilibrium atmosphere (EMAP) is achieved through the interaction between the respiration of the product and the required permeability of the film. The FreshSAFE packaging system

can be produced on thermoforming packaging machines and traysealers as well as chamber machines.

T 600 traysealer with FreshSAFE microperforation system

At Les Maraîchers d'Armor the T 600 is used, the smallest fully automatic MULTI-VAC traysealer that can be integrated into a line. This versatile and scalable model is suitable for packing small and medium-sized batches very flexibly, and it is particularly easy to operate thanks to its IPC06 machine control with touchscreen. The T 600 is equipped with the MULTIVAC FreshSAFE microperforation system, which automatically perforates the upper web during the packaging process. Thanks to the cost-effective needle perforation system, all current upper webs can be perforated to the individual permeability that is required.

In order to meet the requirements of Les Maraîchers d'Armor, the packaging line also included a TDS 300 denester from TVI, as well as a MDC drag chain in-feed system and direct web printer from MULTIVAC. The packs themselves consist of a board tray and

a transparent upper web, so that the consumer can see the freshness of the product at a glance.

Significantly extended shelf life thanks to FreshSAFE

Due to the FreshSAFE microperforation system, the product retains all its sensory characteristics in the pack. It remains appetising as well as fresh, and its shelf life is significantly longer than products packed in other types

of packaging. This means that there is considerably more leeway in the supply chain, and this gives processors like Les Maraîchers d'Armor a better opportunity to market their high-quality but delicate natural products 🏡

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SCIENCE AND THE CONSUMER: the key to the packaging circular economy

*Winfried Muehling, Marketing & Communications
Director, Pro Carton*



PRO CARTON
PACKAGING FOR
A BETTER WORLD



In the current discussion around single-use and reusable packaging, I feel a crucial dimension is being lost: the consumer. Consumer engagement plays an essential role and policies to promote the circular economy will be most effective if they consider the factors that shape consumer behaviour and demands.

Consumers want to do 'the right thing', but legislators and businesses must first create the conditions for them to act. Their buy-in is absolutely crucial.

The European Commission's proposal to amend the Packaging and

Packaging Waste Regulation (PPWR) - which focuses on the implementation of reusable packaging - has proved a source of controversy, not least, because it appears to contradict the will of the consumer.

One of the conclusions from our 2023 consumer research, which examined the attitudes of over 5,000 Europeans towards the environment and packaging, was that consumers have a high level of trust in packaging material manufacturers and brand owners when it comes to securing a future with recyclable packaging solutions. In fact, 92% of consumers in Europe see the responsibility with

packaging suppliers and brand owners, and only 8% with legislators.

Advocating for a mandatory reuse system undermines the ability of these stakeholders to innovate in such a way that drives the circular economy and to further improve recycling abilities in a sustainable and widespread way. This one-size-fits-all approach is a hindrance, not an aid.

Fortunately, there is another option: Life Cycle Assessments (LCAs). LCAs of packaging materials identify, quantify and assess sources of environmental impact throughout a product's life cycle, taking into account the supply

of raw materials for all packaging components, use of packaging and disposal after use.

The result is that product packaging can be scientifically evaluated on a case-by-case basis, accounting for the concerns and demands of the consumer, and closely evaluating the environmental impact of the packaging solutions chosen.

However, in disregarding science in favour of top-down regulation, we are seeing potential cracks start to appear in the Commission's plans.

In Germany, in a bid to comply with the proposal, fast food restaurants have set up deposit systems for reusable packaging - including for "take-out" consumption.. These require consumers to store reusable packaging, rinse it and return it to the restaurant to

redeem their deposit. The system risks alienating consumers by demanding a less convenient habit change, driving up the costs of value meals (for a family, the deposit could be more than 10 euros) and creating uncertainty around food hygiene - a non-negotiable criterion.

The importance of consumer acceptance cannot be overstated if high return rates, and high rotation rates, are to be achieved.

Unfortunately, there is little evidence to suggest consumers are on board. Our recent survey, in which more than 1,000 German consumers were polled about their packaging preferences revealed that two-thirds (66%) of respondents demonstrated a low acceptance level of mandatory deposit schemes. Furthermore, in the fast-food setting, behaviours are largely the

same, with 61% preferring to dispose of their packaging for recycling, compared to 39% who would choose to store, rinse and return reusable plastic packaging to a collection point.

It is worth remembering that Germany is a country in which deposit return systems have been used for decades in different variations.

Navigating this complex issue requires us to be agile and flexible – neither of which is possible with the current approach. Professionally prepared LCAs provided us with a clear avenue towards the circular economy, educating business owners on the best solution on a case-by-case basis, with close adherence to the demands of the consumers, and the interests of the environment. 🏠

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PERSPECTIVE

**PERSPECTIVE of NVC NETHERLANDS PACKAGING CENTRE on
Draft IENW/BSK-2022/263822 by Ms. VLWA Heijnen MSc.**



NVC NETHERLANDS PACKAGING CENTRE

This PERSPECTIVE comprises three parts:

1. Introduction of association NVC and its position on packaging and environment
2. Analysis of packaging and environment over the period 2013-2022
3. Policy recommendations for the year 2023 and beyond



1. Introduction of NVC and its position on packaging and environment

Every second, the world packs some 320,000 products - and the world's population unpacks them later and in a different location. NVC was founded in 1953 and now unites over five hundred companies with an interest in continually improving packaging. The NVC membership includes retailers, packaging suppliers, machine suppliers, branded article manufacturers, pharmaceutical companies, companies in the chemical industry, packaging printers, co-packers, design agencies, recyclers, testing institutes, and so on.

NVC supports its member companies by providing them with up-to-date and reliable business information, by jointly carrying out innovation projects, by educating and training their employees in packaging and by 'matching' supply and demand in the market ('market support').

Specific to packaging and environment, these include the following activities:

- Inform member companies of global legislative and regulatory developments through the NVC Members-only Environment Regulations Guide MERGE
- The NVC Workshop Sustainable Innovation in Packaging (Live Online, so 100% interactive and participation possible from any location worldwide)
- The PUMA Project towards the end of packaging as an environmental problem (see the enclosed PUMA MANIFESTO and all background information at: www.nvc.nl/puma)
- Stimulating innovation in the sector by scouting new techniques and linking supply and demand through exhibitions, conferences and the NVC online Buyer's Guide

NVC works with a 'holistic' vision to improve the activity of packaging, obviously in the Netherlands but especially also on an international scale, given the structural developments in the actors involved in packaging, like the raw material suppliers, the packer-filler industry, the logistics and the retail.



NVC has played an active role in the development of European (CEN) standards in the field of packaging and packaging waste since 1994 resulting from the European Packaging and Packaging Waste Directive of December 1994. Thanks in part to NVC's initiative and its active role in the standards development itself, the world (ISO) standards in this area were published in 2012. Photo: the plenary meeting of the ISO working groups on 6 May 2011 in Atlanta USA at the Coca Cola headquarters.



The PUMA MANIFESTO has now been published in nine languages (Dutch, English, French, Italian, Korean, Japanese, Chinese, Spanish and Portuguese). The German-language edition will be published on Wednesday 3 May 2023 during the PUMA World Conference in Düsseldorf, Germany. From 4-10 May 2023, the world's largest packaging exhibition with more than 100,000 visitors will take place there: the interpack2023. NVC will promote the results of the PUMA World Conference there from a dedicated stand (ENB/03) at the Main Entrance North.

NVC is not a 'vertical' trade association, like, for example, FNLI (the umbrella organisation of the food industry in the Netherlands) or CBL (the trade association of Dutch supermarkets) or NRK (the federation of plastics and rubber manufacturers). As such, NVC's primary tasks are therefore not to 'lobby' the central government to promote specific industry interests. However, we do appreciate maintaining good contacts in this regard.

NVC communicates 'across the board' via NVC News and in the various social media. The NVC website attracts about **sixty thousand unique visitors** annually (about 60% of whom are based outside the Netherlands). Some **thirty thousand professionals** and organisations located worldwide follow NVC daily via social media, especially Twitter and LinkedIn.

NVC is worried about the state of affairs regarding packaging and the environment in the Netherlands and worldwide in 2022. The first European legislation on packaging and packaging waste dates back to December 1994(!) and we are now on the eve of the year 2023. In the meantime, a proposal for follow-up legislation was launched by the European Commission on 30 November 2022: the Packaging and Packaging Waste Regulation PPWR.

As a society and industry, we unfortunately have to conclude that the problems have clearly not been solved over the past 29 years. On the contrary, they seem to have actually gotten worse. Why is this? What can we learn from the past and how can we all do better in the future? How do we **end packaging as an environmental problem**? You can find this NVC basic position in our PERSPECTIVE on the Draft Decision of the Minister.

2. Analysis of packaging and environment over the period 2013-2022

The first significant European legislation on packaging and the environment dates from [December 1994: the European Packaging and Packaging Waste Directive](#). At that time, the Netherlands already had the Packaging Covenant, with the actor on the industry side towards the central government being the Stichting Verpakking en Milieu SVM. There came a Second Covenant in the Netherlands, with SVM.PACT (Project Administration Covenant Two) as the implementing organisation, and the European Directive was transposed into Dutch law in the year 1997.

With the Extended Producer Responsibility EPR comes a financing system for collection and recycling. After an 'interwar period' in which the central government started levying a Packaging Tax, [the Packaging Waste Fund Foundation StAV took office in the year 2013](#). In conjunction with - and paid for by - the StAV, several other foundations came into being, each of which started working in a subfield.

To be mentioned in this context is the [Knowledge Institute for Sustainable Packaging Stichting KIDV](#). This organisation has the Stichting StAV as its only client, with the mutual performance agreement being confidential. Over time, the pricing for specific materials (plastics) by Stichting StAV has been linked to whether or not they comply with Recyclechecks to be drawn up by KIDV. The operational relationship between Stichting StAV and Stichting KIDV is characterised by intensive personal ties (the former Stichting KIDV director is now Stichting StAV director).

To [address litter, the Stichting Nederland Schoon SNS](#) was set up. Its funding was originally linked to the moderated introduction of deposit fees on specific types of emptied packaging. April 2022, the Stichting StAV presented a plan to collect a whole range of 'deposit-fee sensitive' emptied packs (bottles, cans) through a large number of 'circular hub' collection sites. The plan did not include a public cost budget and went off the table soon after presentation.

Now, after a legal joust and a three-month delay, [deposit fees](#) will be introduced [across the full breadth of the relevant packaging spectrum on 1 April 2023](#). What are the costs going to be? The question also arises as to the usefulness of the continued existence of, or funding by, the Stichting StAV of the Stichting SNS.

Regarding the [Stichting Nedvang, a different corporate form is envisaged for the coming years](#): a Private Limited Company (BV). This raises the question of the (future) ownership structure, including the financial allocation of any profits generated by this BV.

StAV's internal organisation comes up for discussion in a report by ILT Inspectorate¹ which audited the accounts for the year 2019. The report contains damning conclusions

regarding the [limited financial, accounting robustness of the organisation](#), including the remarkable way the auditor approved the StAV financial statements for the year in question. The question is, whether these criticisms have now been addressed and durably covered by the Stichting StAV.

The substantiation of the rates used by the StAV Foundation is also unclear, with sudden rate changes (/increases) of up to +1000% occurring in recent years². There are concerns about the [unsatisfactory substantiation of the proposed rates](#) and about the possibility that the Stichting StAV, after having been granted the General Binding Declaration (AVV) by the Minister, has a free hand for five years to implement substantial and unexpected rate increases.

The accountability of the Stichting StAV and the policy structure it funds is also negatively discussed in a recent study by the University of Utrecht³. It analyses for various product categories, including packaging, the extent to which collection and recycling takes place in a transparent manner, with an unambiguous allocation of the various responsibilities. [The situation for the packaging sector is outlined as unfathomable](#).

Finally, there are questions about the data available to the Stichting StAV in the context of its levies. To [what extent are the personal and business data of the Dutch industry paying the fees shared](#) with the Stichting KIDV, the Stichting Nederland Schoon and Nedvang BV - and then through these entities with third parties engaged by them (consultancies, lawyers, self-employed professionals, and so on)?

All in all, major concerns have grown at NVC over the past decade about the effectiveness of the policy structure around the StAV Packaging Waste Fund Foundation as set up in the year 2013 and legitimised by the central government. The concerns focus on two questions:

- 1. What charges does the Stichting StAV want to charge, with what justification?**
- 2. What environmental performance will be achieved by the Stichting StAV with these targeted levies?**

Question 1 has increased in importance now that there is talk of a possible tripling of the envisaged levy per Dutch company, while this was denied in so many words by a representative of Stichting StAV in an NVC members' meeting in early 2022. The foundation's draft multi-year budget is insufficiently conclusive. The foundation does not commit to the level of tariffs for the coming years. What will be the costs (revenues) of the introduction of deposit fees as of 1 April 2023? The basic organisational system costs (at €12.5 million a year equivalent to a workforce of 100 FTEs and significantly increasing) also lack substantiation.

¹ www.ilent.nl/actueel/nieuws/2022/07/08/afvalfonds-behaalt-recyclenorm-voor-2019-maar-de-onderbouwing-schiet-tekort

² www.afvalfondsverpakkingen.nl/nl/tarieven (other metals)

³ studenttheses.uu.nl/handle/20.500.12932/518



Question 2 is almost even more important, especially now that the definition of 'recycling' is changing. A look at the Model in the PUMA MANIFESTO makes this clear. In fact, the 2013-2022 period looked at the amount of Collect-Control and not at the amount of 'newly usable, circular' materials actually created via a material recycling Backend process. Also, it is fundamentally flawed to exclude energy aspects from Collect-Control and Backend processing.

Essential for sustainable decision-making is the elaboration of the Circular Materials Plan (CMP1) promised by the Minister to be published by mid-February 2023, including an analysis of the desired material flows in the context of the Circular Economy of the Netherlands.

The NVC Survey The future of the packaging recycling in the Netherlands certainly will take into account the insights of the CMP1. The results of the NVC Survey will be presented on 5 April 2023.

Finally, an [analysis of the timeframe leading up to the Draft AVV decision](#) over the past twelve months. In the spring of 2022, we communicated our concerns to the Stichting StAV and on 11 May 2022 we met with the management. We had constructive discussions with various industries, the policy department of the Ministry, the Inspectorate and several Members of Parliament.

A total of over hundred NVC member companies actively participated in one or more of the NVC member meetings on the topic. NVC attended the parliamentary debates of the

relevant Lower House parliamentary committee and actively shared the information with NVC member companies and the industry as a whole.

The Draft Decision with an intended entry into force of 1 January 2023, was published on 7 November 2022. Given the deadline for the submission of PERSPECTIVE by interested parties like NVC (six weeks, i.e. until 19 December 2022 at the latest) and the intended entry into force of 1 January 2023, [the Minister has only a week and a half to make a decision](#). This is questionable for a dossier with an impact of at least €2 billion in costs for business and - in our view, much more importantly - with an obligation to future generations to now actually start making an end to packaging as an environmental problem in the Netherlands and worldwide.

Based on the above, one conclusion must unfortunately be that the policy structure in place since 2013 to manage packaging collection and recycling has serious shortcomings anno 2022. This entails significant risks for the Netherlands society, both in terms of costs in an economically turbulent period and in terms of (not) meeting environmental targets in a world where environmental issues rightly need to be addressed.

The decision-making on Draft Decision IENW/BSK-2022/263822 by Ms. VLWA Heijnen MSc., Minister for Infrastructure and Water Management, regarding a General Binding Declaration AVV of the levies by the StAV Waste Fund Foundation (Stichting Afvalfonds Verpakkingen) is a [decisive benchmark](#) in the context of the above.

3. Policy recommendations for the year 2023 and beyond

With regard to the Draft AVV Decree, we submit the following recommendations for the Minister's consideration. Of course, the Minister is free to adopt them entirely, partially or not at all. In all cases, we would appreciate receiving a motivation and will actively share them with our member companies and the sector as a whole.

1. Postpone your final Decision until 1 July 2023.
2. Include in your final Decision the insights from your CMP1 (to be published mid-February 2023) and ideally the results of the NVC Survey the future of the packaging recycling in the Netherlands 2023-2027 (results known 5 April 2023).
3. As a condition for a final Decision, ask the Stichting StAV for an analysis addressing the years 2023-2027 of the budgeted costs in relation to the environmental results. This analysis should also include the impact of the various Stichting KIDV recycling checks on costs and environmental results to be achieved.
4. In your final Decision, require the Stichting StAV to pre-determine rates for all years covered by the AVV.
5. As part of your final Decision, request disclosure of the performance agreement between Stichting StAV and Stichting KIDV including the annual reviews for the past years 2013-2022.
6. Engage Parliament prior to your final Decision, especially in the run-up to the public meeting of the Parliamentary Committee on IenW in the spring of 2023.



Gouda, 14 December 2022
NVC NETHERLANDS PACKAGING CENTRE

Stationsplein 9k, 2801 AK Gouda, The Netherlands
☎ +31-(0)182-512411 ✉ info@nvc.nl

Sharing the future in packaging
www.nvc.nl

C-CONNECT, the Cavanna digital platform at the customer's service

Ideal tool for optimizing the productivity of packaging lines

World leader in the primary and secondary packaging sector, Cavanna aims at achieving the maximum efficiency in the packaging lines and making the production process ever cheaper, faster and more sustainable.

Riccardo Cavanna, President and Lead Strategist of the company, says "To achieve this goal, at Ipack Ima we presented a digital platform, C-Connect, accessible, via single sign-on, both from computer and mo-

bile, in which to find all the services dedicated to the single customer."

All the various functions can be summarized into four major macro-areas:

1. Maintenance and Repair

- digital technical documentation of the installed machinery (manuals, electrical and pneumatic diagrams, SAT / FAT documents or reports);
- e-Commerce on standard spare parts or upgrades. This Web Spares area is connected to the management system and allows,

via web services, to have prices and availability of items in real time;

- e-Learning through video tutorials and trouble-shooting;
- 3D spare parts catalog to find interactively and without possibility of mistake the parts.

2. Optimization and Planning

- customer service to request immediate technical assistance and monitor progress;
- history of maintenance interventions to facilitate any training.



Maintenance and repair

- Interactive and dynamic documentation
- e-Commerce
- e-Learning
- Interactive knowledge database

Optimization and planning

- Customer service
- Intervention tracking

Monitoring and management

- Smart Monitoring Platform

Value-added services

- Digital twin

3. Monitoring and Management

- Smart Monitoring Platform, a dashboard where you can see the real-time data of the machines in production.

All users, from the workshop to senior management, can have access to this data by supervising and optimizing every aspect of the lines.

Furthermore, it is possible to monitor the hours worked of known functional groups, sending notifications via e-mail when the end of life is reached. This allows to make decisions and order replacement parts in no time, improving efficiency and solving downtime immediately.

and allowing the customer to make the right decisions.

"The experience accumulated, with over 30 lines already connected, has shown us that a connected machine records performances of over 20% and a 78% reduction in interruptions thanks also to preventive maintenance and Cavanna's expertise", declares Antonio Marangon, Service Division Manager. Concluding "The possibility of interacting with our technicians remotely, through the Cavanna Support APP, both via chat

and video call, has been a success in these pandemic years as it has allowed, despite the restrictions and difficulties to travel, a significant time saving and immediate problem solution.

Through this APP in these first two years of operation of the C-Connect corporate platform we have closed more than 450 tickets with a customer satisfaction rate of 97%".

Visit:
www.cavanna.com

4. Value-added services

- Digital Twin, a Cavanna proprietary simulation tool to help design complex systems guaranteeing certain OEE values, experimenting with different "what-if scenario"



Print Apply: ETIPACK launches Stick Evo 4" the first model of the new range

Flexibility, performance and efficiency for real-time printing and contactless application



Etipack, a specialist in the design and manufacturing of advanced systems for product labelling and coding, feeders and pick and place systems for product distribution and manipulation, presented at the latest edition of Cibus Tec exhibition, the new Automatic Print and Apply Stick Evo 4".

The first model of the new Print Apply range, it is an automatic system that prints and applies labels in real time on packaging and/or products moving along the production line.

Designed to print barcodes, images and variable data, at the heart of this system is a powerful thermal transfer printer with bi-processor electronics, which guarantees a high level of performance. All models in the Print Apply series will integrate an XDM print engine from Novexx Solutions,

the Possehl Group company to which Etipack itself belongs from 2019.

A synthesis of quality efficiency and versatility, to well adapt to highly variable production requirements

Distinctive features of each solution in the range, versatility, ergonomics and lightness, which combined with performance excellence shape Etipack's approach to new market demands. Modular technologies, developed to support production requirements more flexibly, as exemplified by the plate housing redesigned to easily integrate also printing modules of different brands.

Maximum efficiency and precision in contactless application, always extremely accurate, thanks to the application unit equipped with a pneumatic cylinder that blows the label



onto the box or onto moving products. Production autonomy is also excellent, thanks to the labelling printer that uses thermal transfer ribbon reels, up to 600 meters long to meet all production requirements.

Efficiency and reliability, precision, safety and process optimization, for technologies that are able so well to manage market variability and are therefore ideal solutions for even widely differing product sectors.

Aimed at optimizing consumption and working time is also the maintenance of the models in the new Print Apply range, which benefit from his-



tory printhead control for safer and longer-lasting technologies.

The full range of Etipack solutions for the food supply chain

Etipack, a company specializing in made-in-Italy systems for labelling and coding with pressure-sensitive la-

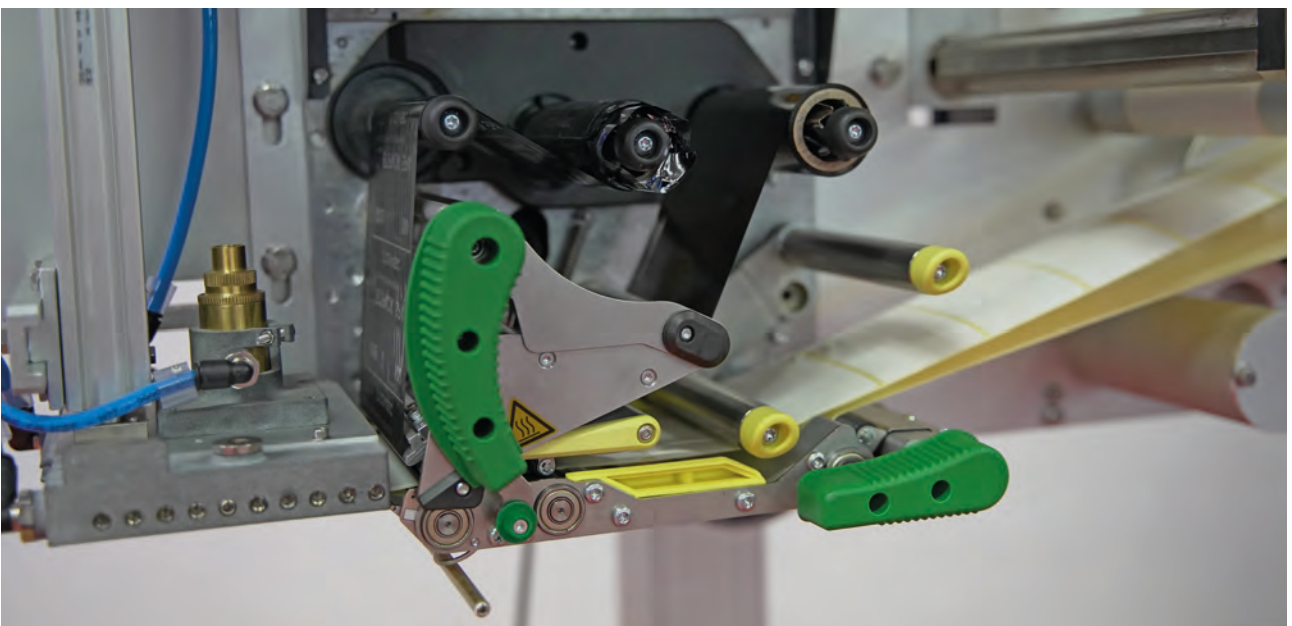
bels, feeders and pick-and-place systems for the distribution and handling of products, offers a range of over 100 solutions capable of meeting the many requirements of the food industry in support of packaging activities.

The product portfolio includes labelers for pressure-sensitive labels, print-

ing and application of barcodes, QR codes, datamatrix, tray destackers, pick-and-place feeders, friction feeders, and bandolier feeders.

Find out more at etipack.it/en/sector/food/ 

etipack.it



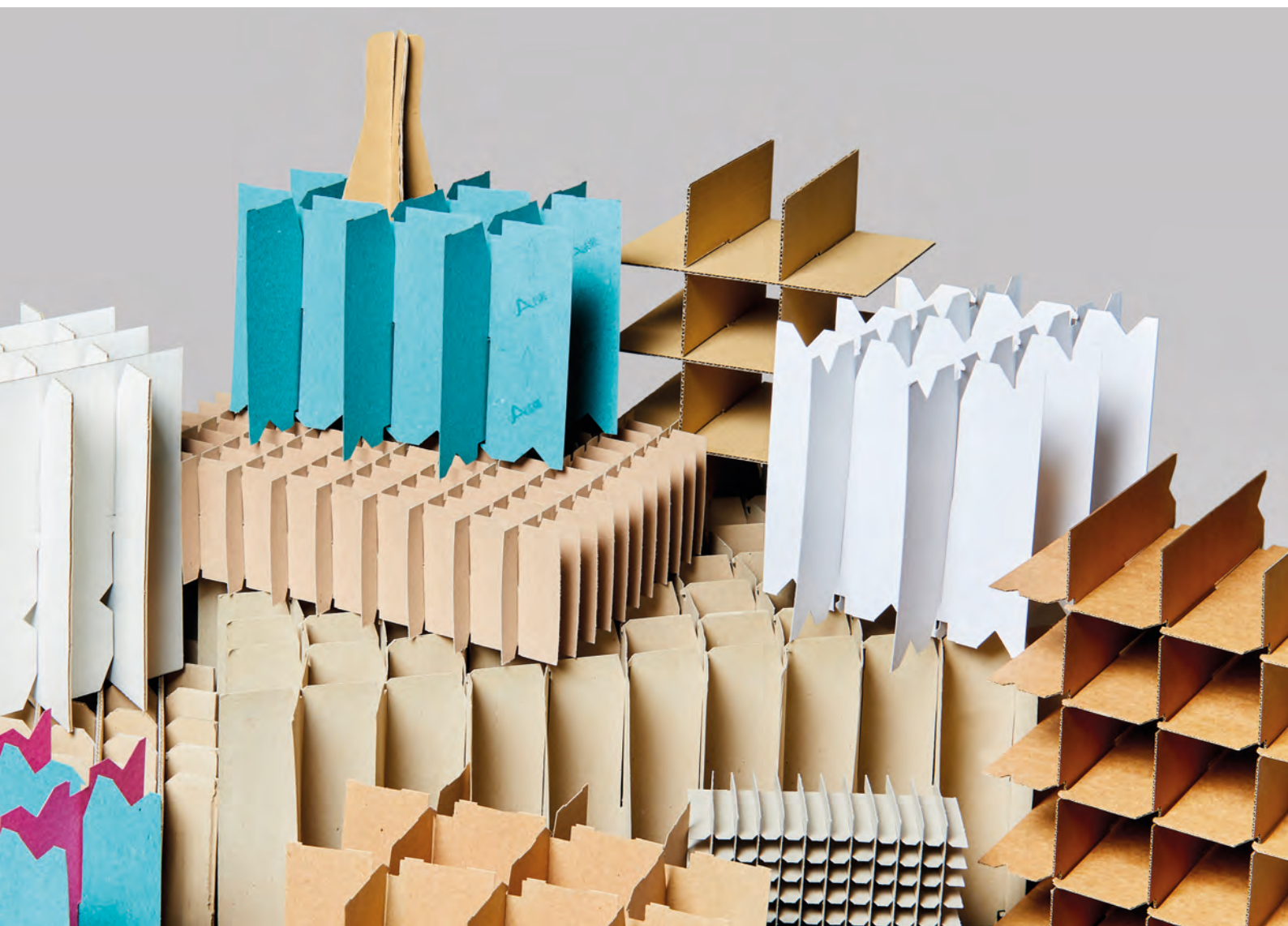
Protecting your products SINCE 1991

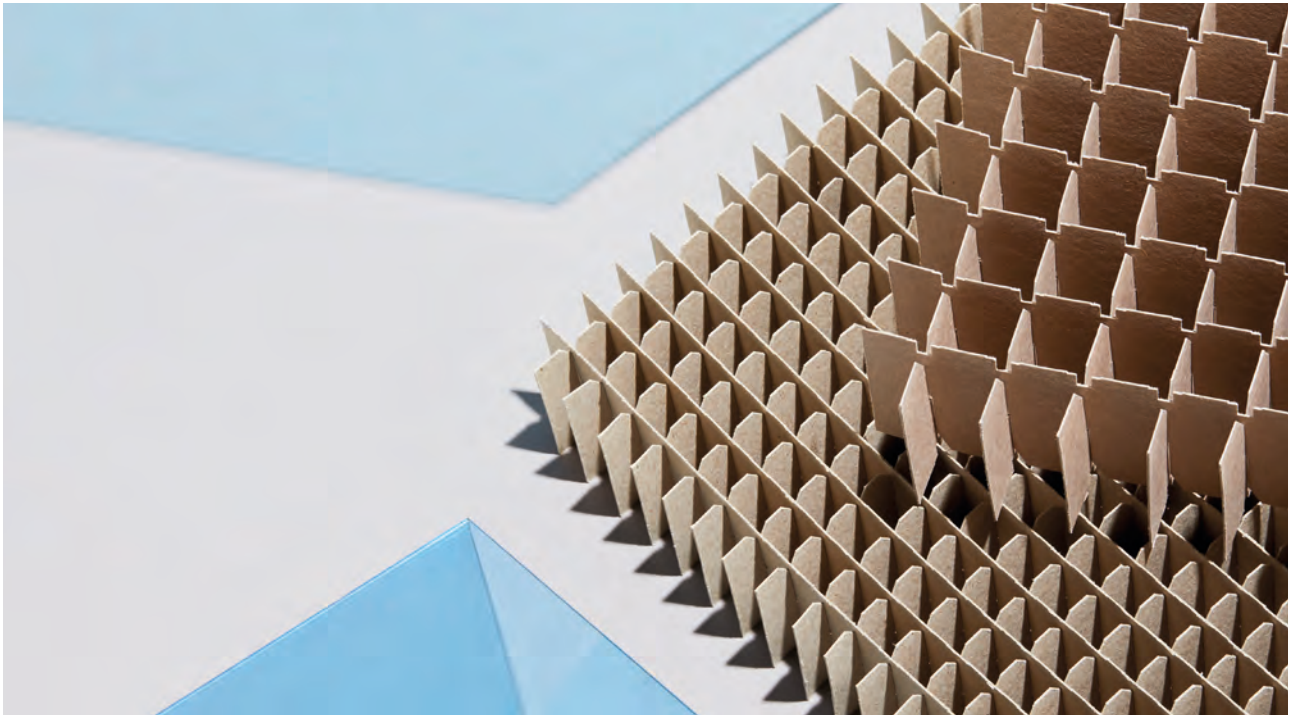
It was 1991 when Walter, Maria Grazia, and Davide started and shaped their project of manufacturing beehives and separators. Back then, the idea of offering the market that particular support for protecting products being shipped worldwide wasn't very widespread, but it immediately received a positive response.

From that moment, the three pioneers made investments and innovations to

stay one step ahead, creating a well-organized structure with technologies and machinery and ensuring quick and customized responses to their customers. Today, L'Alveare, considered a leading company in the production

and delivery of tensioned and corrugated cardboard packaging products, relies on highly experienced collaborators, an always updated machine park, the ability to work with various sizes, and the availability of





its own means for direct deliveries. Sustainability, environmental attention, and organizational efficiency are at the core of the company's philosophy, in addition to being the basis for the quality of the offering, with the awareness that dealing with fragility and responding to the need to "protect" means thinking thoroughly about preserving every creation of humankind.

The use of recycled and recyclable cardboard allows customers to reduce the carbon footprint of their products, supporting the image of a sustainable company, which is increasingly demanded by the market and consumers.

Solutions of every complexity and size are available for different categories of clients, including the Beverage Sector (separators and beehives for wine, spirits, beverages, and water bottles), Glassware Sector (for glass bottle and container manufacturers, up to a maximum size of 1250 mm), Mechanical and Mechatronics Sector, as well as the Pharmaceutical/ Cosmetic Sector. 🏢



www.alveare.com

FIORINI INTERNATIONAL: the partner for sustainable paper packaging solutions

Fiorini International produces small and medium paper bags for international customers in the human food and pet food industry, agriculture, chemical industry, hygiene and personal care segments and for global leaders in large-scale distribution: a range of products and finishes that supplies a flexible solution to every need.

Achieving excellence by focusing on the continuous improvement of quality of products, services and processes and designing a sustainable production model to ensure environmental and human respect are the main values that drive the definition of the strategies and everyday actions.

A constant consolidation of the market share and the new challenging opportunities in the packaging industry have been the main drivers for Fiorini International to become a strategic partner in the Drive to Paper process and in the design of sustainable packaging

solutions, fully and easily recyclable, compliant with existing filling technologies, according to the European directives.

In order to measure and evaluate sustainability and performance and design the path for a sustainable development, Fiorini International has started its sustainability performance assessment with a series of activities focused on minimising environmental impact and to creating awareness of sustainability culture, offering solutions and answers to the community and engaging the entire company network, supporting by a strategic scientific partner Università Milano Bicocca and Toroto, a leading environmental company.

The company commitment to sustainability development has been awarded with the Leader in Sustainability 2023 award: the important acknowledgement is the result of a research by Il Sole 24 Ore and Statista that exami-

ned about 1,500 Italian companies based on 45 key sustainability environmental, social and economic indicators.

The continuous analysis of trends and consumer habits, and the ongoing research into technological solutions and innovative materials have aided an organic and rapid growth in the packaging industry, leading the company to successfully diversify production, while firmly maintaining the eco-friendly commitment to the exclusive use of paper, FSC certified in compliance with the forest chain of custody and ecosystem.

Made up of 2 manufacturing companies, located in Italy and the Czech Republic, and 2 trading companies operating in France and China, Fiorini International stands out as a worldwide production, commercial and logistic network. 🏢

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“TRUTHS AND MYTHS ABOUT MILK: DEBUNKING FAKE NEWS”

According to the National Institute of Nutrition, milk, along with its derivatives, is a fundamental part of a balanced and healthy diet. However, there is no shortage of fake news surrounding it: from real and alleged lactose intolerance to inaccurate claims about cholesterol and rumors about alleged contaminants, there is a growing disillusionment with this important food, which poses potential, real risks to health, especially for children and adolescents.

Nutritionists and experts agree: milk and its derivatives, such as yogurt, dairy products, and cheese, are essential for a healthy diet. This is due to their content of minerals, calcium, magnesium, potassium, vitamins (primarily D, A, and B12), essential macronutrients, and other elements beneficial to the body.

For this reason, despite its appearance being deceiving, milk is not a beverage but a genuine food, which nutritionists recommend incorporating into one's daily diet at every age, with a special focus on pediatric age.



by
Elisa Crotti



images: jcomp_ freepik.com

The Benefits of Milk

Many pages could be written about the benefits of milk. Just consider that nutritionists rank it second among the five food groups essential for a proper diet.

Milk, dairy products, and yogurt primarily provide readily absorbable calcium and high-quality proteins to the body. To give you an idea, 250 ml of milk a day provides nearly 40% of the daily calcium requirement for the body.

Equally important is the role milk plays in helping children develop strong bones and healthy teeth. In adulthood, it provides the energy needed to maintain overall well-being and prevent age-related disorders. For those who engage in sports, this food serves as a natural source of sugars and essential amino acids that are readily available, useful for boosting metabolism, and, at the same time, replenishing the proteins and glucose burned during physical activity. Therefore, milk works better than supplements or sports drinks, as it promotes lean muscle mass growth and rapid recovery. A special note applies to women, for whom milk and its derivatives play an essential role in preventing problems related to the onset of menopause, such as osteoporosis, loss of muscle tone,

and a sense of physical and mental fatigue. There are many more benefits of milk that we won't delve into here. While the scientific case for milk is clear, attitudes toward it are much less settled.

The Milk Myths: Is Milk Harmful?

The first and most common myth about milk concerns its alleged harm to adults.

According to rumors, this food is harmful because it is intended for growth, while only humans among animals consume it throughout their lives.

In reality, cow's, goat's, or sheep's milk has been part of the human diet for thousands of years, to the point that our genome has evolved to allow the production of the enzyme responsible for breaking down lactose, the sugar in milk, even in adulthood.

In Europe, a genetic mutation in humans (known as -13,910*T) is closely linked to lactase persistence and appears to have been favored by natural selection over the last 10,000 years.

Research published in PNAS reveals that consuming raw milk contributed, between 7,000 and 2,000 years ago, to the increased height and stature of inhabitants in some regions of central and northern Europe.





Milk not only provided these northern and central European populations with more energy but also made them more lactose-tolerant.

Lactose Intolerance?

According to experts, the severity of lactose intolerance is often overestimated by the population.

Most patients have a partial deficiency of lactase, which means they can tolerate a certain amount of milk or cheese without discomfort.

In Italy, confirmed congenital lactose intolerance is quite rare, while a loss of enzyme efficiency with age is more common.

While the inability to use lactose in adulthood is relatively widespread in China (95%), Mongolia (87.9%), and India (20%), it is low in Europe.

It is also important to remember that there are non-genetic causes for disorders related to milk consumption, such as concurrent intestinal diseases that affect mucosal function (e.g., ulcerative colitis or persistent viral infections).

Therefore, there are two types of lactose intolerance. The primary form develops at any age or begins after the age

of two when the production of lactase naturally decreases. The secondary form appears later in life, following the diseases mentioned above or after chemotherapy, and can occur at any time in an individual's life, although it is most common in childhood.

In general, lactose malabsorption does not result in symptoms in 75% of cases, and clinical studies confirm that consuming a cup of milk a day tends not to have noticeable effects in the vast majority of people defined as lactose intolerant.

Furthermore, lactase is inducible: the global map of areas with a higher frequency of adult-type lactase deficiency coincides with the map of areas with lower milk consumption. So, giving up milk in a do-it-yourself diet is not a good choice.

Milk and Cholesterol

Another widespread fake news myth concerns the idea that milk and its derivatives contain high concentrations of cholesterol.

First and foremost, it is important to consider that, yes, like many animal-based foods, products derived from milk

latest news

do contain some cholesterol. However, just as in all families, the various components are not very different, ranging from a minimum content of 5 mg or less per 100 g (as seen in yogurt) to around 200 mg per 100 g in butter. When it comes to cheese, there is a lot of variety.

In low-fat cheeses, the amount is around 50 mg per 100 grams of the product (as is the case with ricotta and mozzarella). In other cases, it reaches or exceeds the threshold of 100 mg.

Clarifying this aspect, it's worth looking at other food families to understand that aged cheeses contain a relatively low amount of cholesterol.

According to INRAN/MiPAF data, 100 grams of roasted chicken contain 119 mg of cholesterol.

Mollusks, such as mussels or shrimp, have cholesterol levels ranging from 120 to 150 mg per 100 g. In some sausages and organ meats, cholesterol levels can exceed 200 mg (up to 500 mg, for example, in bovine sweetbreads).

Not to mention eggs, which contain up to 370 mg per 100 grams of product.

Another good piece of news, not fake, is that numerous recent scientific studies have concluded that consuming cheese does not inherently lead to an increase in LDL cholesterol (bad cholesterol) but appears to promote HDL (good cholesterol).

In summary, when consumed as part of a balanced diet, cheese helps to keep us healthy. It's not just grilled chicken and salad, in other words.

Giving Up Milk? No Thanks

Unless there are medical reasons or specific ideological convictions, giving up milk due to some fake news read online is certainly a questionable choice.

It means forgoing a healthy, natural food with enormous potential.

The drawback is that those who do not consume dairy products for extended periods will increasingly have difficulty digesting this food – which sounds like a missed opportunity.

What should you choose? Whole milk without added sugar, plain yogurt, quality cheeses (preferably PDO), and special attention to children's powdered milk. The combination with other foods also plays an essential role.

But that's another story.



Industrial Auctions

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Online auction machinery for the food industry
in Zamość (PL)



Online auction food processing machinery,
bakery and catering equipment in Eindhoven (NL)



Online auction pig slaughtering equipment and inventory
due to company closure of Danish Crown in Søby (DK)



Online auction machinery for the food industry
due to closing production location Hawesta in Lübeck (DE)



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

B.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.

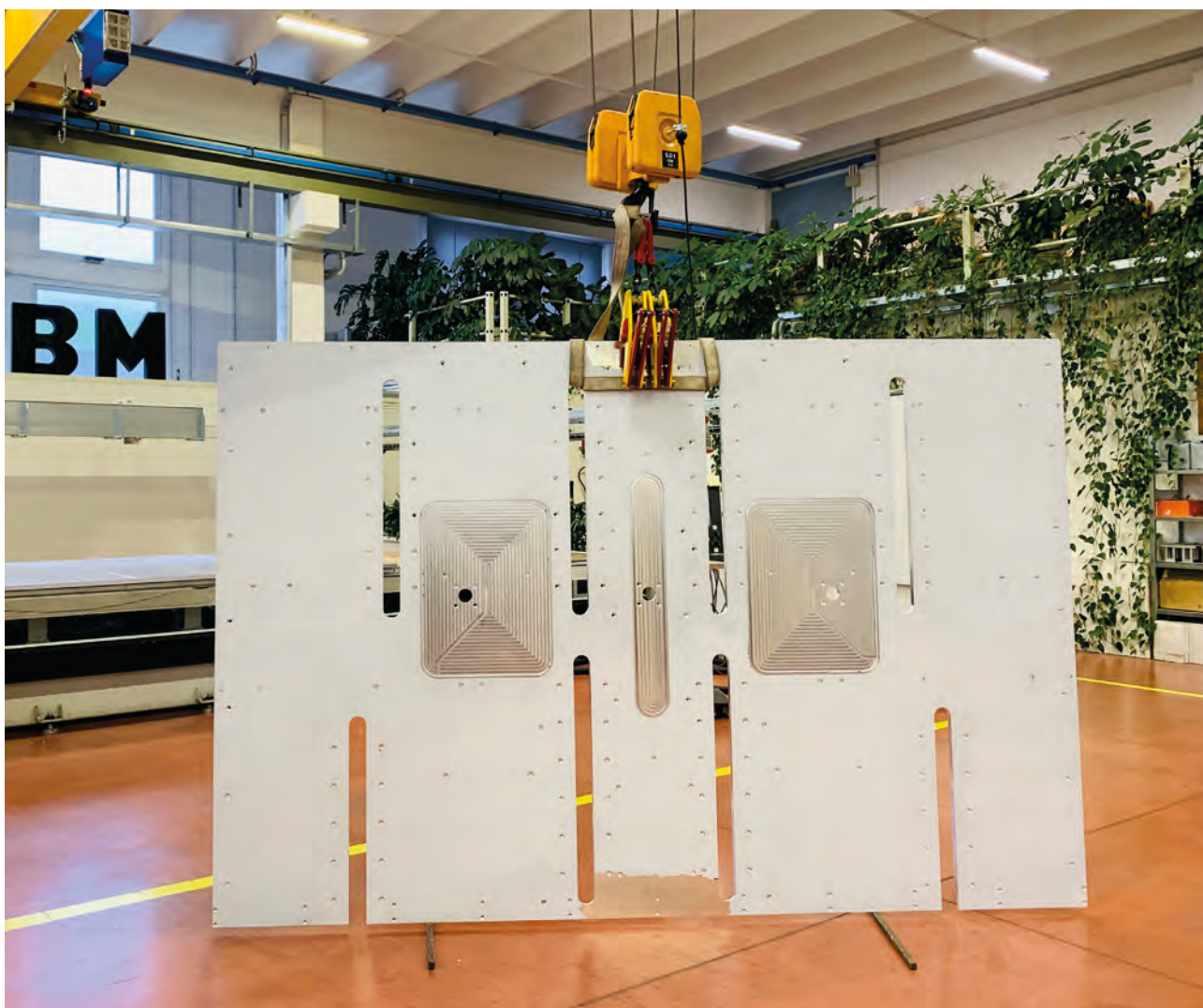
Our Chairman, **Mr. Silvano Busin**, has developed a deep knowledge of both sector through the

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.



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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. 🏠

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“THE WORLD OF PACKAGING BETWEEN ROBOTICS AND ARTIFICIAL INTELLIGENCE”

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



images: unsplash.com

The 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



by Our Editorial Team



and repetitively, reducing human errors and improving product quality.

Artificial intelligence is another technology that is revolutionizing the world of packaging. Thanks to AI, 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.

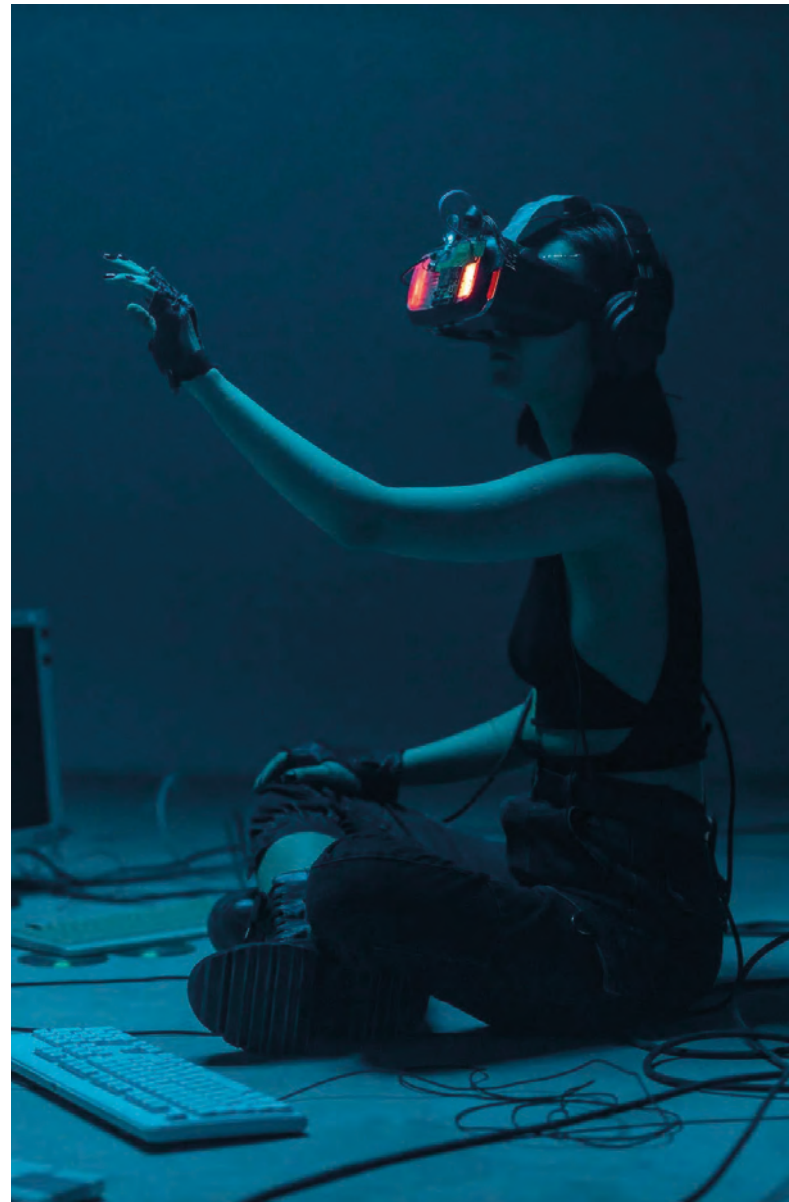
Another advantage of using robotics and artificial intelligence in packaging is the reduction of waste and environmental impact.

Machines can work with greater precision and use only the amount of material necessary to package products, reducing waste and energy consumption. Additional-

ly, 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.



Commercial Horticultural Association announces UK pavilion exhibitors at Fruit Logistica

Innovative UK companies line up for Fruit Logistica, Berlin 7-9 February 2024

Fruit Logistica covers every single sector of the fresh produce business and provides a complete picture of the latest innovations, products and services at every link in the international supply chain.

The event attracts around 63,000 visitors and 2,600 exhibitors from 140 countries, representing the global fresh produce trade across the entire sector.

The Commercial Horticultural Association (CHA) will be hosting an innovative group of UK companies that are keen to develop their international business.

Companies taking part in the UK pavilion include:

Botanicoir, a leading manufacturer of coir substrate products, with expertise in specific mixes for strawberries, raspberries, tomatoes, cucumbers

and aubergines. With production facilities in Sri Lanka and India, the company is able to guarantee a consistent supply and traceability of high-quality products.

As a globally operating company, and a leader in the UK market as well as the USA, Australia and Northern Europe, Botanicoir is positioned at the forefront of developments within the industry.



The company works alongside local agronomists and growers to develop products that provide the optimum substrate solutions for specific crops, local climates and existing systems.

Hall 5.2 B-40

Primafruit is a leading name in the fresh produce industry, specialising in the sourcing and supply of fresh fruit to the UK market.

The team is proud to work with one of Britain's best-known retailers and other foodservice customers, delivering consistently great quality fresh fruit, year-round.

Primafruit product categories include bananas, citrus, stonefruit, grapes, strawberries, blueberries, raspberries, blackberries, dates, kiwi, exotic fruit, melon, pineapple, rhubarb, samphire and asparagus.

Great tasting fruit is at the heart of the business, achieved by working closely with their talented network of growers from around the world.

Hall 5.2 B-22

Bedfordshire Growers will be displaying its new Red Sweet Onion CALYPSO, bred over 30 years

by one single grower, with incredibly low pungency, outstanding flavour and sweetness. It is a stunning red colour with splashes of pink and deep, strong internal colour. Bred and grown in England.

Hall 5.2 B-42

The Scottish Agri Export Hub provides a platform for Scottish seed potato growers and exporting businesses from Scotland to engage with existing and new clients.

Seed potatoes produced in Scotland are considered to be some of the best in the world. With support from expert scientists and breeders in the industry, Scotland has highly specialised and innovative production systems to ensure high-quality and high-yielding potato crops.

Customers of Scottish seed can be confident that they are buying and growing seed that has been produced by experts under the best possible conditions.

Hall 5.2 B-50

Commercial Horticultural Association (CHA) is the British trade association for producers and suppliers

of plants, produce and services. The CHA helps UK suppliers to export, facilitates trade links between UK suppliers and growers, wholesalers and retailers worldwide and lobbies government for export funding and support.

The CHA team can advise visitors who would like to discover more about the UK market, CHA member companies or how to get involved.

Hall 5.2 B-20

Information on the UK exhibitors can be found: www.cha-hort.com/fruit-logistica.

Registration for tickets to visit Fruit Logistica is open now. 🏠



The Commercial Horticultural Association (CHA) is the British trade association for manufacturers and suppliers of plants, products and services to commercial horticultural growers throughout the world. Covering the ornamentals, fresh produce, amenity and landscape sectors, our members offer the full portfolio of products and services for all horticultural requirements. The CHA is a Trade Challenge Partner and Accredited Trade Organisation (ATO) with the British Government's Department for Business and Trade (DBT). The department helps UK-based companies succeed in the global economy. DBT offers expertise and contacts through its extensive network of specialists in the UK, and in British embassies and other diplomatic offices around the world. It works with CHA to provide companies with the tools they require to be competitive on the world stage.

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 hoppers 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 carousel 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.

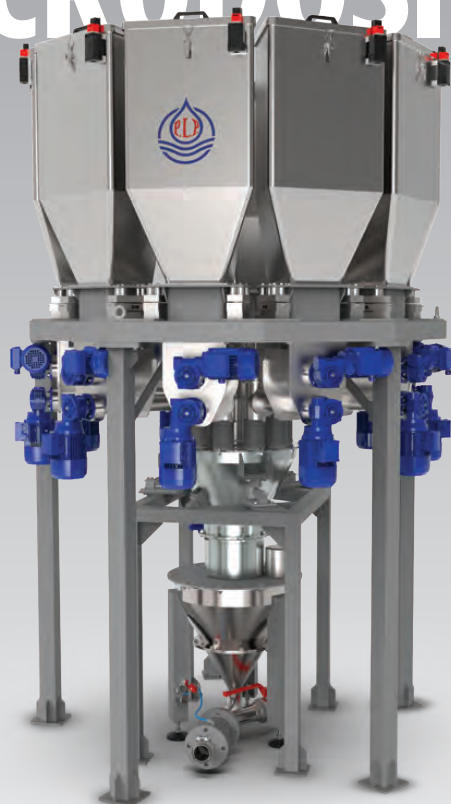
Proboera Description:

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



PLP Systems

MICRODOSING



DRUM COATER



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-

PROBOERA



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C&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 industries,

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. 🏠

www.cgdepur.it

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“ EXPLORING TRACEABILITY IN THE BEVERAGE INDUSTRY: FROM PRODUCTION TO CONSUMER ”

A journey through technologies and practices ensuring safety and transparency in beverage products

In recent years, traceability has become a key concept in the beverage industry. Consumers are increasingly interested in knowing the origin and quality of the products they purchase, prompting companies to implement increasingly sophisticated systems to ensure safety and transparency throughout the entire production chain. In this article, we will explore the technologies and practices that are revolutionizing the concept of traceability in the world of beverages.



Our Editorial Office

One of the primary tools used for traceability is radio frequency identification (RFID) technology. This technology allows for the application of small RFID tags to bottles, containing unique digital information. RFID tags

can be read and recorded during each stage of the production and distribution process, enabling companies to monitor and trace the journey of each individual bottle. This means that product authenticity can be





verified, potential security issues can be identified, and detailed information about the entire supply chain can be obtained.

In addition to RFID, another technology that is gaining increasing importance is blockchain. Blockchain is a distributed and immutable digital ledger that securely and transparently records transactions. In the beverage industry, blockchain can be used to create reliable and tamper-proof traceability. Every transaction, from the purchase of raw materials to beverage production, can be recorded on the blockchain, allowing companies and consumers to access detailed information about the origin, ingredients used, and production practices. This ensures high food safety standards and promotes consumer trust in the product. However, traceability is not just about technology. Sustainable practices and collaboration among the various parties involved in beverage production are equally important. Many companies are committed to working in partnership with raw material suppliers, manufacturers, and distributors to ensure accurate traceability of beverage products while adhering to sustainability standards. This active involvement of all stakeholders contributes to creating a responsible and transparent supply chain.

Furthermore, the use of labels and warranty seals is another common tool to guarantee traceability in the beverage industry. Labels can provide information about the place of production, expiration dates, and quality certifications. Warranty seals, on the other hand, indicate that the product has not been opened or tampered with. These elements provide additional guarantees to consumers regarding the safety and authenticity of the products they are purchasing.



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ANUGA FOODTEC 2024: shaping the future of responsible Food & Beverage industry



Anuga FoodTec stands as a vital supplier platform within the global food and beverage industry. This trade fair offers a one-stop solution for the Food & Beverage sector, encompassing production, processing, packaging, food safety, automation, digitalization, and intralogistics.

In the upcoming year - March 19th to March 22nd, 2024, Anuga FoodTec anticipate the participation of approximately 1,350 exhibitors in Cologne, with more than 60% representing international markets. 9 of the 10-world leading F&B producers like Nestlé, Unilever, Coca-Cola, Heineken, Danone or JBS are regularly visiting Anuga FoodTec.



Guiding Theme "Responsibility"

The food and beverage industry bears a substantial responsibility, accounting for a significant share of global energy and freshwater consumption, while also witnessing a considerable amount of produced food going to waste.

Given the millions employed in the sector, it plays a pivotal role in the global economy. However, despite this substantial industrial presence, 800 million people still face daily hunger. Equally concerning is that roughly the same number of people deal with issues of overweight or obesity.

This underscores the immediate need for comprehensive solutions addressing food availability, accessibility, quality reformulation of recipes and nutrition education.

"The food and beverage industries are system-relevant in many respects", says Matthias Schlüter, Director of Anuga FoodTec. "They are thereby dependent upon the power of innovation of the suppliers, and themselves repeatedly call for solutions and new ideas for adapting their products and processes to present requirements.

The supplier industry also sets the highest goals for itself in order to meet its responsibility", Schlüter continues. "Anuga FoodTec will demonstrate this, discuss it and develop it further together with all participants."

Addressing these challenges requires collective action, but collective action can make a substantial difference for our planet. That's why "Responsibility" is the guiding theme for Anuga FoodTec 2024. The exhibitors will show how they can use innovative technologies to support the food and beverage industry on its way to an innovative nutrition system.

Future of Food Production

At Anuga FoodTec, visitors can explore the future of food production, its trajectory, and its implications for the F&B industry. Key themes such as energy efficiency, reliable supply chains, Industry 4.0, sustainable packaging, and alternative proteins, including cultured foods, take center stage in diverse event formats.

Anuga FoodTec serves as a catalyst for the global F&B industry, functioning as a central sourcing platform. Whether you are an established company or an emerging startup, everything needed for the production, processing, and packaging of food and beverages can be found here. There is a wide range of production, filling, and packaging equipment, along with an impressive selection of analytical devices and packaging materials.

In contrast to other FoodTec exhibitions, all F&B sectors are covered, from cost-effective solutions to high-end technologies.

This trade fair not only serves as a showcase for the latest technologies but also as a platform for talent re-

cruitment and exchange. Students visit the Careers Day on the last day of the fair to learn about the exhibiting companies – 30% of visitors are seeking new career opportunities. Unique opportunities arise for companies and potential employees to connect and collaborate in shaping the industry's future.

With the global food and beverage industry facing unprecedented challenges, Anuga FoodTec 2024 offers an exclusive opportunity to be part of the solution.

Mark your calendars - March 19th to March 22nd, 2024 - and be at the forefront of the future of food at Anuga FoodTec. 🏠

Visit:

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28-31/01/2024 🏛️

COLOGNE

Fair for the sweets and snacks industry.

FRUIT LOGISTICA

07-09/02/2024 🏛️

BERLIN

Fair for fruit and vegetables.

BEER&FOOD ATTRACTION

18-20/02/2024 🏛️

RIMINI

Fair for beers, drinks,
food and trends.

MECSPE

06-08/03/2024 🏛️

BOLOGNA

Fair for the manufacturing industry.

PROWEIN

10-12/03/2024 🏛️

DUSSELDORF

International wine & spirits exhibition.

ANUGA FOODTEC

19-22/03/2024 🏛️

COLOGNE

Fair on food
and beverage technology.

VINITALY

04-08/04/2024 🏛️

VERONA

International
wine & spirits exhibition.

LATINPACK

16-18/04/2024 🏛️

SANTIAGO CHILE

International packaging
trade fair.

HISPACK

07-10/05/2024 🏛️

BARCELONA

Technology fair for packaging.

CIBUS

07-10/05/2024 🏛️

PARMA

Fair of food product.

INTERPACK

07-13/05/2025 🏛️

DUSSELDORF

Technology focused
on packaging, bakery, pastry technology.

MACFRUT

08-10/05/2024 🏛️

RIMINI

Fair of machinery and equipment for
the fruit and vegetable processing.

SPS/IPC/DRIVES/ ITALIA

28-30/05/2024 🏛️

PARMA

Fair for industrial automation sector.

FISPAL

18-21/06/2024 🏛️

SÃO PAULO

Fair for product from packaging.

FACHPACK

24-26/09/2024 🏛️

NUREMBERG

International
packaging trade fair.

MIDDLE EAST 2024/25

GULFOOD

19-23/02/2024 🏛️

DUBAI

Fair for food and hospitality.

DJAZAGRO

22-25/04/2024 🏛️

ALGERI

Fair for companies
of the agro-food sector.

PROPACK ASIA

12-15/06/2024 🏛️

BANGKOK

Fair for packaging, bakery, pastry.

IRAN FOOD+BEV TEC

16-19/06/2024 🏛️

TEHRAN

Fair for food, beverage&packaging
technology.

GULFHOST

05-07/11/2024 🏛️

DUBAI

Fair of hospitality.

HOSPITALITY QATAR

12-14/11/2024 🏛️

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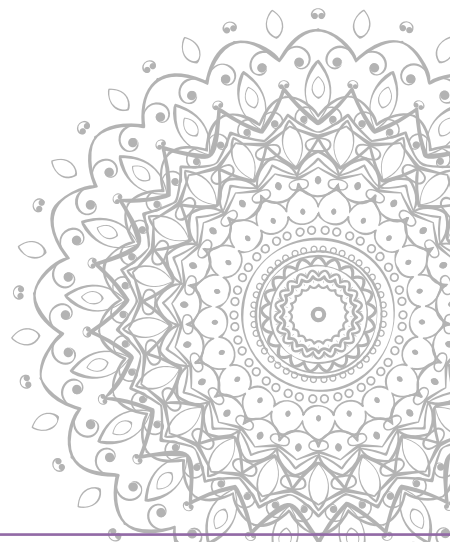
Fair of Hospitality
and HORECA.

GULFOOD MANUFACTURING

05-07/11/2024 🏛️

DUBAI

Fair for packaging
and plants.



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MCTER expo

16-17/10/24 🏛️

VERONA

Exhibition on energy efficiency.

SIAL

19-23/10/2024 🏛️

PARIS

Fair on food products.

SUDBACK

26-29/10/2024

STUTTGART

Fair for bakery
and confectionery.

ALL4PACK

04-07/11/2024 🏛️

PARIS

Exhibition about
packaging technology.

SIMEI

12-15/11/2024 🏛️

MILAN

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

BRAU BEVIALE

26-28/11/2024 🏛️

NUREMBERG

Fair of production
of beer and soft drinks.

DRINKTEC

2025 🏛️

MONACO

Fair for the beverage,
liquid food industry.

TUTTOFOOD

05-08/05/2025 🏛️

MILAN

Fair B2B show to food & beverage.

IBA

18-22/05/2025 🏛️

MONACO

Fair for the bakery and confectionery
industry.

IPACK-IMA

27-30/05/2025 🏛️

MILAN

Exhibition about food and non-food
processing and packaging.

POWTECH

23-25/09/2025 🏛️

NUREMBERG

The trade fair
for powder processing.

HOST

17-21/10/2025 🏛️

MILAN

Fair for bakery production
and for the hospitality.

SAVE

2026 🏛️

VERONA

Fair for automation,
instrumentation, sensors.

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27-30/10/2026 🏛️

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Fair for food & beverage
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