

FOOD

PROCESSING

it. MAGAZINE

n° 1-2023

BEVERAGE & PACKAGING

**PROCESS
AND PACKAGING**

FRAGOLA
MATERA®

NICOFRUIT®
ITALIAN FRUIT & VEGETABLE PRODUCERS

La Fragola che non c'era!



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PINEAPPLE AND MELON

MOD. **PL1D**

MOD. **PL2D**

MOD. **PL4D**



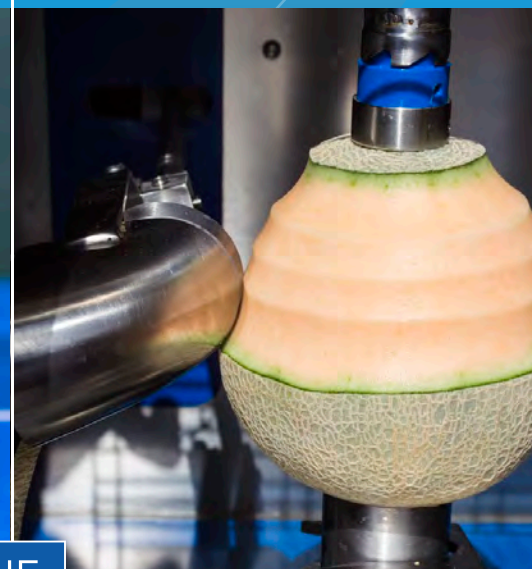
PEELING



CORING



PEELING



PEELING AND CORING MACHINE



www.pndsrl.it

Food Processing Machinery for the food industry

STEAM PEELER FOR FRUITS



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

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SONIA V. MAFFIZZONI
Editorial Manager

Great technological innovations, strong investments in research and development, and a year full of events dedicated to food processing that should not be missed, 2023 is promising to begin with great anticipation.

All of this is further proof of how skillful and resilient the companies in the sector have been in their ability to bring about nearly all of their hoped for results.

With this optimistic and fresh vision, we are preparing ourselves to face a season chock full of appointments, meetings, launches and new opportunities, so we can continue to stand alongside our partners with all the energy and desire to get things done that has always set us apart from the rest.

Wishing that everyone will have a wonderful start of this new year of successes and prosperity!





INOX MECCANICA SRL

EXCELLENCE IN TECHNOLOGY AND TECHNICAL SOLUTIONS FOR FOOD INDUSTRY.

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ICI CALDAIE SPA

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Panorama dei fornitori di macchine, impianti,

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Tropical Food Machinery

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.

Founded in the late 1970s by a pioneering Italian entrepreneur, the company currently boasts an operating branch in the Brazilian state of Minas Gerais, two-fruit processing plants located in the north of the country, as well as liaison offices in India, Costa Rica, and across the Asia-Pacific and West Africa regions.

Thanks to its decades-long know-how accrued on the field, Tropical Food Machinery can offer a wide range of multi-purpose technological solutions, starting from very low-capacity systems such as small-size plants on skid or mobile plants to large-scale, automated plants for the industrial process of tropical, deciduous fruit and tomato. Every line is designed

in-house and then built and tested before every and each delivery, enabling a complete control over quality and productive speed and creating a strong sense of responsibility within the company's workforce.

Some of the jewels of this range that have enjoyed success recently are the Mini Industry Line 200 and the Multifruit Line 1000.

Mini Industry Line 200 arose from discussions with international organizations and was designed to be used by small-scale producers and farmers in decentralized areas,

reducing waste, diminishing costs of both management and maintenance, and generating local economy.

The line can process any kind of fruit and produces "ready-to-drink" fruit juice, jam, fruit salad and tomato paste packed in glass, pet, or tins. Mini Industry Line 200 is approximately 8-meter-long and is supplied already assembled in one single container: it can be therefore moved from location to another if the season requires so.

It has a very low energy consumption and it can also be applied for re-





search and training projects in food companies or institutes.

Multifruit Line 1000 is designed for the same use in remote areas and highly flexible situations.

The system is the smallest of the company's fully automatic lines; it consists of 3 modules with small dimensions and easily transportable in





containers: the first dedicated to the reception of the fruit and extraction of the pulp, the second to the enzymatic inactivation and the pulp refining, the third for the product pasteurization/sterilization and final aseptic filling. Multifruit Line 1000 has a working capacity up to 1 tons/h of any fruit and can produce aseptic natural juice/purée and concentrate as well.

The aseptic pulp or juice is a semi-finished product which is filled in 220 L bag in drum, it is very long-lasting even when stored at room temperature and is then supplied to blending – juicing – baby food companies

and even to the HORECA chain.

This line is particularly recommended for those entrepreneurs who are not regularly supplied with big quantity of fruits.

Given its already deep-rooted presence in most of the largest markets, Tropical Food Machinery boasts also a comprehensive after-sales support service that can provide spare parts

and a prompt technical support if the need should arise. As the company's general director Stefano Concari said: "This is what drives our company: relentlessly working with our customers to improve our technologies and offer even higher yields and more efficient production." 🏢

Visit:

www.tropicalfood.net

TROPICALFOOD MACHINERY



FRUIT PROCESSING INNOVATION

CERERE 6000

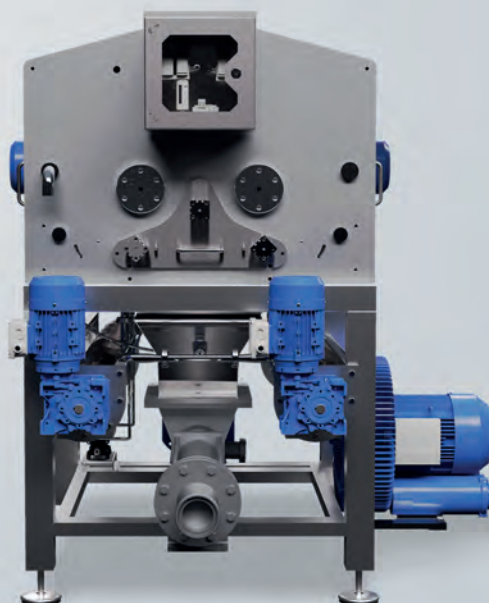
THE BANANA PEELER



2021 International FoodTec
Award in Silver by the
German Agricultural Society

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

"CERERE" will guarantee you
a precise automatic peeling
system and excellent final
quality puree, processing of
the pulp in inert atmosphere,
constant productivity and
educed use of workforce.





NICOFRUIT: past, present and future

FRAGOLA MATERA®

NICOFRUIT is a registered trademark, owned and distributed by Frutthera Growers, an Italian company located in the Basilicata region, in the south of the Country.

This area is well known and is ideally suited to the growing of strawberries, grapes, kiwi and citrus. These fruits find their natural habitat here and are included in the most representative made-in-Italy productions.

Adopting the integrated production quality system means employing environmentally friendly production methods, protecting the health of both workers and consumers, making use of technical and economic features of the most modern production systems.

Special care to the environmental issues led the company to achieve an important result: the drastic reduction of pesticides, implementing specific natural technics and recurring to a massive use of antagonistic insects.

Natural protection of the plants gave a large contribution to get a "zero residues" pesticides for a lot of the fruit we produce.

Packaging represents another way to respect Earth. A totally brand new compostable packaging has been implemented in our production lines, nicofriendly, being entirely degradable and used as a natural fertilizer. Great help for the environment!

Frutthera adopts the integrated production quality system that consists of a combination of eco-friendly production methods, the protection of both workers and consumers' health, and technical





NICOFRUIT
ITALIAN FRUIT & VEGETABLE PRODUCERS

Full of Vitality



FOOD
processing



and economic requirements of the most modern production systems.

Storage and conditioning are controlled by a software cell that provides constant monitoring of the products' temperature and humidity, from the countryside until their final destination into targeted markets.

Monitoring the correct temperature during transport is guaranteed by small electronic recorders installed on the means of transport. NICOFRUIT products are traceable and trackable.

Thanks to a computerized system, the product will be followed through all the stages of processing, packaging and storage to the sale moment so that the consumer can trace back the

soil where the fruits and vegetables have grown.

Today FRUTTHERA Growers can count on more than 40 partners that cultivate more than 500 hectares of land.

On average, 160 seasonal workers are employed with a max of 350 in the most intense harvest periods.

The factory is 12.300 sqm (indoor and outdoor). It is newly built and it has been designed to guarantee the quality of the products.

Sustainable development is the only possible model for NICOFRUIT - solar panels are located on the storage and on the processing plants, and they are sufficient to feed most of the company's energy needs.



From the very beginning, dynamism and long-term outlook have allowed the company to reach internal large-scale retailers and important market spaces from South America to the Middle East.

Analysing percentage shares, the products are sold 50% in the foreign market, 30% in the internal retail and 20% in the general market.

Since commercial aggregation is a very important target to achieve, Frutthera joined one of the biggest Producers Organization in south Italy, with a total turnover > 70 mln €, Asso Fruit Italia, that is also a partner of Italia Ortofrutta, the biggest Italian National Union.

As a natural consequence of environmental awareness, Frutthera takes part in a lot of projects to achieve this target, organized by Universities, Research Institutions and many other reliable partners. 🏛️

www.nicofruit.it





Equipment and lines for the integrated processing of **FRUIT** and **VEGETABLES**

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

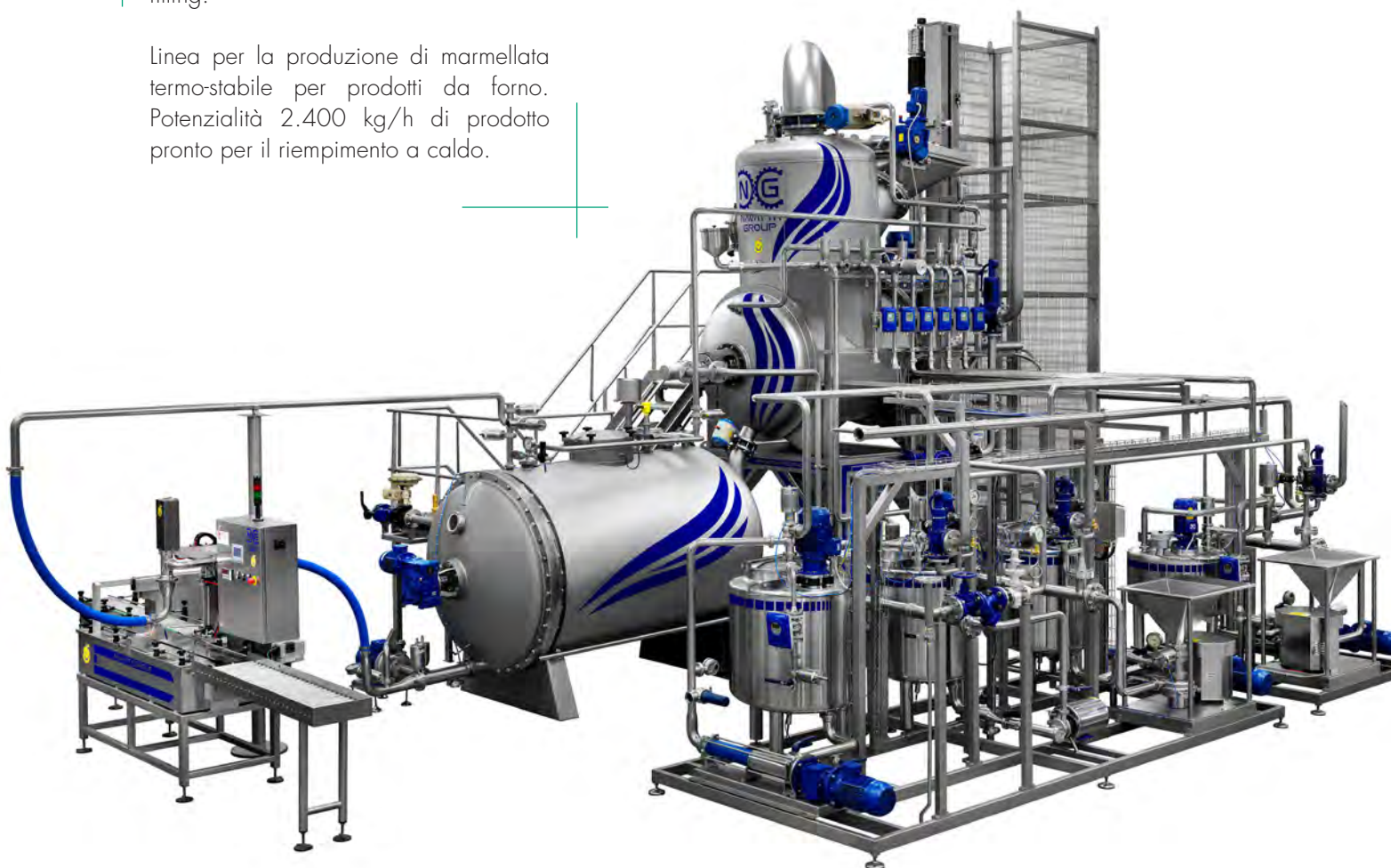
NAVATTA, THE GLOBAL SUPPLIER OF INTEGRATED FRUIT & VEGETA-

BLES 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 pas-

teurizers 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

Line to produce thermostable jams for bakery products. Working capacity: up to 2.400 kg/h product ready for hot filling.

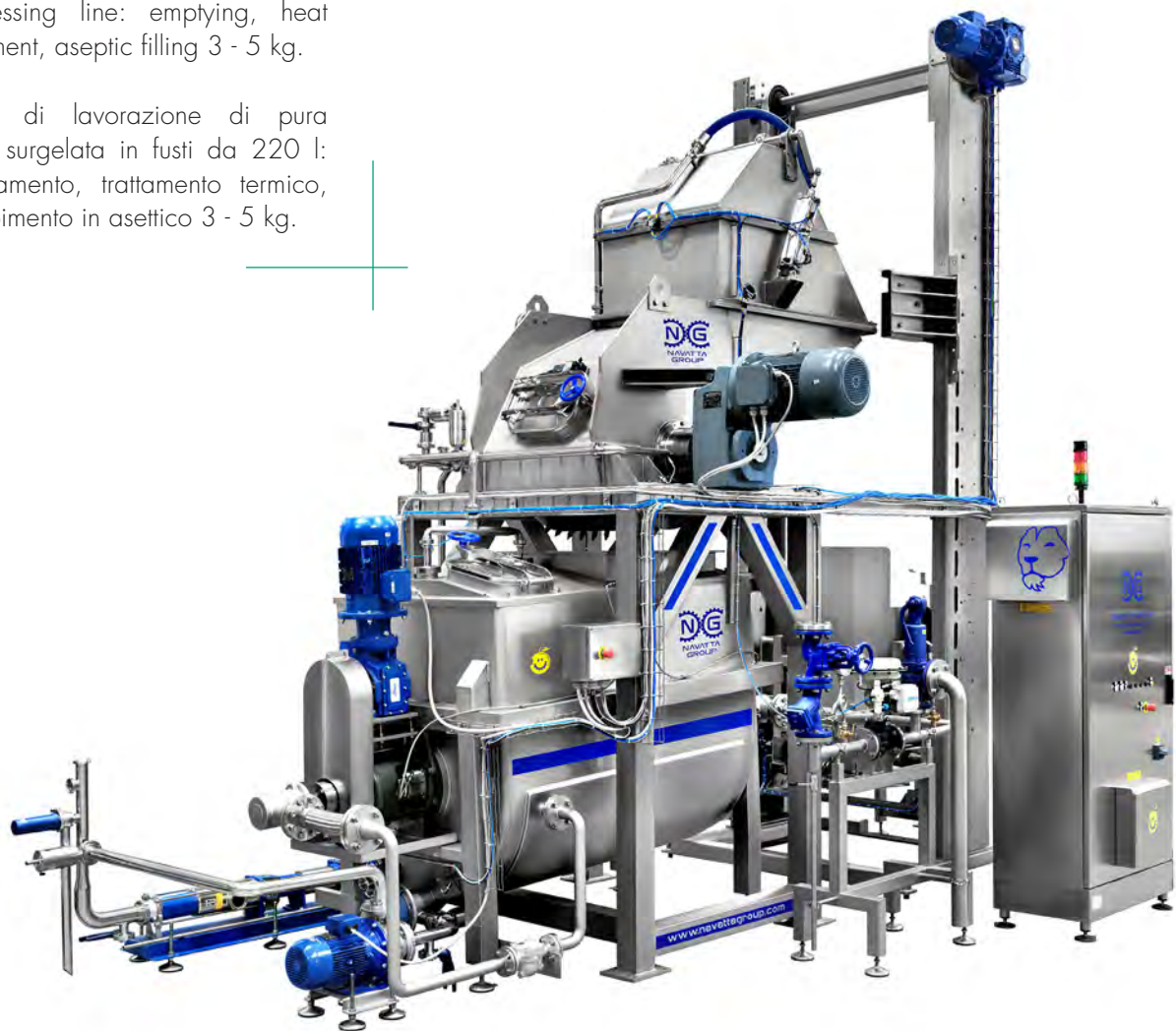
Linea per la produzione di marmellata termo-stabile per prodotti da forno. Potenzialità 2.400 kg/h di prodotto pronto per il riempimento a caldo.





Bag-in-drums 220 l frozen fruit pure processing line: emptying, heat treatment, aseptic filling 3 - 5 kg.

Linea di lavorazione di pura frutta surgelata in fusti da 220 l: svuotamento, trattamento termico, riempimento in asettico 3 - 5 kg.



and thermal treatment; Ghizzoni Ettore, in 2012, specialized in special batch plants for ketchup, sauces and jams.

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

- and 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/ spout-less 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



NAVATTA GROUP
Food Processing S.r.l.



Single head aseptic filler "Webzero" for web small bags 3-5-10-20 liters - automatic loading system - no operator needed – patented system. Semi-automatic filling of 220 bags in drum. Aseptic tank and sterilizer. riempitrice aseptica a testa singola "Webzero" per riempimento di sacchi piccoli da 3-5-10-20 litri – sistema di caricamento automatico - nessun operatore necessario – sistema brevettato. Riempimento semi-automatico di sacchi in fusto da 220 l. Tank aseptico e sterilizzatore.

- 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;

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. 🏠

Visit:
www.navattagroup.com

- 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.

*Navatta, the global supplier
of integrated fruit&vegetables
processing equipment and lines,
providing well proven and innovative
solutions for a full range of plants.*



NAVATTA GROUP
Food Processing S.r.l.

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fruit & vegetables processing
equipment and lines



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Thank You for Your like





GEA high pressure homogenization technology in Food & Beverage applications

GEA is the technological leader for dynamic high pressure homogenizers and plungers pump, suitable for all industries and applications. This is the result of specific know-how and a spirit of innovation that is constantly focused on innovation and high standard process performances.

How homogenization enriches food products?

The benefit of high pressure homogenization is well known in dairy, food & beverage industries for subdividing particles or droplets present in fluids, and reduce them to the smallest possible size, down to nanometer range. Enhanced stability, shelf life, viscosity, color and taste are the essential characteristics that the emulsion gains through this process. Homogenization contribute in increasing digestibleness and, as consequence, facilitating assimilation of the nutritional principles as well.

The use of high dynamic pressure and homogenizing valves specifically designed by GEA experts for different applications, allow to subdivided particles at the required size and efficiently mix ingredients at the lowest possible pressure, ensuring energy and cost savings.

What makes GEA your ideal partner?

The most important key of success consists in the close collaboration with customers. The connection of common efforts enable to implement innovative and tailor-made solutions, to maintain continuous product devel-







opment and to guarantee efficient operations with excellent results on the final products. The latest set-up and continuous improvements on production technologies allow the company to offer a complete range of homogenizers, from laboratory up to the industrial scale.

Thanks to a strategy of development of both established and potential applications, often based on cooperation with our customers' Research and Development Centers, GEA can offer highly specific and customized process solutions to always meet, ensure and repeat over time product quality excellence.

All GEA homogenizers are designed CIP and SIP, they are available with cGMP documentation and approved FDA and 3-A certification; GEA is also able to support clients for the IQ/OQ

qualifications and product test (FAT-SAT).

Ariete Series. The state-of-the-art technology for power, reliability and flexibility.

These machines are easily implementable in remote controlled systems and complete process lines. GEA homogenizers are available in different configurations, conceived with specific liquid end design that allows to reach up to 1500 bar with premium homogenization performances warranty.

Main advantages:

- Easy to use
- Highest reliability on continuous production (24/7)
- Reduced operational costs (water, lubrication oil, energy)
- Low environmental impact
- High capacity at ultra-high pressure

One Series.

The combination of convenience and quality to deliver unmatched benefits. These 3-piston homogenizers are simple and versatile machines manufactured to ensure easy maintenance and simple installation. Available in five versions, the series can meet any production need (from 300 l/h up to 10.000 l/h - 250 bar).

Main advantages:

- Ready-to-use
- Ideal for small-medium dairy & beverage industries
- High versatility and smart installation
- Long lasting core components
- Reduced maintenance cost
- Safe sanitary design

Find the perfect homogenizer for your product

The Laboratory and the Innovation Center, just refurbished in November 2019, represent a unique resource for customers to directly test homogenization technology on their product samples, refine receipts, develop high efficiency homogenizing valves and evaluate the performance of installed machines. Highly qualified staff can support customers in the development of new products, to test maximum process efficiency conditions and product scalability to industrial production processes.

The quality and the reliability of GEA homogenizers are well known all around the world, find out all the information on the website

www.gea.com/homogenizers





Inaugurated by H.E. DR. SAUD BIN HAMOUD BIN AHMED AL HABSI, Oman AgroFood kicked off on 11 December in Muscat



Inaugurated by H.E. Minister of Agriculture, Fisheries Wealth and Water Resources, Dr. Saud bin Hamoud bin Ahmed Al Habsi, and in the presence of distinguished guests and media representatives, Oman AgroFood 2022 was officially inaugurated on 11 December in Muscat.

Organized by International Fairs & Promotions (IFP Group) and Al Nimr International Exhibition Organizers, Oman AgroFood, the 4th International Exhibition for Agriculture, Food and Aquaculture was held from 11 to 13 December 2022 at Oman Convention and Exhibition Centre. For three consecutive days, this key gath-

ering brought together Omani and international decision-makers, regional trailblazers, and innovative solution providers to transform the agriculture and food sectors and make the Sultanate's ambitious vision a reality.

More than 100 local and international exhibitors from Oman, Russia, Iran, India, and Saudi Arabia, gathered under one roof to showcase their products, services, and solutions for sustainable farming and to foster

successful partnerships with local and regional entities.

Running alongside the exhibition is a three-day certified conference showcasing the latest opportunities in the agriculture and fisheries market in Oman and discussing cutting-edge technologies and innovations from around the world.

For more information about Oman AgroFood, visit

www.omanagrofood.com





CIRCULAR ECONOMY: industry and environment in co-existence

"Pastazzo" promotion for an eco-friendly business

From the very first steps in ORION Engineering company, we decided that one of the most important points to be focused on in our projects would have been the eco-sustainability of the processes in which our plants are involved. Today, as then, we pursue this philosophy to pass on to future generations a world that places man at the centre of an ethical and eco-sustainable business.

The first achievements, obtained from these analyses, highlighted the opportunity to undertake a path to further enhance a by-product linked to the citrus fruit chain: the **"pastazzo"**!

The study we have been carrying out for some time is allowing us to re-engineer its enhancement. The combination of technologies and ancient traditions permit to reuse these production wastes as new raw material.

The analysis opens new business opportunities for the protagonists of the supply chain, focusing on reducing industrial production costs and at the same time allowing the surrounding environment to be preserved.

The citrus fruit pulp, as known, is a by-product of the food processing industry consisting of lemons and oranges waste subjected to the extraction of juice and essential oils. From a chemical-physical point of view, the "pastazzo" is made up of residues of peels ($60 \div 75\%$), pulp ($30 \div 35\%$) and seeds (on average $0 \div 9\%$ depending on the quality of oranges and lemons undergoing transformation).

Depending on the type of citrus fruit and processing, the production of fresh "pastazzo" varies from 49% to 69% by weight of the fruit subject

to the transformation process. Sometimes the "pastazzo" also contains process water absorbed during the production phases.

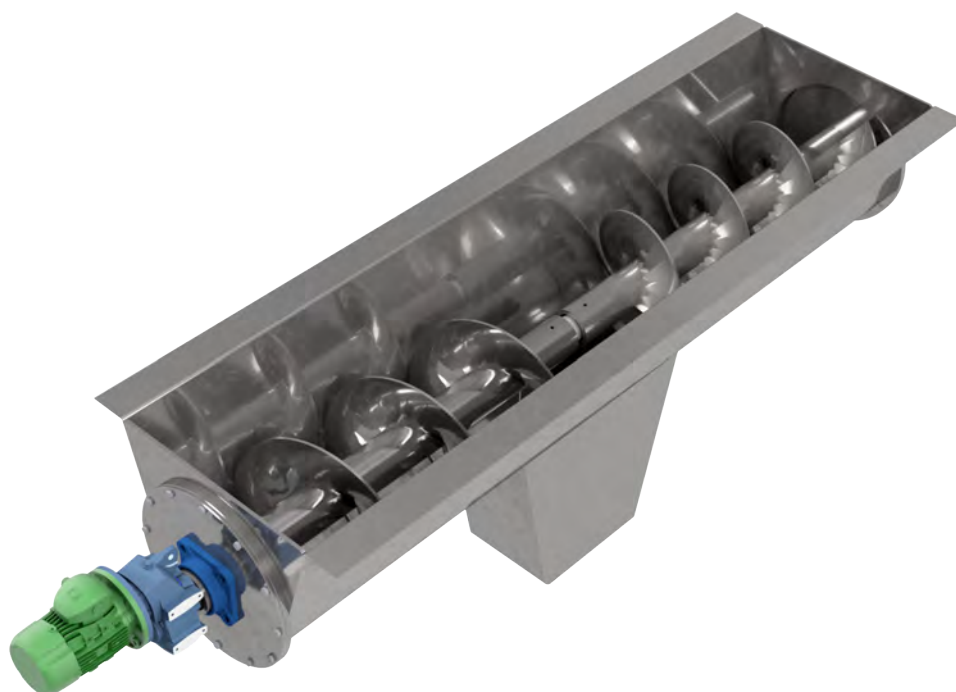
As a pure indication, we can highlight the different processing products and by-products from the transformation of 10 tons of citrus fruits from which to obtain:

- **4.930 [kg] of products derived from the 1° transformation**

- 4.200 [kg] First pressing juice;
- 700 [kg] Second pressing juice;
- 30 [kg] essential oil;

- **5000 [kg] of fresh zest "Pastazzo"**

- 265 [kg] Peels for the extraction of Pectin;
- o 315 [kg] Peel for zootechnical use;



The citrus fruit pulp, as known, is a by-product of the food processing industry consisting of lemons and oranges waste subjected to the extraction of juice and essential oils. From a chemical-physical point of view, **the "pastazzo" is made up of residues of peels ($60 \div 75\%$), pulp ($30 \div 35\%$) and seeds (on average $0 \div 9\%$ depending on the quality of oranges and lemons undergoing transformation).**

Our mission as **ORION ENGINEERING S.R.L.** company is to make the reuse of this resource usable, through our technology under development, to give the opportunity not only to large industrial processing plants but to many others. The synergy of our growers and all the players involved in this supply chain is one of the keys of success of the process.



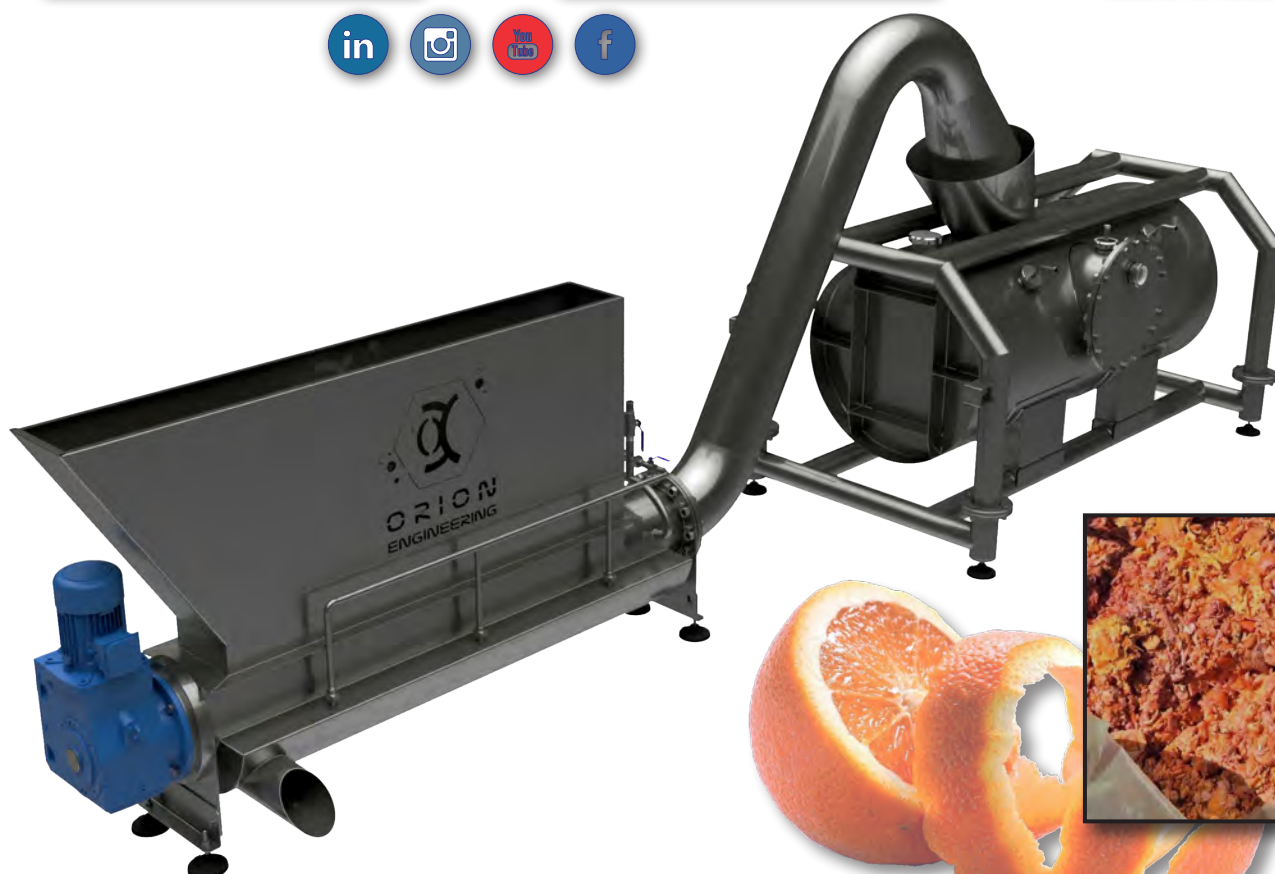
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for agri-food chain

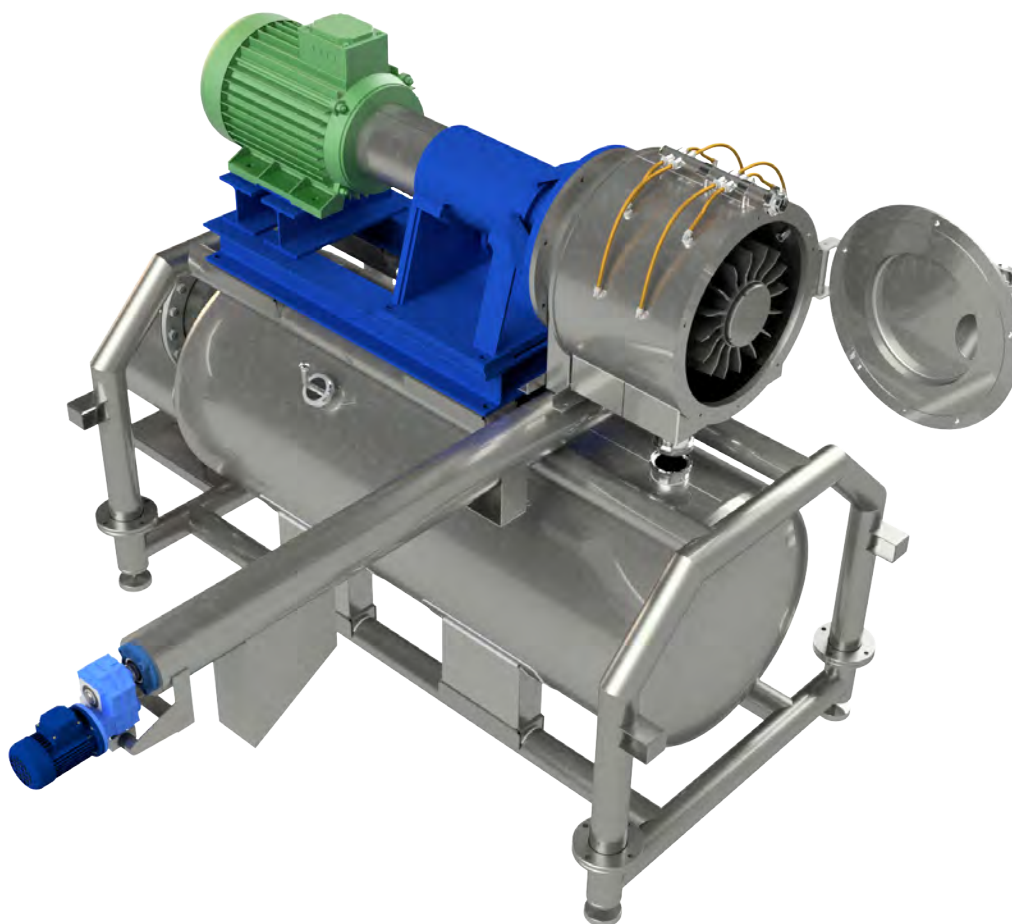
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 43036 Fidenza (PR) Italy | Phone: +39 370 371 1521

E-mail info@orion-eng.it | www.orion-eng.it

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- **9330 [l] di Liquid residues**

- 125 [kg] of Bio-Alcohol;
- 9205 [l] of residues with C.O.D. equal to 18.500 mg/l for Bio-gas production;

The citrus fruit pulp can be used in different ways, some of the best known concerning the organic fertilization of the land, the use in animal husbandry and the extraction of pectin: a thickening polysaccharide naturally present in fruit and widely used in the production of jams.

Our mission as ORION Engineering company is to make the reuse of this resource usable, through our technology under development, to give the opportunity not only to large industrial processing plants but to many others.

The synergy of our growers and all the players involved in this supply chain is one of the keys of success of the process.

Our country, with the notification to the European Commission of 13 February 2019, highlights the need for and importance of the use of this resource, asking for the regulation for production, marketing and use of "pastazzo" as a by-product of citrus processing for its agricultural and zootechnical use.

The various scientific research which are studying and proposing the use of "pastazzo" as an alternative for human nutrition provide further value to our recovery project. The idea is to partially replace food fats such as palm oil (used in various baked goods' preparation) with a dried fiber extracted from all the residues of citrus fruits.

From the grinding and drying of the fiber, some flour is obtained that has the characteristics of dietary fiber and great water absorption power, for a "sponge effect" that would allow this

flour to at least partially replace the dietary fats present in snacks and other bakery products.

Do not hesitate to contact us to receive further information on the technology under investigation and for its application in plants of medium production capacity. 🏢

www.orion-eng.it



“ SMART FARMING FOR RESOURCE OPTIMIZATION ”

Because it makes the best use of the most up-to-date technologies made available by research, Smart Farming, which is also being called Agriculture 4.0, is making it possible to transition to a new era, characterized by reducing waste to an absolute minimum through monitoring a myriad of essential parameters such as soil, plants, livestock, and environment.

Smart Farming, Precision Agriculture, Agriculture 4.0: those who believed agriculture to be one of the ancient practices of humans hardly affected by technological changes, will need think again. Indeed, there is a range of new technologies, which work right alongside traditional farming methods, and which are able to revolutionize the way the system functions and is perceived. From the plot to the plants, from the season to the single moment, today's technologies allow details to be focused on, without sacrificing the



by Elisa Crotti



image: unsplash.com



image: unsplash.com

vision of the whole. Target: optimize farming work and resources, by overcoming limits that have remained unchanged for millennia.

However, before delving into its implications, what exactly is meant by this concept should be made clear. In essence, Smart Farming means highly efficient and optimized management of agricultural activities on the farm. Made possible through IT, technology and innovation have transformed agriculture into a more efficient, less laborious, more precise, and simpler way of working the land. Indeed, Smart Farming significantly reduces assessment errors and hence cuts down on the waste of human and economic resources, especially water. In other words, with the Internet of Things (IoT), not only can time be saved, and innovative solutions be identified, relieving people from having to do many repetitive and routine jobs, IoT is now and will continue to be making it possible to interpret agriculture in completely new ways. These changes have already begun.

Smart Farming tools

With the objective of increasing the quantity and quality of crop yields, by optimizing the work required, Smart

Farming implements a series of technologies related to the different phases of production. In fact, there are sensors that can detect critical parameters by monitoring the earth, the water, the available light, the humidity, and temperature and that then can request any necessary corrections. Furthermore, through specialized software and connectivity programs, even using GPS and satellites, essential “dialogue” can be maintained among the instrumentation, the systems, and the farmers.

On the other hand, robotics is used on tractors, farm machinery and crop processing equipment, while at the same time, data analytics applications allow for the processing of all relevant data and the optimization of interventions.

This means having the right technologies to achieve a smart, efficient, and productive farm, at every level, based on clear decision-making processes.

Decision-making processes

Smart Farming can provide for data-driven decision making. And while it may be true that until very recently the farmer has been the final arbiter, who would weigh every choice made with skill, intuition, experience, and capacity for observation, today the volume of data available requires more sophisticated processing because it is considerably different.

Thanks to sensors or aerial detection by drones, real time monitoring of soil humidity can be displayed to predict, for example, the possible development of parasites, or to monitor the health of individual plants so that necessary corrective measures can be taken. In addition, the effectiveness of the pesticides and fertilizers used can be precisely analyzed, which leads to what is being called Precision Farming or Precision Agriculture.

Using Precision Farming, the plants or livestock can receive exactly what they need when they need it, because the systems’ applicative intelligence is essentially superior to the capacity of any single human being. Here lies the big difference when compared to traditional agriculture. The fact that decision-making is focused and detailed and may concern a single square meter or a single plant, rather than the entire field can change everything.

For example, when managing livestock, the level of well-being and nutritional needs of each animal can be monitored so that the correct quantity of feed can be supplied, and if necessary, by the analysis of health issues, the animal can be isolated. These are ultra-targeted procedures resulting in early intervention, upon



an initial reading which will save resources and time. A very important support in this sense is the application of drones, which are able to collect multispectral, thermal, and visual data.

When processed together, these data provide indices related to the health of the land, the number of shrubs, their height, foliage, reserves, chlorophyll, and many other important particulars that are useful for predictive purposes.

Farming Automation

Another Smart Farming advantage can be found in Farming Automation Systems, which are especially useful in intelligent greenhouses. Here, environmental parameters such as temperature and humidity, were normally monitored manually or through labor-intensive production, and control systems requiring high levels of energy output. Now, because of IoT based technologies manual operations can be eliminated entirely. Instead, sensors and platforms are employed to process the data gathered, which are then stored in the cloud, for further processing and checks without requiring the involvement of personnel.

The green meaning of Smart Farming

Not only does Smart Farming have important implications for large-scale farm management, but it has also been shown to work well in emerging agricultural systems such as family farming, organic crops, breeding special livestock, or in the conservation of high-quality varieties.

All of this is geared towards greater awareness, which helps to make agriculture more transparent for consumers. This is a real revolution, which will allow the reduction of the use of chemical crop protection products and pesticides, while enhancing productivity and improving food traceability, with all the ramifications that this entails in terms of safety.

Even the environment will be benefitted. Just imagine how valuable an optimized and aware water use management system would be. Therefore, application of Smart Farming is neither merely a farmer's whim nor just an "obsession". Instead, Smart Farming is turning out to be a truly great opportunity for agriculture, which already today must bear the weight of nearly 8 billion mouths to feed.



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 good 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.





PND presents to the world its new cutter for cherry tomatoes

Founded in 2000, PND is one of the leading companies in the manufacturing of fruit processing machinery.



The company has invested in innovation, specializing in design and development of advanced systems for ready-to-eat fruit products' companies and for already established industries in canned, frozen and dehydrated products.

A business mainly related to exports, which is worth 95% of the total turnover. PND operates on a global scale and is strongly present in Europe, South America, the United States, Asia, Australia and Africa. There are 19 machines in the catalogue that are easy to intuit, use and maintain.

Among the top products there are peeling machines, coring machines,





automatic and manual cutters, for multiple fruit varieties, as well as treatment and pre-washing tanks. Strawberry, apple, pear, kiwi, melon, pineapple, mango, peach, lemon, watermelon, citrus; each fruit has different intrinsic and external characteristics and responds to different market needs. The PND brand machines are modular, therefore they lend themselves to the construction of a tailor-made process line for the customer. Since September 2022, a new machine has been added to the catalogue, the PND new cherry tomato cutter, designed for cutting in half and in quarters. Fast, with a production capacity of about 200 kgs per hour; safe since it is designed to comply with all the safety standards required by current regulations, for example with the covered cutting unit; innovative because of its automatic loading, thus also saving manpower. The product is, in fact, collected in a hopper and, through an elevator conveyor, lift to the loading belt that aligns and transfers it to the cutting station. The cutting unit is composed of 4 rotating circular blades that, operated together, allow the cut into quarters. A mechanical lever system allows, instead, to move 2 blades so

as to obtain the cut in half. Finally, an output conveyor, placed under the cutting station, collects the product easily.

Thanks to its innovative stainless-steel design, the machine treats cherry tomatoes of different calibre (\varnothing 25 - 40 mm) and is easy to handle being equipped with four wheels.

Our company strength? Listening to the customer. PND is able to give a prompt response to the buyers, with processing lines designed according to their needs and requirements. A vision enabling to pay attention to



technological performance, perfectly tailored to the needs of those who choose them.

Relying on PND means receiving personalized assistance. As a matter of fact, our customer care is quick and effective and covers every latitude.

We invite you to discover the PND world by visiting the website **www.pndsrl.it**, where you can consult the catalogue of available lines and different machinery, as well as viewing all the national and international trade fairs in which the company will participate. For more information write to **info@pndsrl.it**. 🏠





DARMEC TRANSPORTER, versatility and efficiency in harvesting





DARMEC



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



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 Wyznie 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.

OMIP, Boema and FME will exhibit at Fruit Logistica 2023 (Berlin, 8-10 February): Hall 1.1, Stand A-32. 🏢

For more information:

omip.net/en

boema.com/en/

fme-europe.pl/index_eng.php



“EXPENDITURE ON NATIVELY CONNECTED MACHINES AND EQUIPMENT IS UP BY 17%”

Thanks to the incentives,
exponential growth towards agriculture 4.0



by Elisa Crotti

Agriculture 4.0 in Italy has grown and continues to grow constantly, despite the Covid-19 crisis and the international geopolitical scenario. According to a survey carried out by the Smart Agrifood Observatory of the School of Management of the Politecnico di Milano and by Rise Laboratory (Research & Innovation for Smart Enterprises) of the University of Brescia, the sales turnover of this market rose sharply from 540 million Euros in the first semester of 2020 to 1.3 billion at

the end of 2020, reaching 1.6 billion in 2021. These remarkable results were presented during the conference titled “Smart agrifood: let’s pick the fruits of digital innovation!”.

There are several technologies on which investments in agriculture 4.0 are primarily focused, first and foremost natively connected agricultural machinery and equipment, which have registered a significant rise in expenditure. According to the Observatory,



Unsplash

this expenditure accounts for 47% of the market and is increasing by + 17%.

The boost is provided by incentives, to the advantage of mechanized equipment and substantial increases in the sale of tractors, for example, followed by monitoring and control systems for after-sale application on agricultural vehicles and equipment. In fact, 2021 represented a year of growth for the registrations of tractors and agricultural vehicles (+ 36% compared to 2020, according to the calculations of FederUnacoma, with a sales turnover for the Italian market of approximately 14 billion euros).

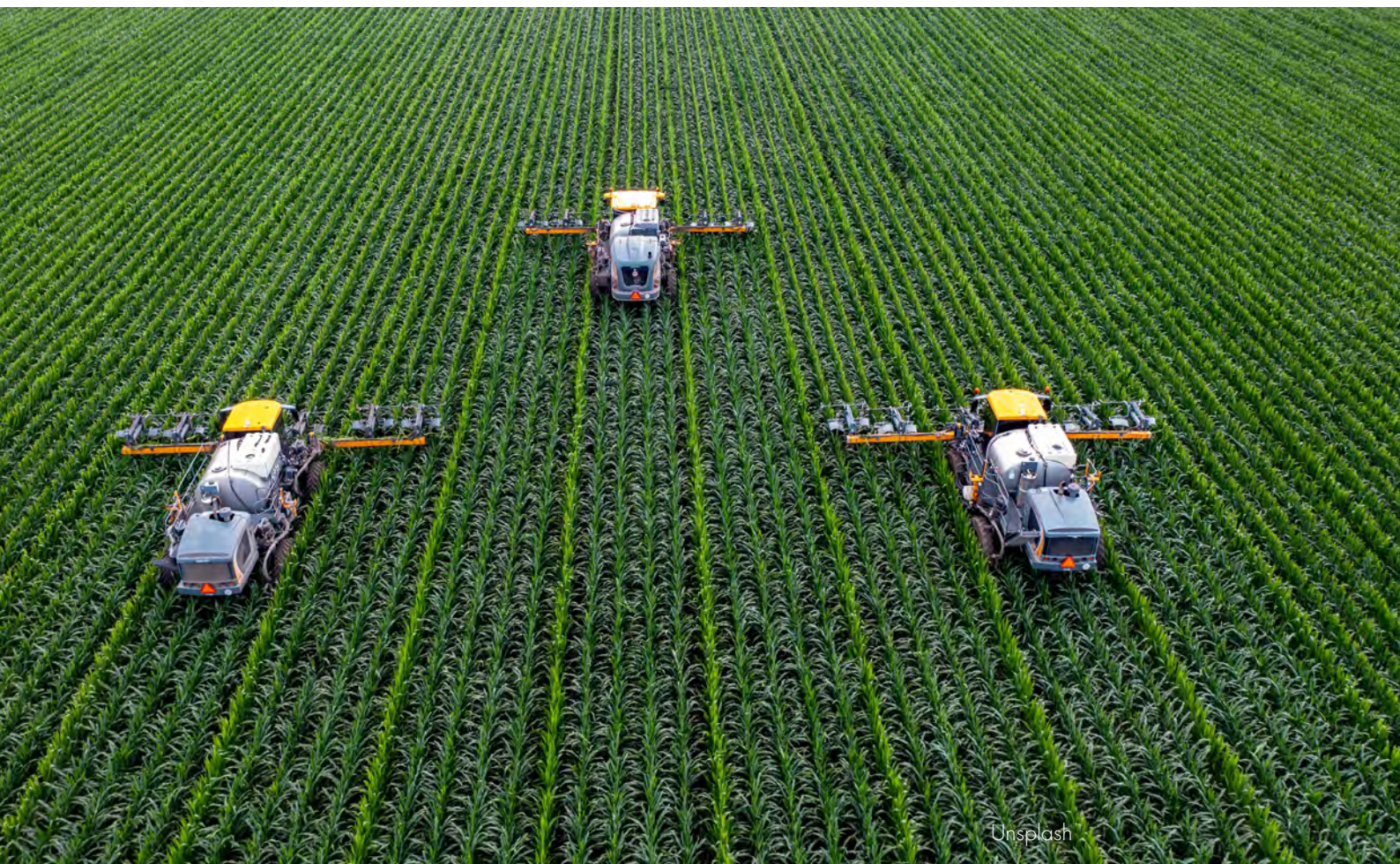
Indeed, with market growth being driven by incentives, especially the subsidies of Rural Development Programs and the Transition Plan 4.0, it is not surprising that three quarters of farms have used at least one Agriculture 4.0 incentive. Of these, 84% argue that incentives have had a decisive impact on investment choices, allowing them to anticipate them (for 44% of companies), to invest in more than one solution (20%) or in a more expensive solution (20 %).

The key to their success was that of linking the tax credit to mechanization and the implementation of innovative solutions. Initially, operators adopted these solutions to obtain the incentives. Subsequently, they realized the benefits of their investment and use rates have increased constantly.

This has extended the area being farmed with Agriculture 4.0 equipment, which reached 6% of the total in 2021, double the previous year.

Also according to the Observatory, in 2021 60% of Italian farmers used at least one Agriculture 4.0 solution, + 4% compared to 2020, and over four out of ten use at least two, in particular management software and monitoring and control systems for machinery. The researchers also report a growing interest in data analysis and decision support systems, confirmed by 26% of farmers who foresee investments in this area of agriculture 4.0 for the near future.

A trend for a new concept of farming, which seems to be unarrestable.





FUTURE OF FOOD PRESERVATION

Already present and available

PIGO srl is a family-run company, founded in 1991, and based on continuous research and development of new technologies, and improvement of the most cutting-edge technologies existing in the food processing.

PIGO srl is specialized in freezing that for decades was the best way to store the food, and still is. With deep freezing, up to 100% of all the natural characteristics and nutritional values of the fresh product are preserved, but

the frozen product requires the cold chain.

The future of the conservation is in the possibility to conserve the product in the easiest way possible. That is why the future is now.

The perfect complicity of the high technology, simplicity for the user and economical advantage are all concentrated in EFD Easy Freeze Dryer. Taking the frozen product, drying it with the sublimation process (freeze

drying), we obtain a product with all the characteristics of the fresh product, but completely without water, with a "shelf life" of many years, which does not require any particular conditions for the storage.

Today it is possible to freeze-dry not only individual components, but also whole meals. All we had the pleasure of seeing and trying complete meals, also for celiacs, who do not lose their taste or natural characteristics, thanks to one of our customers





"The only way to predict the future is to have power to shape the future." (E.H.)



who with decades of experience in the medical-pharmaceutical field uses these methods for its product.

Foods processed in this way have always been used by astronauts but today these products are the most innovative and most popular in all sectors of the food industry worldwide.

Today, PIGO srl is one of the very few companies in the world that offers all three main methods of preserving food: freezing, drying, and freeze drying.

Managing to improve existing technologies, obtaining the final product of clearly superior quality.

Following guideline "our raw material is gray matter", PIGO srl is focused on research, development and continuous improvement, thanks to engagement of entire team and collaborators.

PIGO srl long term experience in fruit and vegetables processing brought also to develop the high tech freeze-dryer that allows to save delicate aromas while drying the frozen product under vacuum, producing a premium quality product. The sensorial properties of the finished product are absolutely superimposable to those of the fresh product. After the process, product will have retained its form, volume and original structure, as well as all its physical, chemical and biological properties.

As the product is porous, it can be re dissolved by the simple addition of a proper solvent (water).

As mentioned PIGO srl is specialized also in freezing, and for the perfect IQF freezing process we recommend **EASY Freeze IQF Freezer**, PIGO srl avantgarde in freezing technology.

Fully controlled fluidisation method keeps the product constantly suspended above the belt in a cushion of air. The result is the immediate crust freezing and efficient core freezing of individual pieces, regardless of type, variety or condition of product.

Maximized freezing efficiency is guaranteed for each unique





product, whether the product is heavy, light, soft, sticky or fragile, thanks to Variable speed control of all fans and all other build-in drives, allowing on-the-fly optimization of air flow conditions.

PIGO srl is also specialized in other drying and freezing technologies. Besides **Easy Freeze Dryer EFD**, main machines for drying are **Adiabatic Multistage Belt Dryer PG135** and Tunnel Dryer PG128. For freezing, besides the **IQF Freezers EASY Freeze**, PIGO also produces **Spiral Freezers EASY Freeze SPYRO**.

PIGO srl experience also in complete stone fruit processing lines is perfectly proven and incorporated in the **High Capacity Pitting machine - PG 103**.

The key advantages of PIGO Technology and competitive technologies:

FASTER PROCESS WITH LESS ENERGY – Our method reduces process time up to 25% while consuming less energy.

LOW TEMPERATURE OPERATION – Uniquely designed features allow the low temperature operation cycles which are crucially important for preserving the natural integrity of the product.

NO PRODUCT WEIGHT LOSS / ZERO DEHYDRATION - Uniquely designed features allow air flow which are crucially important for preserving the natural integrity of your product, almost immediate crust freezing and preventing product weight loss.

HIGHER YIELD and faster investment return.

LISTERIA AND PATHOGEN FREE OPERATION - Today's "must" for food safety, provided by open design of all machinery parts by unique PIGO design.

OPERATOR FRIENDLY - All steps in the freezing process are designed to facilitate simple, fast and efficient operation and maintenance, **with NO DOWNTIME**.

For more information we invite you to visit our website **www.pigo.it** or simply send an e-mail to **info@pigo.it**.

Recalling philosophy "give the best to people who expect the best. (D.Z.)" PIGO srl invite you to give us a try. 🏡





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



© Photos: activeIT, SH Pratt, Depositphotos



Vibrating Material Handling Equipment for the FOOD and PACKAGING Industry



Processes

- Uniform product feed and output (Freezing tunnels, ovens, seasoning...)
- Separation of products by size.
- Washing and draining of products.
- Controlled instant dosing to weighers and selectors.
- Product elevating and cooling.
- Sprinkling powder.
- Dosing in additive lines.
- Fines and dust removal.
- Convey of product between different processes.
- Compaction of product by vibration.
- Product Alignment /Product Dispersion.

Products

Appetizers and Snacks.	Pyrite and minerals.
Pasta and Rice.	Pellets.
Candy and Sweets.	Soap.
Coffee, sugar and salts.	Detergents.
Legumes and Cereals.	Fertilizers.
Fruits and Vegetables.	Glass Fiber.
Olives and Pickles.	Carbon Fiber.
French fries and nuts.	Pigments.
Cornflakes.	Granulated resin.
Preserved Food.	Adhesives.
Cookies and Biscuits.	Plastic pieces.
Frozen food.	Tablets and pills.
Pet food.	Urea.



COMPLETE DISTRIBUTION AND FEEDING SYSTEMS TO WEIGHERS



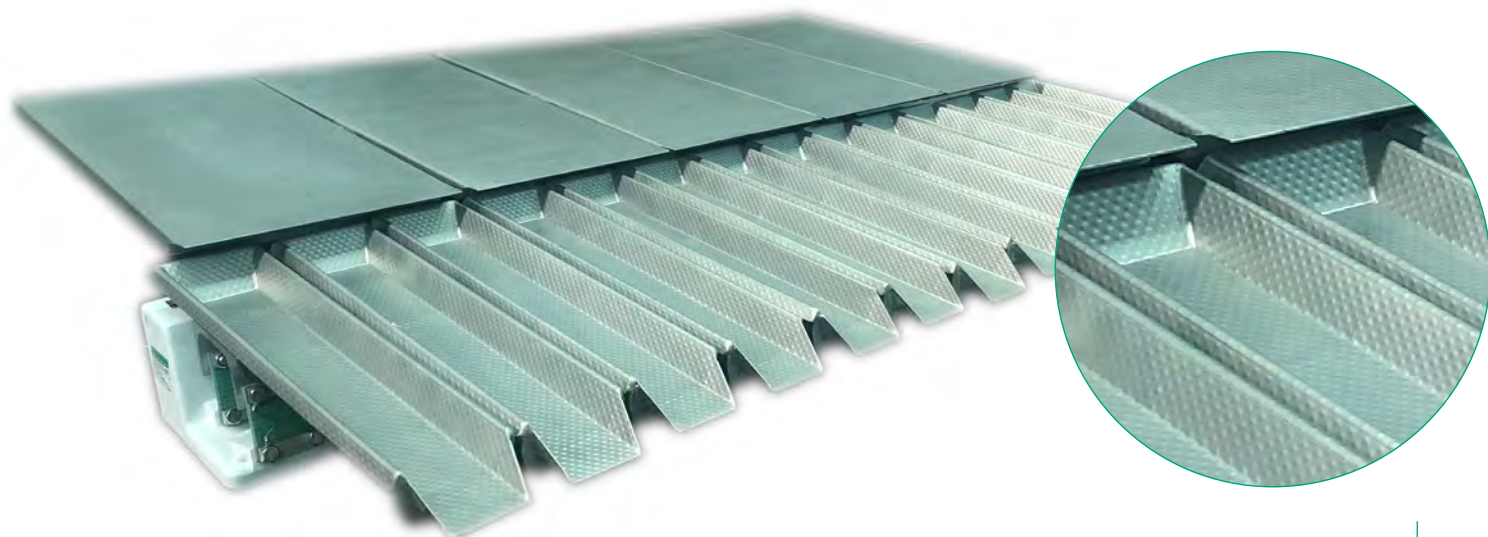
More than 60 years providing Vibrating Material Handling Solutions for moderate and large productions:

Syntron Material Handling

TARNOS



TARNOS ELECTROMAGNETIC vibration for fruit and vegetable packaging



Vibrating system for fruit and vegetable weighers and counters

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 solid boost to its applications within the food sector, 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 demand-

ing 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.

TARNOS

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

“ ITALIAN ORGANIC FOOD IN 2023 ”

The Covid- 19 pandemic certainly had a negative impact on the Italian organic food industry. However, this sector has begun to recover as consumers resume demand for delicious perishables. In the first six months of 2022, profits in Italian food exports rose by 16% compared to the previous years.

Germany, France, and Benelux are the biggest areas for importing Italian food products. However, there is also a thriving B2B industry within Italy itself. In 2023, there are several trends for food production and distribution to be aware of. Here are some of them.

Food Traceability

When a restaurant purchases food products from a supplier, they want traceability for all sections of the supply chain. This is especially true for meat such as poultry, as animal welfare is a major concern. Organic and ethically

sourced meat will likely be a key focus for the industry in 2023. Italy provides a large amount of fish to both local and international businesses.

Companies that are transparent about their practices will seem more attractive.



Our Editorial Office



image: Freepik.com



Technological Advancements

The rise of eCommerce has transformed the Italian organic food industry. It has expanded the different types of products available to order. B2B logistics can become more efficient in the coming year as new forms of technology are embraced. On the other hand, classic staples such as pasta and vegetables will still be ordered wholesale by customers all over the world. Technology could even be used in the production of the food itself. For example, olive oil companies may use new hardware and software to increase their yield on a factory scale without undermining their organic status.

Fast Delivery

Advanced GPS apps and delivery drones allow perishable Italian foodstuffs to reach the customer in a shorter amount of time. This means that in 2023, restaurants can get fresh products and serve them on the same day. Pizza continues to be an extremely popular form of Italian food. Live yeast is required to make the dough. In the past, organic yeast would have died before reaching the customer. As a result, people resorted to canned products instead.

Demand for Shelf Life

Meanwhile, 2022 saw a marked increase in the demand for food with an enhanced shelf life. This poses an issue for suppliers of organic products. Firms will need to find ways to make items last longer without resorting to the use of additives.



OUR STAINLESS STEEL JEWELLERY

IP 65

stainless steel packaging line

FP 021

stainless steel horizontal wrapper

FV 025

multi axis vertical wrapper

FP 027

wrapping machine for cheese

FP 025 PBA

stainless steel version

FP 025BB

stainless steel version

FP 095 AISI

stainless steel wash down long dwell

Tecno Pack

PACKAGING MACHINES

Wrapping up quality with TAILORED PACKAGING SOLUTIONS

Dolcezze Savini is a company based in Tuscany that for three generations has passionately been working in the art of bread and pastry making, using old processing techniques and carefully selected ingredients. From its factories in Valdarno, for over fifty years Dolce-

zze Savini has been baking high-quality products such as the famous bread cooked in a wood-burning oven, made with Tuscan wheat.

In addition to the different varieties of bread and pizza made with different types of flour, the Valdarno brand bo-



asts a rich pastry production that also includes the typical traditional pastries from Siena produced by the historic company Fiore 1827, acquired by Dolcezze Savini in 2017.

Among these specialities there are three important IGP products: two of them are from Siena and they are Panforte and Ricciarelli, while the almond biscuits named Cantuccini are linked to the Tuscan territory.

For a long time, Dolcezze Savini has focused its activity on a production that pays particular attention to the importance of some elements such as natural ingredients, reduced gluten products,

Dolcezze Savini's artisanship meets Tecno Pack's technological innovation



Tecno Pack
PACKAGING MACHINES

ifp
PACKAGING

SP
general system pack

palm oil-free products and a clearer labelling system.

The current size of the company, which counts more than a hundred employees in total, has not affected the original characteristics of Dolcezze Savini, confirming its vocation for craftsmanship, its dedication to quality

and its desire to be at the forefront of the technology used in its factories.

In this regard, in 2019 the company built a new production plant of over 4,000 meters with the clear intention of investing in technological innovation. Alongside the integration of two new semi-automatic lines for the

production of partially baked bread, the new investment has opened more space for artisanal production with the strengthening of the production of handmade pizza dough. The company has also developed a complete electronic management system, making it part of the world of industry



4.0. This innovation process has found full achievement in the strengthening of its packaging sector, for which Dolcette Savini has called upon the group Tecno Pack, a leading company in the supply of packaging technologies.

For over 30 years Tecno Pack has been designing, manufacturing and distributing horizontal packaging machines and automatic packaging systems for the food industry and other sectors. Tecno Pack is a group of companies including Tecno Pack, IFP

and GSP. Based in Schio, in the province of Vicenza, Tecno Pack stands out for being a pioneer and innovator in the packaging industry, developing cutting-edge solutions, increasing the digitalization of machines and plants, offering its customers excellent results with limited investments.

The partnership between Tecno Pack and Dolcette Savini has resulted in the development of three packaging lines, specifically designed by the group for the bread sector of the Tu-

scan company. These, in detail, are the new packaging lines implemented in the production system of Dolcette Savini:

- Monopiega Diamond 650 wrapper. This is an innovative and high-performance shrink wrapping machine.





ne, designed to wrap small, medium and large-sized items as well as thin solid products;

- Flow pack ATM FP 025 line suitable for pizza dough and ideal for "pinsa" (a traditional pizza made with an ancient Roman recipe). This horizontal packaging machine is specific for modified atmosphere packaging thanks to the tight packs granted by the sealing system. It is the most suitable flow-wrapper when aesthetically good-looking packages with high-quality side gussets and thick wrapping materials are required;
- The FP 015 line for sandwiches. This horizontal pillow pack wrapper

has a particular cantilevered frame with easy accessibility that helps sanitation, both for hygienic and maintenance reasons, guaranteeing full safety at work.

At the same time, the historical production carried out by Fiore 1827 was also implemented with the purchase of a vertical + multi-head packaging machine to improve the type of packaging and achieve greater production efficiency.

With the selection of these tailor-made solutions, designed according to the production needs of Dolcezze Savini, the Tecno Pack

group not only proves to be a leading manufacturer in the sector of packaging machines and systems but also confirms to be the ideal partner to integrate new technologies created as "tailor-made" solutions according to specific automation requirements.

The precious and fruitful collaboration between the Tecno Pack group and Dolcezze Savini represents the utmost expression of the most recent technological innovation combined with traditional working procedures for the production of a great variety of quality products with an authentic artisanal flavour. [🏠](#)



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



B.S. SRL, systems and machinery for industrial food processing and automation

BS srl was founded in 1980 in Parma, at the heart of the Italian Food Valley and, since then, its core business has been the production of systems and machinery for industrial food processing and automation.



A growing desire for innovation, together with a consolidated reputation and



reliability have allowed B.S. to acquire and develop an up-to-date and advanced know-how in the food-tech trade.

By creating a partnership with its clients and conducting targeted market analyses, B.S. is able to identify the needs of the industry effectively and precisely, with a view to designing and producing special custom-built solutions, capable of delivering high standards of performance and product quality.

B.S. responds to a constant and exponentially rapid technological development by producing modern technological machinery with the capacity to anticipate future trends.

OUR MANTRA HAS ALWAYS BEEN "THINK ROBOTIC"

BS is very proud to present the latest novelty: the "B.S. POCKET" Sandwich Line

The system can process several sandwiches at the same time, enabling high levels of productivity.

A single block containing all the mechanisms for making pocket sandwiches.

PRODUCTIVITY

The B.S. POCKET can produce up to 100 pcs / min. with different types of filling, from sweet to savory.

All the different settings can be saved in the recipe for easy recall.

HYGIENE

The BS pocket line enables fast and safe cleaning operations.

The various parts requiring sanitization can be removed without the use of special keys, or washed directly on the line.

FLEXIBILITY

The machine is equipped with Brushless motors on each station and dosing system.



This makes the system very flexible, allowing for optimal adjustments on each station according to the type of product to be processed.

HOW IT WORKS

The line is divided into 6 phases: bread deposit, 2 sauce dosing groups, sandwich rotation, slicing station, and unloading.

The bread loaded into the machine is transferred directly onto the conveyor belt by means of a special mecha-

nical arm,. When the line moves forward, it positions the bread under the two dosing stations, before proceeding to transfer it under the closing station from where it is carried to the slicing station.

The last station will unload the sandwich onto the outfeed belt, which will carry the product to the packaging machine". 🏠

www.bsparma.it



SLIMFRESH



GB Bernucci is an historic company operating in the food packaging since 1946. In accordance with the law and in compliance with quality requirements, **GB Bernucci**, with its business partners, provides a wide range of packaging solutions and is constantly dedicated to the research and development of innovative products made of eco-friendly materials that comply with its Mission: **Food Safety, Respect for the Environment & Search for innovative packaging.**

SLIMFRESH

One of the most extraordinary products that **GB Bernucci** offers is **Slimfresh**: it is an innovative and environmentally friendly packaging solution, made of a laminated cardboard base with a food liner and coated with a top as a second invisible skin around the product. This coating offers the possibility of

extending food shelf life, ensuring freshness and time lasting. Recycling and sustainability are the guidelines of this new eco-friendly packaging: with a simple gesture you can remove the paper from the film ensuring an efficient recycling. **Slimfresh** is indeed recyclable with paper.

The versatility of the product and its immediate display are the strengths of his new packaging. In addition, thanks to a completely customizable paper based with four colour printing, it offers a new advertising solution and it also give the opportunity to pack irregular shapes for better merchandising.

Upon request, **Slimfresh** can be produced with paper branded FSC (Forest Stewardship Council). FSC, is the international NGO that established a certification system to ensure responsible forest management and sustainability in the wood-paper supply chain.

FSC issues two different certifications: FMC (Forest Management Certification) and COC (Chain of Custody).

In summary, this skin-pack is the solution to meet the various needs of the consumer, manufacturer and environment.

PAPERSEAL

Paperseal® is an innovative, eco-friendly and sustainable tray that offers brands and retailers the opportunity to replace Modified Atmosphere Packaging (MAP) plastic trays and Vacuum Skin Packaging (VSP) trays with a barrier-lined paperboard alternative.


Compared to traditional trays, this new packaging allows a plastic reduction of about 90% as the thin inner layer can be easily removed and disposed separately, ensuring an efficient recycling.





This tray is recommended for cheese, fresh or processed meat, ready-made products, frozen foods, snacks, salad and fruit. The hermetically-sealed tray ensures the product remains fresh, with up to 28 days of shelf life, depending on the application. Minimum bulk and maximum advantage in one single

packaging. The exclusive sealing process leads to a perfectly sealed surface. It is possible to customize the whole surface of the tray with an offset print up to 5+5 colors, both internally and externally, ensuring a 360° communication that perfectly meets the requirements of each

customer. PaperSeal® Cook is a brand new tray technology for oven and microwave-ready chilled and frozen food applications. It has been created to match the functionality and performance of existing trays. . 

www.gbbernucchi.com



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-

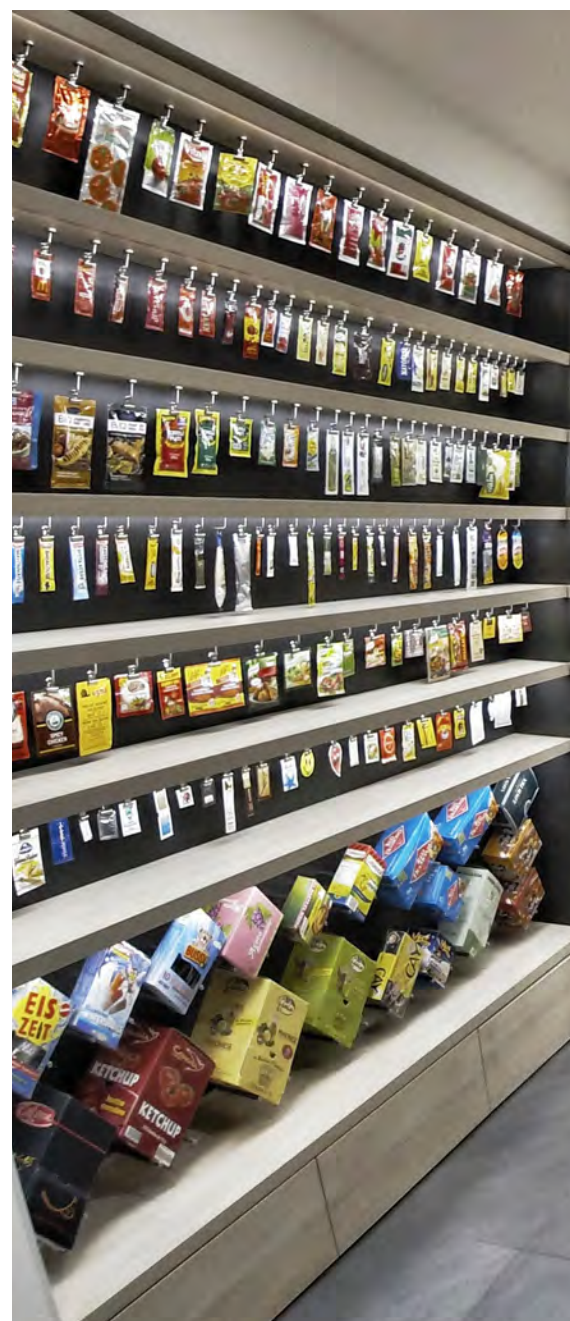
bility, traceability, sustainability and attention for consumers gave us the opportunity to improve our offer.

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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GLOBAL CUSTOMER base demands global support



In modern industrial operations, it is rare to find a company that has earned a reputation based solely on the quality of the products or machines it manufactures. These days, an equally important element of any company's market standing is the level and quality of pre- and post-sales support it can offer.

Much like consumers who have experienced easy and pleasant purchase-and-support experiences from high street stores or online retailers, industrial end users are looking for suppliers who can act as full-solution providers, as opposed to just hardware vendors.

In the food and beverage industry, this

heightened level of service is essential, as many companies work using agile and lean principles in order to generate the best possible yield and efficiency. As a result, extended downtime is not acceptable, which means that these end users depend on their machine suppliers to help maintain maximum uptime.

In a local context, the delivery of in-person support is relatively straightforward, the same is true on a national scale, albeit a little slower for on-site visits, but delivering this level of support internationally becomes more difficult and sometimes

to leading multi-national companies in many countries and, as such, has grown a rapid-reaction support network to make sure it can operate as quickly as possible and as locally as possible to its installed machine base.

process streamlining; uptime optimisation; and software patching, updating & enhancement.

The programme also offers Augmented Reality (AR) capabilities – using an app



An example would be its commitment to the Americas, where it has two permanent technicians in the USA and another in Mexico, all of which are supported by a comprehensive centrally located spares facility in Indiana.

Zacmi offers support in nine other core markets too, comprising either technician access or remote interactions; and the global team is backed by Zacmi's own support team in Parma, which comprises five engineers and 10 technicians who can travel to where local on-site support is not available or additional support is required. In addition to technical assistance, the support team can also help with installation, training spares and upgrades.

Thanks to advanced automation hardware and on-machine digitalisation, Zacmi is also able to offer its class-leading Remote Access Service (RAS) programme. Using a secure communication network, engineers from Zacmi can connect to machines – anywhere in the world – to deliver a range of value-added services, including: monitoring and troubleshooting; start-up &

– for connection via smartphone, tablet and even smart glasses. Using this service, end users can interact virtually with Zacmi's support team in real time or via photo and video messages. Live training sessions can also be undertaken to help increase Overall Equipment Effectiveness (OEE).

"Any company with a global footprint, such as ours, has to offer a comprehensive support infrastructure," explains Martino Chiefari, USA After-Sales Manager, at Zacmi. "We have to deliver peace of mind as well as class-leading technology and help ensure that our customers are operating as efficiently as possible. One of our key selling points is OEE, so we must fulfil this promise with dependable support, no matter where the customer is located." 🏢

www.zacmi.com/en/after-sales/

ZACMI[®]
FOOD & BEVERAGE PLANTS

attracts longer lead times. It is for this reason that many companies are investing in an international support network.

One such company is Parma, Italy-based Zacmi, a designer, fabricator and installer of tailor-made filling, sealing and processing lines for the international food and beverage industry. The company supplies high-end equipment

MAKRO LABELLING: technology in evolution on the small and large scale



Modularity, flexibility and practicality are key concepts in a company whose strong point is technological innovation and development. This is what the market wants and this is what customers get from the Italian based Makro Labelling, international standard setter for industrial labellers in the beverages, food, detergent and pharmaceutical sectors. The thirty years' experience of its founders, a team of 90 people, a dense and well-organised sales network consisting of the branch offices Makro UK for the United Kingdom and Makro North America in Saint-Philippe (Montreal) for Canada and the USA, together with agents and representatives in the most important countries throughout the world, plus an impeccable assistance and spare parts service guarantee satisfaction of every labelling

need and constant expansion on all the most important international markets.

A range of labellers for production speeds of 1,500 to 50,000 b/h

The range includes labellers able to process from 1,500 to 50,000 bottles per hour, applying up to five labels per bottle and available in wet glue, hot melt, self-adhesive and combined versions. For companies with limited production requirements, the **MAK 01, MAK 02 and MAK 1** labellers provide speeds of up to 12,000 b/h with mechanical or electronic rotation of the bottle plates. With special applications and able to cope with production speeds of up to 50,000 b/h, the **MAK 2, 3, 4, 5, 6, 7 and 8** labellers, on the other

hand, satisfy the needs of medium to large companies. The range includes a high speed self-adhesive labeller with reel winders and non-stop system enabling production to continue at maximum speed even during reel changes and a combined labeller to apply the fiscal guarantee seal.

For the high volume PET market, such as the water and soft drinks sector, Makro Labelling has developed the **MAK Roll Feed** series of rotary labellers. The 6,000 b/h to 40,000 b/h production speed and use of wrap-round plastic labels on a reel with hot melt application guarantee maximum economic benefits in the production process. The modularity of the machine also allows the roll feed unit to be replaced with a hot melt unit for pre-cut, wet glue or self-adhesive labels. Again designed for the water

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and fitted with a line scan camera. Thanks to a special, patented paper delivery system, the new **MAK AHS2** self-adhesive labelling module responds to the need for faster, more precise machines. It guarantees a linear speed of 100 metres a minute at a label pitch of 20 mm.

The technical and R&D departments monitor the market closely to understand its demands and anticipate them with new solutions able to offer efficiency, speed and a concrete response to specific labelling needs. Latest developments include the prototype of **C Leap**, a new, truly revolutionary labelling system, and two new inspection systems - **M.A.I.A.** (Makro Advanced In-line Analysis) and **A.L.I.C.E.** (Advanced Label Inspection and Control Environment) - which guarantee high performance, less production rejects and the highest finished product quality. 🏠

and soft drinks market, but needing between 6,000 and 16,000 b/h, the new series of **MAKLINE Roll Feed** labellers features motorised axles and brushless motors to minimise costs while maintaining meticulous labelling quality.

The new **double-station self-adhesive MAKLINE** is, on the other hand, designed for the beverages, food, detergent and pharmaceutical sectors. It packages large and small containers and offers the same high

quality labelling as a rotary machine. In common with the entire Makro range, the MAKLINE is fitted with the **Vision Control** system to verify the quality and correctness of the packaging and manage rejects.

The **Follower** optical guide system (an exclusive patent) enables the bottles to be aligned for application of the labels in precise positions with respect to a reference on the bottle and reduces format change times and costs. It is available in carbon fibre

www.makrolabelling.it



PERSONALIZED SLEEVES and self-adhesive labels

Orograf S.r.l. has been in the **SELF-ADHESIVE LABEL and SLEEVE** business for 50 years and we are a well-established firm, both in Italy and internationally, hold ISO 9001:2015 certificate. We offer a high-quality and highly flexible all-round service, **from graphic design through to final printing.**

Our production facilities are highly innovative and use the most advanced manufacturing technologies.

We have a wide range of printing systems (letterpress, screen, HD flexo, digital, offset, hot relief, dry relief, perforation, glitter effect and on-foil pantone overprinting), and **we can print on all types of material,**

adhesive and non-adhesive (laid, embossed, metallized paper, synthetic films, twin and booklet labels, reels and sheets), for any kind of end product. But what really distinguishes Orograf S.r.l. is that **we can combine multiple printing systems on the same production line** and therefore offer our customers unique and customized final products tailored to their specific needs.

FOOD Labels

Regardless of whether they are applied on packaging or directly on products and fresh foods, labels for foodstuffs must be produced respecting a series of precautions dictated by the particular products on which they are to be applied. Above all they

must be produced in compliance with **consumer health protection laws.** OROGRAF uses top-quality certified and guaranteed materials that meet these legal requirements and guarantee consumer protection. In addition to informing the consumer about the product, food labels can be used as warranty seals or open-and-close labels; they can also carry advertising, recipes, warnings, information about competitions, discounts, and so on.

As well as being customized with logos, colours and ingredients, food labels also need to carry **traceability** information, such as barcodes, progressive numbers, production and best before dates, batch codes and other **variable data.**





Orograf offers a wide range of plasticized materials, white and transparent, as well as standard finishes such as lamination and protective anti-UV coatings, hot foil printing and relief embossing.

Orograf offre una vasta gamma di materiali plastificati, sia bianchi che trasparenti, oltre a rifiniture standard come la laminazione e vernici UV protettive, stampe con lamina a caldo e goffrature a rilievo.

SLEEVES

A sleeve is a tubular label that shrinks when heated, **perfectly fitting the product** and giving it great visual appeal.

Our sleeves (produced in PET, PVC or PLA) can be printed in **multiple colours, including metallized ones**.


An important characteristic is the option of providing every sleeve with a **"tear off" system**. This is essential for products that consumers need to be able to open easily after purchase; this system also allows the sleeve to be removed from the container for recycling, once the product has been consumed.

MULTIPAGE, TWIN LABEL and PEEL-OFF

Multipage, Twin and Peel-off labels are all great solutions when the available space is limited and needs to be optimised.

Multipage labels, as their name suggests, have a number of pages and they come in different sizes and formats: they can take the form of folded leaflets; detachable or with a transparent resealable cover; or booklets (bound like a book).

Peel-off labels can have 2 layers (4 printable surfaces), 3/4/5 layers, or a booklet format; they can be printed in multiple colours, also internally, and there is the option of adding various other features, such as a tear-off system.

Twin labels are special self-adhesive "page-like" labels where a second layer (or page) can be applied on top of the first. This can be peeled back, read and repositioned. 

www.orograf.it





PERSPECTIVE

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



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

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Sharing the future in packaging
www.nvc.nl

INOX MECCANICA: excellence in technology and technical solutions for food industry

Research, development, and technology are at the core of our projects, aiming to strengthen and preserve our region's traditions and history!

Inox Meccanica's dream has become reality thanks to a life dedicated to an ongoing pursuit of simplicity, quality and constructive efficiency. That's a fruitful marriage increasing speed in production processes. Here they are the

driving forces shaping our industrial automation concept. As global market leaders since 1975, we design and manufacture machinery for meat processing and packaging, focusing on sausage products. Thanks to the experience developed over the years,

we jumped into a diametrically and complementary field; we full immersed into the world dedicated to washing and sanitation of all sorts of production tools and containers, finding the sector cleverly cross-cutting.

1968 is the year of our first patent; a



INOX MECCANICA
TECHNOLOGY FOR THE FOOD PROCESSING INDUSTRY

date opening the door to a pride that has persisted for almost fifty years. With the desire to satisfy our customers' most peculiar and diversified requests, we have achieved around 50 commercial partnerships which allow us today to cover almost 60 countries all over the world. We manufacture more than eighty machines for industrial plants each year, entirely handmade in Italy, in a workplace covering more than ten thousand square meters. However, the beating heart of our headquarter consists of our almost 100 employees divided between production, warehouse, technical/electrical department, administration and sales. Staff to whom we provide an on-going training to ensure a highly competent workforce. So far, our meticulousness has assured the attribute "quality" to Inox Meccanica branded products which, together

with a selected dealer network and strategic business partnerships, have ranked the company at the peak of the national and international market. The distinctive quality note associated with the Italianness of our AISI 304 stainless steel products, coupled with our after-sales service, make our global expansion visible, reaching all the way to the Americas and Australia. The sales procedure is inclusive, on request, of tests, if the customer feels the need to put our machines to a trial with specific needs and their own food recipes. Thanks to an exclusive Pilot Plant we can test industrial production, both for the development of new products and for the optimisation of traditional production processes. However, our testing does not just end with the packaging procedure. After that, the food can also be evaluated from a microbiological aspect in

the new laboratory, and from an organoleptic and taste angle in a modern, purpose-equipped tasting room.

In the last few months we have developed several novelties. Beside an advanced and updated top-of-the-range-PIC 99 BCE, equipped with an automatic loading belt, an automatic tube changing system, and a 1100 mould, we developed a brand new version of this PIC (called PIC 99 DRW) equipped with a product preparation system conceived to fill casings with meat pieces or injected muscles. In fact, it allows the operator the positioning and the assembly of several muscles inside a volume reproducing the forming mould.

The inserted parts' overall weight can be monitored due to a weight control system featuring a high-precision loading cells and a display viewer.



This allows to obtain bagged bars of constant length.

We can't not dedicate a parenthesis on a productive innovation brought by a freshly patented smoking system. Warm woody notes are imparted directly inside our Tumbler to both cured and cooked products, whose work cycle normally consists of a series of technical operations such as osmotic actions, salt distribution, rest or massage in atmosphere or vacuum, and liquid extraction. To achieve this, our R&D department optimized a process which uses a friction generator, such mechanism can generate smoke at low temperature alternated with vacuum phases. Besides the advantage of the considerable time savings, there is a lower weight loss of the product and a milder taste, whereas in respect of the production cycle there is almost zero risk of fire, saving space and plant energy costs.

Inox Meccanica is not just food processing but washing and sanitation too; therefore, we chose to design the best solutions to sanitize all those tools involved in the production process. Such machines have strong transversal applications, just think of the meat production area, the cheese one, the pet-food one, the pharmaceutical one, and the cosmetic one. Plus, our washing solutions focus on maximising energy and water savings by being environmentally sustainable in terms of the amount of resources used in washing, without compromising on pro- and excellent disinfection. The Washing Machine for buggies is just one of the many examples of the how the company materialised its commitment in researching and developing new technologies for washing and sanitation.

Our team upgraded the previous model of the washing machine for buggies by

equipping the washing cabin with two doors; one is used for container entry via an automated system with forks, while the other is placed at the front from which the container is extracted clean and disinfected, again with the aid of automation. In fact, the washing machine is designed to be housed in a wall separating two different areas of the plant, thus eliminating the risk of cross-contamination and the proliferation of bacteria that would compromise the quality of the products together with the safety of the purchasers.

Don't miss the chance to discover the exhibition of the innovative multiverse made in Inox Meccanica in Frankfurt; an opportunity we personally invite you to and which you cannot miss if you want to stay kept up to date. 🏠

www.inoxmeccanica.it



Pressed stock cubes: IN-LINE EFFICIENCY

A brief interview with the IMA team behind the highest speed line with the smallest footprint available on the market

The manufacturing of pressed stock cubes is a market niche where a higher level of efficiency is often required: all the machines in the line have to work together in synergy to ensure maximum productivity. Today IMA is the

only supplier on the market that can single-handedly offer a complete line. We had a brief conversation with IMA experts regarding the latest development in this field: a complete line with an output of 2,000 tablets/minute.

**Let's start with Fabriano Ferri-
ni, Product Manager for Tablet
Presses at IMA Active. Since
we are talking about pressed
stock cubes, I suppose
everything starts with a tablet
press. Is that right?**

Yes, that's right: the first machine in the line is a tablet press. Prexima is designed to guarantee high efficiency in production, mainly pursuing two factors: high output and consistent processing.

Prexima features several technical solutions for high-speed tableting of bouillon powder.

A new die feeder has been designed specifically for high efficiency feeding of wet masses with low flowability. This has proven to ensure low deviation in weight, even with tablets of 10 grams or more.

Compaction and dwell time are also important factors when high speed needs to be reached.

They allow more time for the ejection of the air contained in the powder blend and for the bonds to be made between the particles.

Here, the 250 mm pre and main compression rollers mounted on Prexima really make all the difference, as well as the IMA 32T tooling, which features a larger punch head.

In addition, the Prexima high-yield motorisation minimises heat production in the lower compartment, being the



ideal solution for low melting or heat sensitive products. Low temperature tableting maintains blend flowability at die feeding, prevents product sticking to punches, and dies and preserves tablet quality.



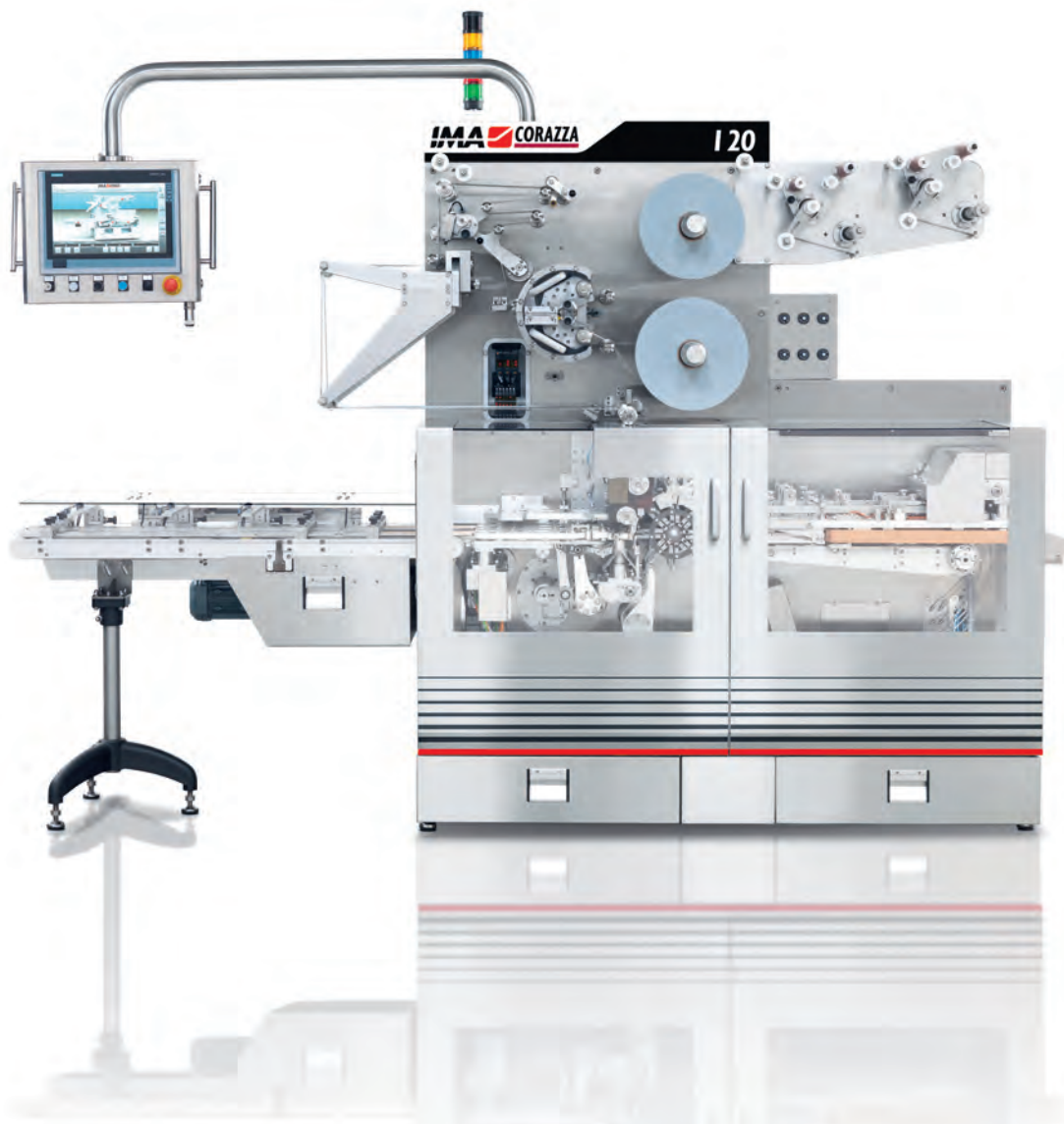
So, Prexima can run fast. But to achieve efficiency you must ensure a consistent process as well.

Correct: an optimal OEE is based on a robust operation, which minimises unexpected line stop, reduces cleaning times and maintenance work. From this perspective, Prexima ensures complete separation between processing and mechanical areas thanks to the use of purposely designed seals and protections. The absence of products in the mechanical area makes

for extended duration of cams, tooling and compression rollers, leading to reduced cleaning time. In addition, a powder-free mechanical area allows for a totally automated and recirculated lubrication system: the control system automatically takes care of lubrication frequency, without any need for operator intervention. In that way, the best parameters do not depend on the operator's skills. The only required action is to check the oil level and refill it, if necessary.

Now the tablets have to be wrapped. Let's turn to Davide Giordano, Sales Manager at IMA Corazza.

That is correct. Stock cubes are wrapped by the I20 wrapping machine, in side-folding execution, with its fully electronic operations. The machine can be equipped with the "easy-opening unit" which enables an easier consumer-oriented opening of the stock cube wrap. The I20 is also able to handle paper-based packaging



materials, which is certainly a plus for Corazza solutions in a world where recyclability and sustainability have become a must.

What are the I20's main hallmarks?

The I20 has been engineered with a very compact footprint, delivering a space-saving solution. What's more, its modular design means it is easy to access and maintain.

Its two-lane execution, equipped with a unique wrapping reel without any aligning unit, ensures gentle operations and high efficiency. The dedi-

cated feeding system allows for a compact design to be delivered for both the press and the wrapper: products coming out of the pressing unit accumulate on the two-lane conveyor, distanced thanks to the acceleration wheels and then driven towards the folding wheel by a pusher.

The new welding system, installed in the outfeed grouping unit, ensures excellent sealing quality of the final product. Compared to other wrapping equipment available on the market today, the I20 machine concept and operations allow for very fragile products to be handled.

What about maintenance and cleaning?

Since the I20 has been developed to meet customer expectations in terms of maintenance, the plug-in design of the main groups greatly facilitates activities such as reel change, foil feeding set-up as well as infeed and outfeed group cleaning.

The I20 shows its customer-oriented approach through the HMI control panel, which reports machine performances to monitor production, has alarms to tackle downtimes and enables remote machine assistance.



The high number of tablets released by the I20 means an automated solution is necessary to place them into a tray. Let's listen to Michele Nomi, Area Sales Manager at IMA GIMA, who can give us some more details on the FTB569 tray packer.

Over the last few years we have seen increasingly faster wrapping machines and, at the same time, a general growth in labour costs.

These factors have led many customers to look for automatised solutions also in the end-of-line sector, replacing what was normally done by semi-automatic equipment or even manually by operators.

It has been almost ten years since we began collaborating with IMA Corazza, supplying a downstream wrap-around tray packer for wrapping machines, and I can definitely say it is highly appreciated on the market for its many features.

First, its compactness – a total length of approximately 2 metres, including infeed and outfeed conveyors – and its accessibility.

Then, product handling and flexibility: thanks to the servo driven movements and other tailored devices, we can guarantee the smoothest product handling without any damage. Lastly, the machine is designed to provide a quick size change, switching from one format to another by replacing just a few parts, allowing our customers to be reactive to market changes and trends, while maintaining high efficiency levels.

You mentioned the wrap-around tray packer. What are the advantages of this technology?

The fully automatic technologies used to place the tablet in trays are usually top loader and wrap-around. Although

we have both of them in our portfolio, for this specific application we have decided to use the wrap-around solution because of several advantages.

Firstly, as we have just mentioned, the compactness of the machine.

Secondly, optimised tray dimensions: by forming the tray directly around the bundle, we can design it with zero tolerance between product and tray, which means a reduction in the used material, while achieving significant annual savings in logistic and shipping costs.

Last but not least, the quality: a tray that perfectly fits around the product looks better on the shelf and facilitates its wrapping.

Now we should wrap the tray... Let's ask Enrico Pazzi, Food Sales Manager at IMA BFB, which has a long tradition of designing and manufacturing end-of-line machines, ranging from overwrapping and stretch wrapping to case packing, palletizing and handling solutions. If you had to choose the best machine to end this line, which one would you propose?

The A50: it is a very compact machine. Its reduced footprint also makes it the ideal end-of-line solution when it comes to wrapping because it can easily adapt to any space constraint. Being the final equipment in the line means that it has to be flexible in size if you want it to fit into any space.

The machine is also extremely easy to operate. Operators do not have to be trained or particularly skilled to use it. We can say that it is designed with the operator in mind because it is easily accessible thanks to its balcony structure: it is very easy to reach the product-flow areas for cleaning.

The A50 guarantees maximum protection both for the operator and the product.

How is overwrapping carried out on the machine? How is the final quality of the wrap guaranteed?

The machine has specific film unwinding, cutting and sealing systems to ensure that the film is always cut with a very precise fold and sealed without wrinkles, air bubbles or other imperfections. The product is treated with care, lifted by the elevator, gently wrapped and pushed to the sealing area, where it is securely sealed and closed as it goes through the sealing plates. Thanks to this system, the machine can handle very thin films, like 16 micron films, considering the standard thickness is 22-24 micron. The option of handling thinner films brings significant advantages because, on the one hand, you can reduce the cost of the packaging material and on the other, you have a greater film reel autonomy which means less operator intervention. 🏢

www.ima.it

Make the most – The IMA Virtual event dedicated to Confectionery and Snack market

The Sensing Future Days cycle continues: a new virtual event completely dedicated to the processing & packaging solutions for the Confectionery market will take place on May 27th, the agenda will be available in the next days. Join the Sensing Future Days community to receive updates on the agenda. March edition: the last virtual event entirely dedicated to complete lines for stock cubes, processed cheese, butter & margarine, yoghurt, beverages & baby food and of process technologies for gums, candies & coated sweets is now available on-demand on the IMA Sensing Future Days Platform. Sign-up now at sensingfuture.ima.it to re-watch these sessions, as well as any other session from past editions.

Solve Fermentation Challenges Through APPROPRIATE VALVE SELECTION

By Rodolphe Karpe, Product Marketing Manager, Fluid Control and Pneumatics, Europe at Emerson

With the explosion of craft beers, demand for new wine blends and rise of international distilleries, the alcohol business is booming. This proliferation has given consumers more choices than ever and expanded the alcoholic beverage market both regionally and around the world.

Whether you're a small-town brewer, boutique winemaker or multimillion-dollar global brand, it's essential that your products maintain the same high levels of quality and taste to keep up with demand, despite such variability.

The secret to meeting customer expectation every time lies in your fermentation process.

To ensure quality, consistency and taste across various beverage styles and flavors, the fermentation process requires exact temperature control. To precisely control heating and/or cooling parameters, control tanks must be equipped with the right valve system.

Too often, valves experience short service lives and other performance issues that can cause temperature fluctuations — compromising beverage quality and costing precious time and money.



The fermentation process in the beverage industry requires precise temperature control

Common Obstacles Make Tank System Upgrades Difficult

Alcoholic beverage producers typically control tank temperatures, and therefore the fermentation process, using glycol or ammonia systems.

Depending on your system, it's also important to select valves that are rated to handle the appropriate me-

dium. In propylene glycol systems, for example, this nontoxic liquid medium flows through thermal jackets surrounding the fermentation tanks. In a

closed circuit, the glycol is pumped through and cooled in a chiller before it flows back down through the jackets. The chilled glycol then cools the tanks and their contents.

Because fermentation is such a vital process, it's no surprise beverage makers look for opportunities to install or upgrade their tank cooling and heating systems.

But these modifications aren't without their challenges. Many facilities, particularly smaller operations, have limited physical space.

As a result, tank systems need to be positioned as close as possible to each other to maximize floor space and remain accessible during maintenance — making innovative yet costly tank designs a necessity.

Other challenges include:

- **High energy costs.** Energy is one of the largest overhead costs in the food and beverage industry — including alcoholic beverage production. Because fermentation is considered a wet environment, beverage makers also need to have additional electrical safety features in place.
- **Extensive installation and maintenance.** Depending on the size and number of tanks, the labor required for piping and wiring can be costly and time-consuming. In addition, maintenance and upkeep become all the more complex — increasing potential downtime.



- **Possible product loss.** For wineries, in particular, any issues that compromise batches during extended fermentation periods equate to several years' worth of lost time, materials and cost.

In addition to ensuring precise temperature control, proper valve selection can address the challenges associated with installing, maintaining and upgrading fermentation heating and cooling systems.

By choosing the right valves, you can save equipment space, conserve energy and optimize productivity.

How To Select Valves That Overcome Fermentation Challenges

Whether you're spending too much time on piping or you're a startup operation with limited resources and space, Emerson can help you select the right fluid automation product to meet your unique needs. In addition to their reliability and durability, our products provide the industry's longest expected service life — maximizing your uptime during every precious minute of the beverage-making process.

Choose from the following valve solutions, all of which are suitable for systems using glycol or ammonia:

Two-Way Valves. Two-way valves are a traditional, tried-and-true valve type for fermentation heating and cooling systems.

These high-flow solenoid valves come in a range of pressure ratings, sizes and resilient materials like brass or stainless steel — providing long service life and low internal leakage. Many feature low electrical consumption and are mountable in any position — boosting their installation flexibility in tight or limited configurations. Look for an IP65 rating for use in fermentation and other wet environments.



IP washdown solutions eliminate contamination and protect components from corrosion that may cause downtime



High-flow solenoid valves, such as the ASCO Series 8210, provide long service life and low internal leakage in heating and cooling systems

Solenoid Valves. Solenoid valves include several electrical enhancements that achieve even greater energy savings and longer service life.

Look for valves that incorporate power management circuits, as well as electrical surge suppression to both the solenoid and electronic controls. These features result in energy savings that can lower your total cost of ownership by 14 percent.

In addition, these valves accept both AC and DC voltages without sacrificing flow or pressure specifications, increasing DC performance up to 500 percent by today's industry standards.

Because the valve's DC characteristics now rival AC pressure and flow values, you can eliminate AC output cards to simplify control, reduce wiring costs and provide safer working environments for DC users.

Solenoid valves also eliminate the hum associated with AC voltage and have expanded AC and DC operating temperatures. They also extend product life through low solenoid temperature rise, and they meet UL, CSA and CE approvals and RoHS 2 compliance.

Angle Seat Body Valves. Air-operated, direct-acting angle body seat valves are ideal for aggressive and high-viscosity fluids. Many models feature a straight-through design and wide range of advanced options, including a signaling box, compact positioner for proportional control and stroke limiter.

These valves are the preferred alternative to diaphragm and ball valves. They allow tight shutoff in both directions and contain no bleed holes, eliminating the chance of glycol plugging and the possibility of related tank temperature fluctuations.

They are also one-third the cost of ball

valves and last up to 10 times longer. Many angle seat body valves are designed to handle back pressure, eliminating the need for check valves, and feature a rugged, stainless steel body that resists sulphur vapor in processes like winemaking.


Automation Further Improves Temperature Control

In addition to proper valve selection, it's important to consider automating your fermentation heating and cooling systems to achieve even greater thermal precision.

For example, the G3 Electronic Fieldbus Platform makes this process quick, simple and painless. G3 integrates communication interfaces and input/output (I/O) capabilities into your pneumatic valve manifolds, which enables your PLC to more efficiently turn valves on and off, as well as channel temperature data from resistance temperature detector (RTD) sensors. Compact and modular, G3 includes

a range of innovative features to enhance your fermentation operation, including a graphics display for easy commissioning and fault diagnosis, as well as compatibility with a range of industrial communication protocols, including Ethernet, PROFINET, DeviceNet and many others.

The right valves in combination with the G3 automation platform provide a single solution that overcomes many of the challenges preventing alcoholic beverage makers from installing, expanding or upgrading their fermentation systems.

In addition to saving space, conserving energy and improving critical uptime, this combination delivers the peace of mind that comes with knowing your beverages — no matter the style, flavor or blend — are achieving only the highest levels of quality, consistency and taste. 

www.emerson.com



The ASCO Series 290 is a pressure-operated, direct-acting, angle seat-body valve built for demanding applications such as fermentation

INNOVATIVE AUTOMATIC DOSING SYSTEM: fast, accurate and eco friendly

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

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

Why dosing is so important in food processing?

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

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

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

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



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

Full automatic dosing system

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

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

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

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

Semi-automatic dosing system

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





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

Key benefits of our automatic dispensing system

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

end products with uniformity features throughout time.

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

„Dosing right the first time” as a consequence of accurate and exact dosing of powders and liquids, results in a reduction of product waste, energy/water consumption, processing times and, as a consequence, cost.

From the ecological point of view, our technology reduces to zero the exposure for operators to dangerous substances or toxic ingredients and provides absolute control of the dust

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

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

www.colors-service.eu



CM SOFTWARE SOLUTIONS SRL is a very young and dynamic company

Born from the passion for software development. Thanks to the experience of its founder gained in over more than 15 years of activities in many IT contest, it proposes itself as a company capable of creating software that can satisfy any need.

The most important feature of CM Software Solutions products.

is the ability to interconnect with any type of device and/or management system in order to automate the execution and data collection of the most complex production processes, minimizing the procedural and infrastructural impact.

The long experience in the food sector has allowed the company to create its





own flagship product "XSystem": an integrated ERP & MES software that implements a series of features useful for the complete automation and planning of the production process.

Traceability and Performance guaranteed throughout all the supply chain.

We asked the founder Eng. Cristian Melli why this software is better than the others: "It's the best because we are concrete people that before sit-

ting behind the desk to write software we got our hands dirty in the production environments by bumping into each other first person with real problems.

And we continue to do it every day. XSystem leads to concrete results, clear and well understandable data. It allows you to easily understand what needs to be done within the process to optimize performance and therefore minimize costs by increasing margins".

It is also the best because it is strongly focused on ergonomics of use, which expresses its highest need in the production environment.

Aware of this we have made it easily and extremely customizable, allowing our customers to minimize, if not delete, the costs related to staff training." 🏢

Visit:

www.cmsoftwaresolutions.it



PNEUMAX: components and systems for industrial automation

*Pneumatic components,
electric actuation and fluid control*

Founded in 1976, Pneumax S.p.A. has become one of the leading international players in the field of industrial and process automation components and systems. The company is at the head of the Pneumax Group made up of 25 commercial and production companies with over 730 employees worldwide.

The international network includes 9 branches in Italy, 8 branches in Euro-

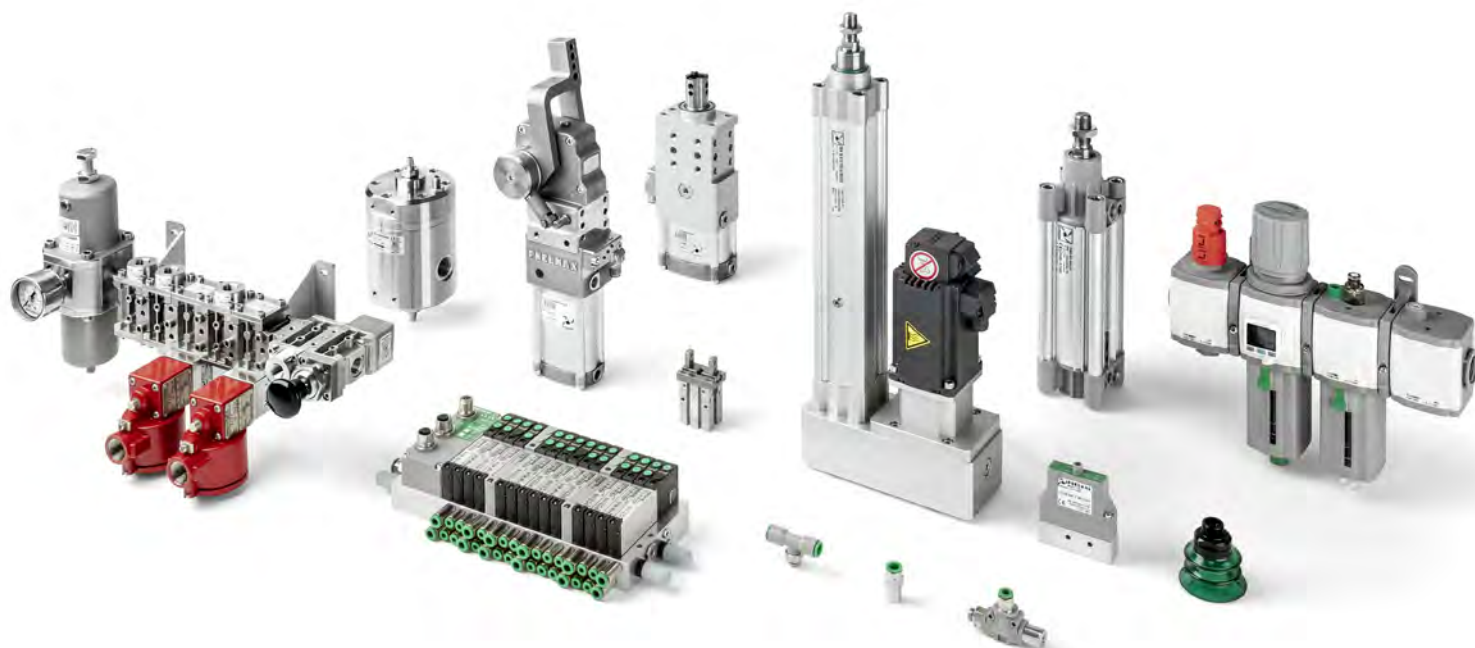
pe in addition to branches in the USA, Brazil, India, China and Singapore, and a vast network of distributors that guarantee presence in over 50 countries.

All of the Pneumax Group's manufacturing facilities are located in Italy, the seven units in Lurano (BG) plus Titan Engineering in San Marino. All the facilities comply with the environmental and workplace safety requirements set

out in standards ISO 9001: 2015, ISO 14001:2015 and ISO 45001: 2018.

Continuous investment in research and development has enabled Pneumax to expand its offer by combining well established pneumatic technology (actuators, valves and solenoid valves, proportional technology, fittings, air treatment, materials handling, vacuum), with electrical actuation and com-





ponents for liquid and gaseous fluid control and offering solutions made from different materials ranging from stainless steel to engineering polymers or from aluminium to brass.

The organisational structure designed to maximise flexibility and the use of cutting-edge technologies ensure maximum efficiency both for the supply of standard components and the creation of completely customised solutions.

At the same time, the development of mechatronic and digital expertise underlies the creation of integrated systems which, thanks to enabling technologies, are capable of meeting the requirements of Industry 4.0, from component interconnection to the ability to remotely control and manage component performance, without ever neglecting aspects such as optimising consumption.

FCM FITTINGS


Food Contact Material

The food & beverage and food packaging sectors are two of the sectors for which the company offers

Pneumax Automation LLC
A Pneumax Group Company

128 Durkee Lane
Dallas NC, USA

specific products such as the entire range of stainless steel components (cylinders, valves and air system units and fittings) or FCM fittings which, in addition to ensuring reliability and high performance, comply with relevant international standards such as NSF/ANSI 169 and MOCA. FCM fittings are suitable for con-

tact with food and the passage of food fluids according to European Regulations (EC) 1935/2004, (EC) 2023/2006, (EC) 11/2011 and contact with drinking pursuant to Italian Ministerial Decree DM 174/2004. 

www.pneumaxgroup.com



SYNTEGON LAUNCHES new pick-and-place platform

- *New robotic pick-and-place platform for product handling, feeding and loading*
- *Strong combination of industrial expertise, control and robotics technology*
- *Syntegon RPP: modular, individually configurable and scalable*

The Covid-19 pandemic has further fueled the automation megatrend. Manufacturers of different products, especially food, increasingly rely on robotic solutions to automate critical process steps or to fully automate entire systems. Syntegon Technology has been offering robotic solutions for process and packaging technology for many years. With its newly developed robotic pick-and-place platform, Syntegon RPP, the company sets a new standard in the automation of packaging lines. "We are more than ready for the requirements for the factory of the future. Automation and robotics are important strategic focus areas for Syntegon," says Dr. Silke Blumer, Vice President Strategy and Product Management for the business unit Food at Syntegon.

The core functions of the newly developed RPP platform include quality assurance, user-friendliness and efficient production processes. "Thanks to our proven expertise in robotics combined with industrial know-how, we can offer our customers automated turnkey solutions from a single source," Blumer confirms. "We understand the food industry's requirements for machines and lines better than any other manufacturer – from

process technology to primary, secondary and transport packaging."

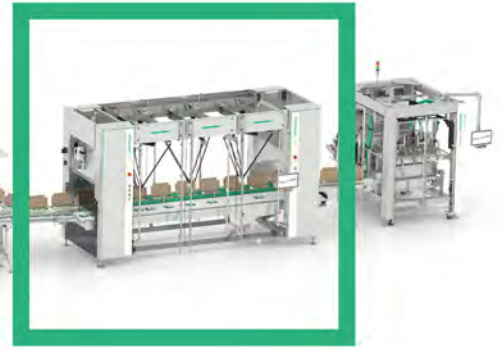
Maximum flexibility thanks to individual configuration

The Syntegon RPP platform automates process steps such as handling, feeding and loading. The new robotics platform is designed as a modular system. This allows individual configuration of the robotic cells. "Each customer project is different. Thanks to the modular RPP platform, we can

handle a wide variety of products. The Delta robots can be flexibly connected and, together with transport modules, seamlessly integrated into an overall system," explains Andreas Schildknecht, Product Manager Robotics at Syntegon. "Together with our customers, we can automate single process steps consecutively and in line with their needs or budgets, following the principle 'build as you grow'. Moreover, the platform can be scaled to suit different production



Each robotic cell of the RPP platform can be configured individually to automate processes such as feeding, handling and loading.



The new robotics platform is designed as a modular system and can be incorporated seamlessly into existing production lines.

capacities, while multiple cells can be connected."

The open control software ensures the seamless integration of the Delta robots into the line. "The comprehensive integration of controls and hardware is essential for all components within the line to communicate with each other through a single control platform – and to function perfectly together," says Schildknecht. The platform, which was designed according to the latest UX aspects, ensures user-friendly operation. New features support the operators in making their daily work with the line easy and effective. The RPP cells provide excellent visibility, easy access and efficient cleaning. The stainless steel robotic cells meet the IP65 protection class. This minimizes the risk of

contamination for both current and future hygiene requirements in the food industry. Last but not least, the tool-free format changeover reduces downtime, allowing manufacturers to process different products on the same line and to respond quickly to changing market demands.

Automation is the future

"The growing need for more flexibility and efficiency will be increasingly realized by integrated robotics solutions. Automation is the future," Blumer is convinced. "With the Syntegon RPP platform, we are paving the way for future manufacturing. However, we have by no means reached the end of the road. Our unique combination of mechanical engineering, robotics and industry expertise makes

the Syntegon RPP platform one step of many, albeit a very important one." In parallel, Syntegon will continue to develop further innovative automation technologies – and will soon introduce new developments to the market

Syntegon Technology is a leading global process and packaging technology provider. Formerly the packaging division of the Bosch Group, the company, headquartered in Waiblingen (Germany), has been offering complete solutions for the pharmaceutical and food industries for over 50 years. About 6,000 employees at 30 locations in more than 15 countries generated a total revenue of 1.3 billion euros in 2020. The portfolio of intelligent and sustainable technologies includes stand-alone machines, as well as complete systems and services. Fields of application in the pharmaceutical industry are the production, processing, filling, inspection and packaging of liquid and solid pharmaceuticals (e.g. syringes and capsules). In the food industry, the portfolio includes process technology for confectionery as well as packaging solutions for dry foods (e.g. bars, bakery products and coffee), frozen foods and dairy products.



Andreas Schildknecht, Product Manager Robotics at Syntegon

www.syntegon.com

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

COMMERCIAL HORTICULTURAL ASSOCIATION offers prime meeting opportunities at FRUIT LOGISTICA

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

The trade association CHA is representing UK suppliers with an industry information stand alongside an exhibitor group at Fruit Logistica 2023.

The show, which covers fresh fruit and vegetables, dried fruit and nuts, packaging and labelling plus transport and logistical systems, is being held in Berlin from Wednesday 8 to Friday 10 February 2023.

International buyers and UK suppliers are encouraged to visit the information stand, where the CHA team and representatives from the DIT Agri Tech department will be on hand to answer queries and direct sales enquiries to appropriate UK suppliers.

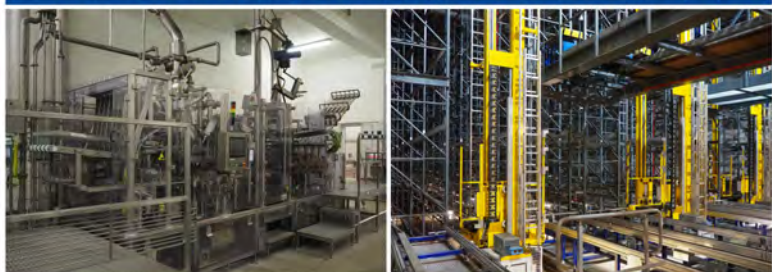
UK suppliers taking advantage of the CHA Base Space area on the CHA information stand can display product brochures, have a place to sit and work or hold meetings and access light refreshments. 🍽️



Asta online di macchinari per la trasformazione dei cibi, panificazione e attrezzature per il catering a Eindhoven (NL)



Asta online di macchinari e magazzino della precedente sede produttiva di Homann Feinkost GmbH per conto di Progressu GmbH a Dissen aTW (DE)



Asta online di macchinari per l'industria alimentare per conto di Fountain Group Ltd a Nordelph (UK)



Register for free

Find and bid

Win

Pay and pick up

RUMMO is born again thanks to unique partners

The combination of multiple skills gives rise to customized and efficient projects. ICI Caldaie proves to be a precious partner for energy efficiency paths

In October 2015, severe weather conditions hit the Sannio area in the Campania region. The heavy rainfall caused the overflowing of three rivers – Calore, Tammaro and Sabato –, covering the industrial area of Ponte Valentino with water and mud. The storm violently hit the historic Rummo pasta factory, destroying the machinery, damaging the raw materials and stopping production.

Despite the irreversible damages, the management never considered the idea of shutting down. Thanks to the determination of its employees, about 150, and with the help of the Web, a spontaneous campaign of solidarity began on the social networks, prompting consumers and supermarkets all over Italy to buy Rummo products.

#SAVERUMMO IS ICI CALDAIE'S CONTRIBUTION

The hashtag #saveRummo went viral and the brand made fun of the tragedy with the slogan "water never softened us". Rummo is a family-run business that has been producing durum wheat semolina pasta since 1846, exporting it to 45 countries all over the world and continuing to do so for a long time thanks to both the management and employees' hard work and passionate commitment. Other invaluable protagonists in this history of rebirth are the many partners with whom the pasta factory works – qualified and reliable professionals who have supported the cause from the very beginning. Among them is the Venetian company ICI Caldaie, which has contributed to the energetic improvement of the fac-

tory with its expertise.

The beginning of a successful collaboration

The year after the flood, Rummo decided to improve the modernization of its plants with the desire to significantly reduce primary energy consumption yet maintaining its high-quality standards.

To achieve this ambitious goal, Rummo decided to turn to an important ESCO (Energy Service Company) operating in the industrial sector, S4E System (www.s4esystem.it). This company had been working for some time with ICI Caldaie, an Italian boilers and steam generators manufacturer





based in Verona. S4E System soon promoted the beginning of a wider collaboration between Rummo and ICI Caldaie, being it a company at the forefront in the Italian scene. Since the beginning of the new century, ICI Caldaie has been working on the research of possible alternatives in the energy sector, aiming at reducing carbon dioxide production and building effectively sustainable plants.

To do so, ICI Caldaie has always relied on the collaboration with national and international partners, including research centres, universities and manufacturing companies, and on innovative methods (including design thinking, a person-centred process aimed at solving complex problems). ICI Caldaie, in fact, strongly believes that only through a multifaceted and versatile know-how it is possible to create a truly efficient and functional system. In

the specific case of Rummo, the challenge was to continue to improve the quality of its production, reducing both energy costs and the company's environmental impact. Making use of each other's expertise, ICI Caldaie and S4E System developed several solutions that perfectly met the requirements of the pasta factory.

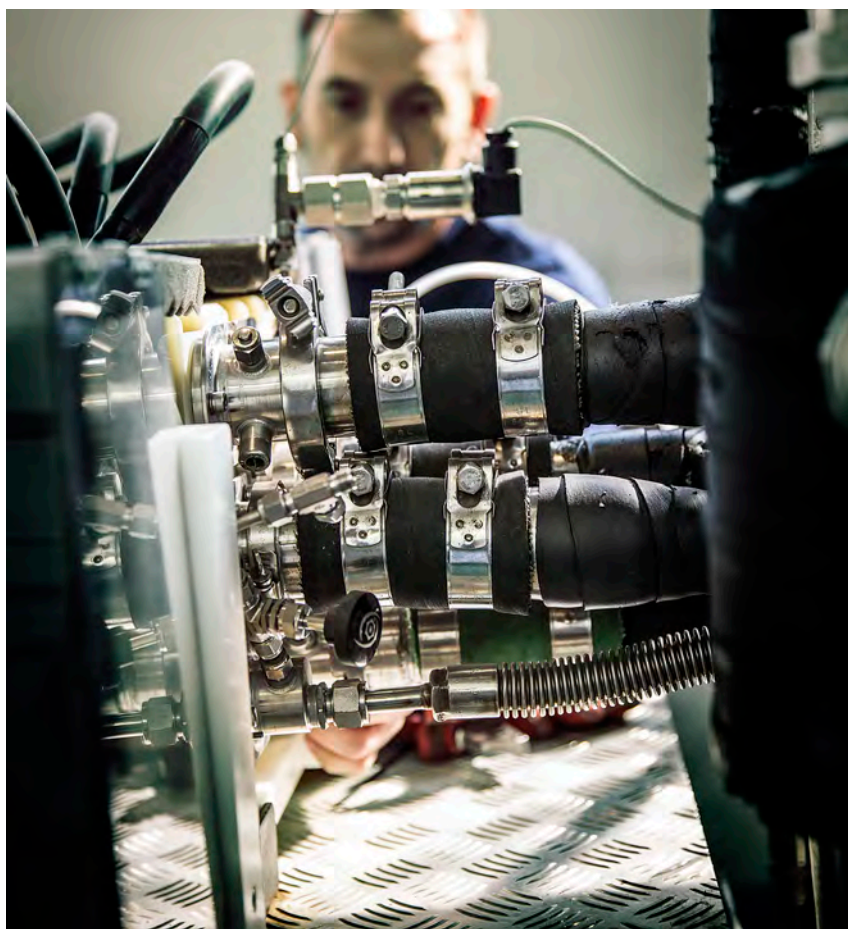
Interventions and results

The design and modernizing activity was performed throughout 2016 in collaboration with the plant technicians, and ended in 2017. The interventions mainly focused on the heating plant, but also involved the refrigeration plant, the compressed air plant, the vacuum plant and the general energy monitoring system of the heating and refrigeration plant, including the Energy Diagnosis procedure according to the Legislative Decree 102/2014. The main intervention in

the heating plant was to improve the production efficiency of superheated water. S4E System identified the main problem, detecting an ex-ante situation with an efficiency of 86% characterised by the presence of a boiler that used diathermic oil as an intermediate heat transfer fluid for the production of superheated water at 140°C.

On that specific boiler, there was a combustion air preheater. It was thus decided to improve the efficiency of superheated water production by introducing an ICI boiler ASGX EN 6000 superheated water boiler of 6 MW, equipped with economizer for heat recovery on flue gases and characterized by a nominal useful efficiency of 94%.

To date, the boiler working on the three pasta production lines in Room 2 produces at full capacity about 50% of the nominal power. This translates



into a methane consumption saving of 200,233 Sm³/year, corresponding to about 58,000 €/year. The new system configuration also eliminates the diathermic oil circulation pump (diathermic oil pump Q=400mc/h H=35mt c.l. Pel ass= 45kWel) with a consequent electricity-saving equal to 356,400 kWh/year, about 28,500 €/year.

The energy efficiency path has thus produced the expected results: lower costs and reduced environmental impact.

Overall, the intervention conceived by S4E System and carried out through the introduction of an ICI Caldaie boiler has led to saving about 234 TOE/year, a cost reduction of about 86,500 €/year and a decrease of about 520.86 tons of CO₂. The energy improvement process is not limited to this but has involved other sectors with excellent results. In the refrigeration plant, for instance, a reduction in

Annual savings in the Pasta Rummo's plant thanks to the interventions ICI CALDAIE and S4E



TOTAL ECONOMIC SAVINGS

154.100 €/year



TONS OF CO₂ SAVING EVERY YEAR

800 Ton/year



equivalent to the emissions of 100 medium-sized cars that make 65,000 km



TOTAL POWER SAVING

1.202.359 kWh/year





energy consumption for the production of chilled water has been achieved by changing the system configuration and improving the efficiency of chilled water production by achieving an EER of 4.5.

This result was made possible thanks to inserting refrigeration units with screw compressors under inverter and replacing the plate heat exchanger with direct exchange and mixing hydraulic disconnector to work at the same

temperatures as the cooling tunnels of 14°C. The electricity saving is equal to 282,972 kWh/year, equivalent to about 22,600 €/year, i.e. 93 tons of CO₂ less released into the atmosphere. As for the compressed air power plant, the ex-ante situation was based on fixed speed compressors.

These were replaced by inverters compressors, which resulted in an electricity saving of 30%, about 325,387 kWh/year, corresponding to about 26,000 €/year and a reduction of about 107.38 tons of CO₂. Finally, in the vacuum plant, the vacuum pump has been replaced by a liquid ring pump cooled by the chilled water produced by the Fridge Units with an air-cooled pump.

This replacement has allowed a saving of electricity of 30 kWh in addition to the non-use of chilled water for cooling, which means a saving of electricity of 237,600 kWh/year, equivalent to about 19,000 €/year and about 78.41 tons of CO₂ less released into the atmosphere. S4E System has also introduced an energy monitoring system for the heating and cooling plant, and also installed switchboards with PLC and digital interface to replace the previous electromechanical switchboards with no digital interface. In 2019, Rummo commissioned S4E System to carry out and transmit the Energy Diagnosis procedure according to the Legislative Decree 102/2014.

From a critical situation, the right partner helps rise to success

When the client's initial needs are fully met, there is no question of success. Success is made possible by the vision of those companies that no longer think themselves in terms of simple producers, from an individual perspective, but see the project on a larger scale.

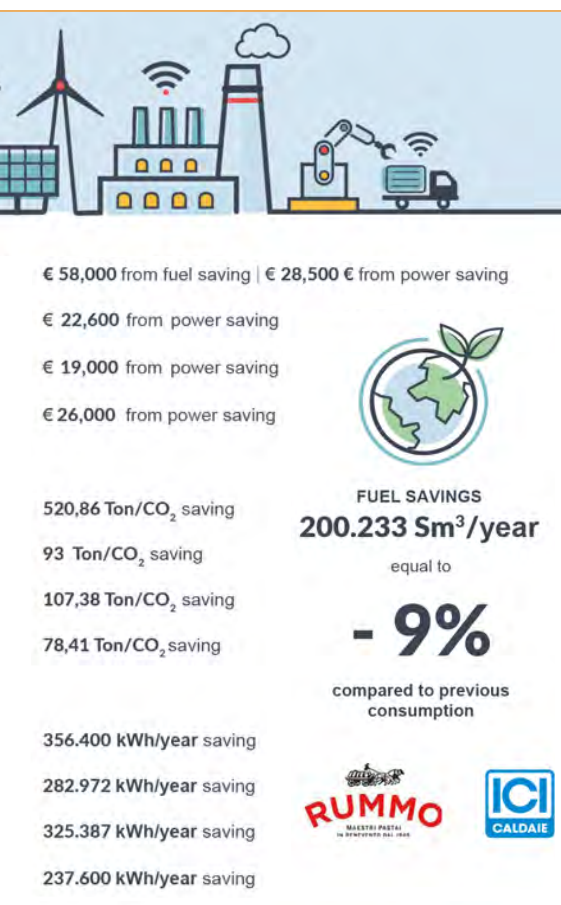
Only if driven by the desire to achieve a comprehensive solution one can establish partnerships with other companies that have different specializations and bring together multiple skills to develop complete projects.

With this ambition in mind, a company like ICI Caldaie collaborated in the energy improvement process of another company, in this case Rummo, not simply offering its boilers, but participating in a design process that involved many other areas.

Starting from a specific urgency, making useful energy-saving actions, it has been possible to create a condition of saving in a wider sense, making the company sustainable while maintaining the high-quality standards of its efficiency and productivity.

This story teaches us that with the right partners, it is possible to create not only a product but a complete and innovative tailor-made system. 🏡

www.icaldaie.com



EXPERTS IN CREATIVITY, innovation & sustainability



A quality designed to last. This is Lawer's mission statement, a Biella based company, internationally recognized for the excellence of powders and liquids dispensing systems. This excellence begins with a preliminary analysis phase, to the equipment commissioning, to ensure safe and automated systems, operated by a high-class software which is able to adapt itself to the manufacturing companies' changing needs. Quality is also the ability to provide the most efficient service and maintenance, being always on time and close to its customers thanks to a worldwide presence.

Since the beginning Lawer has always implemented the strategic decision to invest on people, research and new technologies. Thanks to the analysis and development of the technical department the company shows its strong projecting capabilities. The task

of finding the most innovative technical solutions for the systems continuous improvement is essentially provided by a qualified and professional team, which is constantly updated and trained with new technologies.

For this reason, Lawer continues leading in an increasingly competitive market. Lawer's dosing systems automatically weigh all the powder and liquid ingredients present in the recipes and batches, where the micro dosage of ingredients is required.

All Lawer's systems are the result of Lawer's 50-year experience and know-how in the design and manufacturing of dosing systems for many different applications in different types of industrial productions.

With the automatic powder dosing systems, it is possible to grant:

- **The highest quality of the finished product**

- **The highest weighing precision**
- **Replicability of the recipes**
- **Right balance of raw materials**
- **Production management, efficiency and cost reduction**
- **Complete confidentiality of know-how**
- **Optimisation of production, less production time**

More time/less costs, the automatic dosage system reduces the production time with consequently recovering of efficiency and marginality.

Confidentiality, it is possible to keep secret the composition of the recipe and protect your creativity and your know-how.

Control, it is possible to monitor and verify the daily production, monthly production, the consumption of each



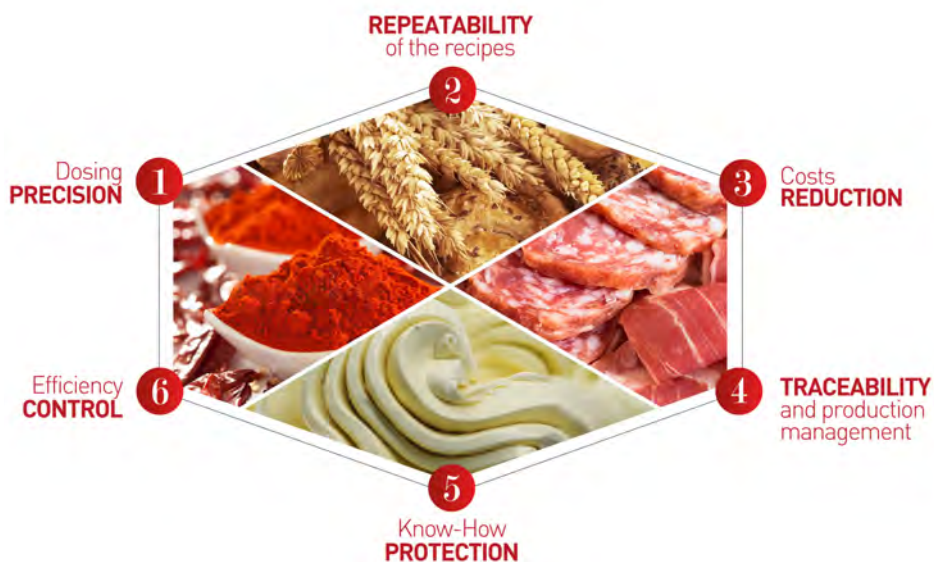
single raw material or each single recipe accessing to a protected area.

Replicability, in a fully automatic way, the system repeats countless times the error free weighing of the micro-ingredients of the recipes, guaranteeing constant quality at all times.

Less errors, less cost, higher quality of the finished product.

Traceability, all the weighing operations are saved and made available for a perfect traceability.

Saving, the systems contribute to reducing errors and time in the recipe preparation, thus reducing costs of production and personnel.



Lawer can supply different models of Automatic Dosing Systems, with sin-

gle, double and multi scale technology (**mod. UNICA TWIN, UNICA HD & SD and mod. SUPERSIN-CRO**), with different levels of accuracy (**1gr – 0.1 gr or 0.01 gr**) and different capacity of powders' storage (from **50 lt** up to **300 lt.** capacity of each hopper). Lawer is the ideal partner for the automation of the powder micro-ingredients dosing. 🏭

www.lawer.com



LAWER®
dosing & dispensing systems

FOOD
processing

W.B.L. SYSTEMS: the re-birth of the washing, drying and conditioning process

What can help a winery improve its process?

How can costs be optimised in a winery?

How can you work better and produce more without necessarily having to invest in buildings or water drainage systems?

How can you do without compressed air?

How can you be greener?



Washing-drying LAB12+ conditioning CAD-8_3000 combined synchroblock

LAB-X and CAD-X, with their patented systems, completely revolutionise the work in the winery.

The **External washer/dryer with single combined carousel mod. LAB-X** opens the way to new washing concepts. It is the first machine in the world to enclose in a unique carousel the washing and dry-

ing phases, with a consequent drastic reduction of the occupied space.

1 - Most compact machine in the world

2 - Active surround system Automatic shape recognition brush system.

3 - Automatic brush wear compensation The "tactile" washing device requires the brushes to ad-

vance towards the bottle up to the contact, recognizing the shape. Wear is compensated.

4 - Green washing system

Water is dosed on the bottle in a smart way only where and when it is needed in a closed station.

5 - 3-Axes washing system

Improved cleaning efficiency.

6 - Totally self-lubricating No greasing points.



conditioning CAD-8_3000

7 - Universal drying Innovative drying air distribution system.

8 - No compressed air on the whole range

9 - Water off system Injection system which recognizes the absence of the bottle and stops the dosage of water in the corresponding empty station

CAD-X radiant dynamic conditioner is synonymous with transformation and progress compared to

traditional technology. It revolutionizes the bottle conditioning process. It is a radiant conditioner with dynamic accumulation. Thanks to this device, water is totally eliminated in the process, consequently the system is perfectly cleaned and free from contaminations.

1 - "no water" device

2 - significantly reduced dimensions

3 - advanced catalytic tech-

nology System with an efficiency of 98,5 % as all energy is transformed without dispersion. No more plant engineering charged to the customer.

4 - Stationary treatment First machine in the world with stationary product treatment.

5 - "FIFO" device FIFO ("first in first out") FIFO managed machine which guarantees traceability by batch and the staying time during the process. Uniformity of treatment.

6 - "Contactless" filling Bottles feeding method takes place without contact between the bottles. Relative noise is eliminated as well as the format change.

For more information and to discover the range of products visit the site. www.wblsystems.com

www.wblsystems.com



Washing-drying LAB12



MERGER SYSTEMS IN PACKAGING LINES: a short guide for selection



The presence of merger systems in the packaging lines is a significant sign of a very high level of complexity and automation. The selection of the correct device is not trivial and has a strong impact on the quality of the products and the proper functioning of the downstream machines and in general on the efficiency of the line.

There are many types of mergers, but the main ones fall into two categories: **pneumatic or accumulation unifiers and dynamic unifiers.**

Accumulation types have “gates” on the entrance lanes which remain closed waiting for the convergence section to be free, then releasing the rows of products in sequence. This simple and cost-effective solution have **two important prerequisites:** the products must be able to withstand the pressure during the accumulation phase and the downstream machines must be able to receive the products in trains without being stressed. The first point is intuitive because it concerns the integrity of the products and it means that those eligible are boxes,

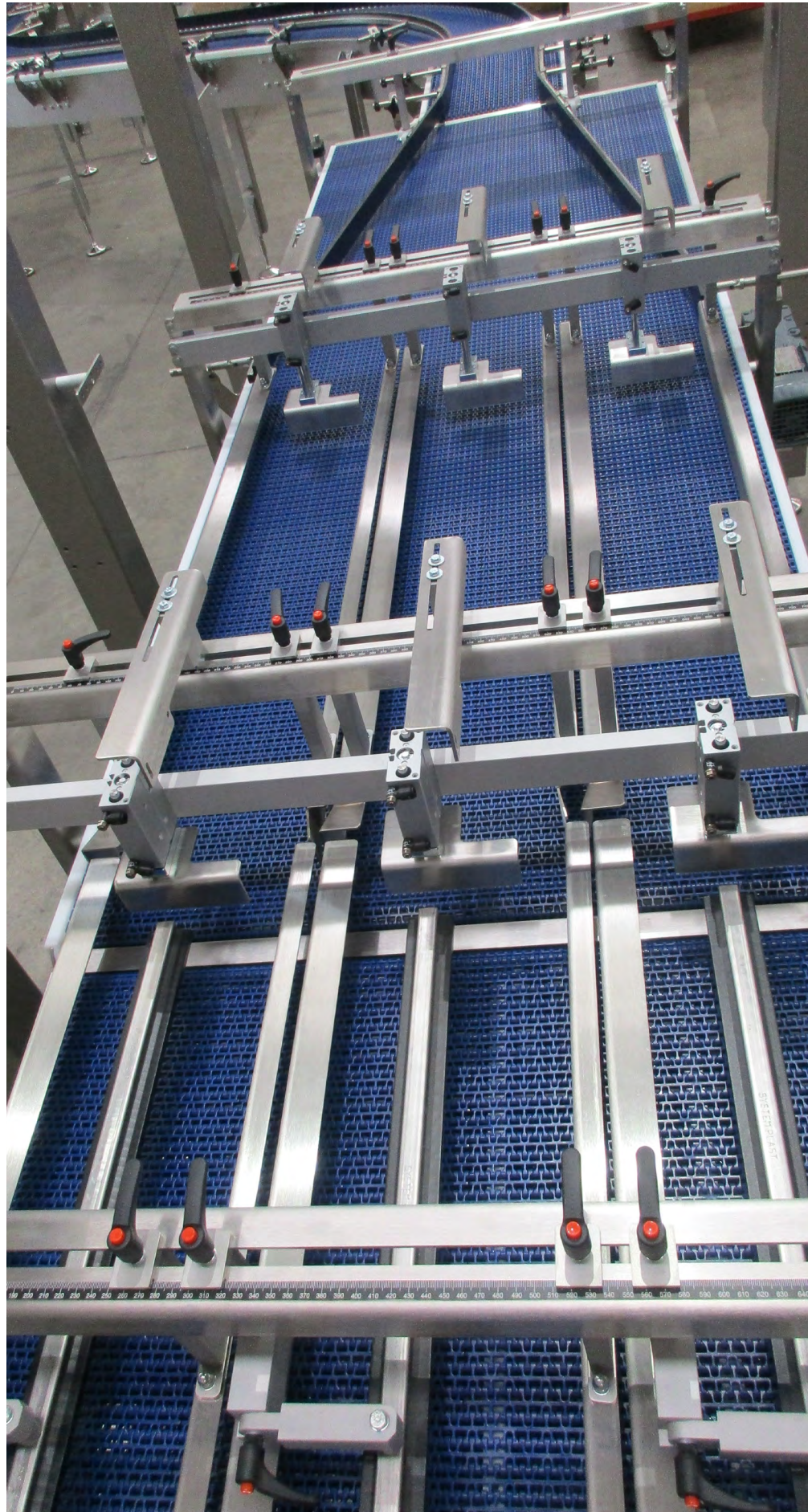
trays, stacked products in tight wraps. It is more important to deepen the second point though. At the exit of the merger, the products are attached to each other or in any case very close, but the speed of the belt is equal to that which would be obtained with regularly timed products with a gap between them equal to the size of the product itself. The average productivity of the line does not change, but when the train arrives downstream, the instantaneous one, from the point of view of the machine, is double. For this reason, either the machine is able

to handle the situation, or it is necessary to normalize the flow with a slow-down belt and an acceleration one after the unifier, which clearly requires more footprint, two extra motors and a more complex control logic.

When these premises are not verified and the products cannot be accumulated, due to the risk of overlapping (typically flowpacks or pillow bags) or damage due to excessive pressure or because the downstream machines require the products to be presented at a regular frequency with adequate distance between one product and another, then it is necessary to use a **dynamic system**.

A dynamic merger is a scalable system composed of a series of phasing belts that speed up or slow down the products arriving from the incoming rows in order to create the necessary gap to prevent two pieces from appearing at the convergence point at the same time. In these devices products are dealt with always one by one thus avoiding to have group of products while ensuring a regular spacing. As the production rate increases, the number of phasers required also increases. The fastest machine developed by MH is the HP dynamic systems that can reach throughputs up to 600 ppm for 150 mm long flowpacks. Depending on products' weight and packaging up to 5 phasing conveyors with brushless drive and vacuum suction can be used to handle the steep accelerations. 🏭

www.mhmaterialhandling.com



An approach to innovative cross-flow filtration with VLS TECHNOLOGIES

The markets of wine, beer, spirits, juices and soft drinks are constantly evolving, and the technological solutions adopted for the filtration of liquids must keep up with innovation and growth.

VLS Technologies represents worldwide a single reference point for the client for both the aspect of filtration and more complex needs that involve the whole process of liquid treatment: that is made possible by the production plant in San Zenone degli Ezze- lini in the Province of Treviso, northeast Italy, as well as by an established worldwide network of agents, authorized reselling and assistance.

In addition to traditional applications, as sheet filters or pressure leaf filters, the focus of VLS Technologies is the development of innovative solutions as cross-flow filtration systems and reverse osmosis.

Innovative technologies guarantee a number of advantages. For example in cross-flow filtration the liquid is pushed by means of pressure through the particular pores of a membrane: thanks to this system the clients are able to improve the obtained quantity of product, decreasing energy consumption and production costs, for example avoiding the usage of clarifiers and adjuvants.

Among technologies based on cross-flow filtration, the most valued are Unico and Lees-stop.

Unico filter is a solution designed for small/medium manufacturers that need to filter their products (wines and





lees) with a single solution, obtaining a filtered product of excellent quality with a turbidity below 1 NTU.

That is why VLS Technologies has created Unico filtration system: thanks to our filter it becomes possible getting a good filtration of the product and reducing the microbiological flora; all of this by saving all the organoleptic characteristics of the product.

The filtering media can stand repeated regenerations with warm water and detergents: this means a longer lifespan.

Unico has recently won the "Innovation Challenge Lucio Mastroberardino" at SIMEI Drinktec 2017.

Lees-stop, winner of the New Technology Award at SIMEI 2015, is a solution meant for filtering products with high content in solids that replaces the traditional polymeric membranes of the cross flow filters with sinterized stainless steel membranes.

Thanks to several tests, we have verified that this kind of material perfectly fits the cross flow filtration of "difficult" products with about 70% of content in solids.

VLS Technologies, thanks to its 35-year experience in the market, can

guarantee a dynamic and flexible approach, realizing long-term partnerships with both medium and small production companies as well as with major brands worldwide. 🏛️

www.vlstechologies.it



Planning and realization of machineries for OENOLOGICAL SECTOR

Our company was founded on 09 January 1996 by the current Administrator P.I. Giacomo Cocci who, thanks to the experience gained since 1979 in the wine sector, decided to set up his own business. Over the years the company has grown due to the experience and innate inventiveness of the founder, as well as the arrival into the company of the children and high qualified staff who have added value and new ideas.

WHAT WE DO

Our business is focused on the study and development of new technologies, on the design of machinery and processing lines, on the construction and marketing of oenology systems. Over the years, oil and beer production plant have been built. In addition to mechanical construction, we are also able to develop com-



ENOMET
IMPIANTI ENOLOGICI





plete turnkey wine cellar projects, taking care of the architectural and technological parts and proposing innovative systems, making use of various patents.

MISSION

A whole life dedicated to wine and his men. The lucky to have fun with your work. The opportunity to meet and work with great Oenologists and Wine Producers. Our mission has always been: to listen, to understand problems, to propose solutions. We are pioneers, we have always explored innovative and highly topical techniques. We are leaders in ion exchange, in the recovery of fermentation gases, in the design and construction of innovative machines from grape harvesting to bottling, in the construction of complete wine cellars.

OUR PRODUCTS

- Reception and processing of grapes: Destemmers, sorting lines, receiving tanks, stalk shredder, stalk aspirators.
- Pumps:

- Elliptical rotor pumps, single screw rotor pumps, lobe pumps, peristaltic pumps, piston pumps, floating stator pumps, coaxial pumps.
- Pressing: Membrane presses for soft pressing.
- Musts cleaning: Dynamic flotation units for the clarification of the musts.
- Filtration: Rotary vacuum filters, kieselguhr filters, plate filters, cross-flow filters, microfiltration housing, reverse osmosis.

- Refrigeration: Chillers, heat exchangers, refrigeration plates, electrical panels for to control fermentation temperatures.
- Tartaric stabilization: Manual and automatic ion exchange deionizers.
- CO2 recovery: Plants for the recovery and reuse of fermentation carbon dioxide.
- Sparkling wine and fizzy wine: Complete plants for Classic and Charmat Method.
- Nitrogen: Nitrogen generators and plants.
- Batonnage: Automatic devices for mixing liquids inside the tanks.
- Tanks and accessories: Stainless steel tanks and autoclaves of all types. Removable stirrers.
- Bottling: Bottling systems of all types, manual and automatic. Rinsers, fillers, corks, labellers, capping machines.
- Barriques and tonneaux accessories: Supports for barriques and tonneaux, manual stirrers, filling, emptying, washing.
- Sanitization: Steam generators, dry nebulizers.
- Oxygen dosage: Micro oxygenators.

OUR MARKET

Our main activity is in Italy but since 1996 we export our products to over 53 countries around the world. Exports currently constitute about a 35% of sales. 🏠

www.enomet.it



Gulfood

20-24 FEB 2023

DUBAI WORLD TRADE CENTRE

CHANGE



INSPIRATION



TALENT



THE FUTURE

ONE SOURCE OF THE WORLD

Bringing together F&B communities from across the world in Dubai to chart the way forward for this rapidly evolving sector, the **28th edition** of Gulfood is set to be **30% larger** than the previous years, with over **1,500 exhibitors** new to the show this year.

THE GLOBAL FOCAL POINT FOR
TRANSFORMATION IN FOOD



INNOVATION

REGISTER NOW



GULFOOD.COM

The (re)discovery of hygiene, health and safety connection with COLUSSI ERMES

The whole world has a new awareness: the connection between hygiene and health cannot just exist but must be tangible.



How? This is Colussi Ermes' starting point. This company specialized in food industry washing systems has seized the opportunity to renovate their mission, which has always aimed to pursue perfection in terms of hygiene and sanitization.

Colussi has done so trying to strengthen the concept of safety in the food industry world. During such an intense period, many food-production companies faced the demand to comply with new strict standards.

No one knows this better than Colussi Ermes who has met many new requests coming from its clients: ranging from the meat to the dairy industry, from the confectionary field to fruit and vegetable production, from the poultry sector to fish industry. How can safety be increased during the food production and washing cycle? With solutions that allow to reduce cross-contamination risks thus protecting consumers and also with the kind of care for every detail that distinguishes Colussi Ermes. Machine design, energy consump-

tion reduction, water and detergent use, cycle automation, loading/unloading automation and the parameter monitoring in compliance with HACCP rules are just a few of the features that combined in a single washing system make the difference. The CIP (Clean in Place) self-wash programs are an example of this. Their goal is to protect and depurate the production lines from organic and inorganic contaminating agents.

Thanks to this automatic system – that involves all of the machine circuits,





walls and key points and that is performed with pre-set pressure and temperature including also a final rinse and sanitization phase – companies can reach the high safety standards that are required.

Colussi Ermes' challenge for 2022 becomes another opportunity to make the world a safer place. Two new plants have been built comprising the new Colussi Research Centre site.

This is an actual innovation space, a lab where experts can study new improved systems for industrial washing, sanitization and drying that guarantee energy savings and that aim to ensure higher quality, safety, performance and efficiency levels. The new site, which are completely covered with solar panels, qualify Colussi Ermes as a model of sustainable excellence.

Colussi Ermes exports all over the world, extensively in many countries. Europe, North America and Australia

are the main markets where the most important sales targets are constantly reached. Furthermore, with the aim of strengthening the efficiency in the American market, Colussi Aws Inc. has been established in California, together with an all-American brand.

Saving resources

Large and small companies working in the food market and using COLUS-SI ERMES machines have been able to achieve extraordinary advantages such as:

- dramatic energy and chemical savings
- environmentally friendly wash op-

erations

- reduced wash time vs. very high hygienic and sanitary standards
- increased production capacities and safety
- better working performance of their staff

Colussi Ermes is continuously innovating to improve your safety.

This is a company that marked its path with its resilience spirit which is fundamental in this memorable period. 🏠

www.colussiermes.com



Mega Event Gulfood to play a leading role in tackling global food challenges, kick-starting a pivotal year for the UAE in 2023

28th edition of the industry leading event set to be 30% larger than ever before, and bring sustainability to the fore with launch of global sustainability initiative Gulfood Green.

Dubai World Trade Centre (DWTC) has announced the largest annual global food and beverage sourcing event in the world, Gulfood, will take place from 20-24 February 2023. Bringing together F&B communities from across the world in Dubai to chart the way forward for this rapidly evolving sector, the 28th edition of the show is set to be 30% larger than the previous years, with 1,500 of the 5000+ confirmed exhibitors new to the show.

Gulfood 2023's record scale is due in part to the introduction of Gulfood Plus, a brand-new bespoke hall, where firsttime exhibitors will showcase product innovations across 10,000 m² of added floorspace.

Leading global brands exhibiting include: Unilever, GMG, Americana, Agthia, Fonterra, McCain, Monin, USAPEEC, Hunter Foods, ASMAK, Minerva Foods, U.S. Dairy Export Council, Frinsa Group, Emirates Snacks Foods and Al Rabie to name a few; as well as newcomers including Brazilian food processing company: BRF Global and Agricultural, and Processed Food Products Export Development Authority (APEDA).

Globally, a series of world events are causing inflation and a rise in the cost of consumer goods, food, utili-



ties, and fuel. The food industry has a huge role to play in helping reverse these trends and moving towards healthier, more resilient food systems. With the UAE preparing to host COP 28 in 2023, Gulfood will serve as a critical opportunity to convene the global F&B industry at the start of the year, and continue the shift towards more sustainable food production and consumption.

"With the ongoing food crisis, combined with climate shocks, and rising costs of food, 2023 will be an important year for turning the corner and getting back on track while elevating healthy and diversified diets that are sustainable for people and the planet. Gulfood and the UAE will be at the heart of many of these conversations and have a unique vantage point from which to lead the way" commented Trixie LohMirmand, Executive Vice President, Dubai World Trade Centre.

THE SOURCE OF THE WORLD

With the UAE acting as the central hub of all these changes, Gulfood will be at the heart of the business community, the source of propelling sector conversations from agenda to action, bringing the industry together to convene in the first key F&B industry event of the year, unveiling new products and innovations, and creating an international platform for business opportunities including 125 country pavilions with first time participants: Armenia, Cambodia and Iraq, and welcoming back returning pavilions from South Africa and Australia.

SUSTAINABILITY AT THE FORE

Launching in 2023 Gulfood presents: Gulfood Green - a new global sustainability initiative, to ignite and continue conversations within the wider F&B community to create a momentous shift towards more resilient and sustainable food production and consumption. The objective being to raise visibility and influence key stra-

tegic food industry champions for sustainable food systems transformation in the lead up to COP28 and set a precedent for the future.

As part of the initiative Gulfood has also launched its own Gulfood Global Forest, an international tree-planting campaign and nature-based solution to the events' sustainability commitments, to conserve, restore and grow trees across the globe to help curb climate change. The food industry is known to be a major carbon emitter and the Gulfood Forest will enable stakeholders of the event from exhibitors and visitors, to speakers, chefs and the wider public to get involved and plant trees to help restore global forests.

Gulfood Green has already started planting in four countries: UAE, Uganda, Ecuador and Indonesia, with fruit bearing trees planted in a number of the locations to enable families and local communities to become self-sufficient. The trees already planted will support 2000 families and sequester 1 million kg of CO₂ over the trees' lifetime. Gulfood Greens' commitment is to quadruple the number of trees and country expansion by COP28.

The theme of sustainability will be carried through multiple verticals of the event, with topics being discussed at the conference including: Working towards zero food waste and making the dairy industry less carbon intensive, to building and securing viable, sustainable food business. Speakers include: Paul Newnham – Executive Director of SDG2 Advocacy Hub; Carlos Frunze Garza, advocate for sustainability and Executive Chef of Teible; Kylie Woodham – General Manager of Magners Farm; and Kamesh Ellajosyula - President and Chief Innovation & Quality Officer of Olam Food Ingredients. Gulfood will also put the spotlight, for the very first time, on global chefs spearheading

biodiversity in the restaurant industry, with masterclasses and workshops by top chefs creating real change, through sustainability and zero waste initiatives including: Rasmus Munk of Alchemist in Copenhagen and Peeter Pihel, sustainable restaurant advocate and Head Chef of Fotografiska.

The Gulfood Green Awards will also take place this year, with submissions open to the industry, in five categories: Green Foodservice Industry Award, Waste Management Award; Green Food Innovation Award; Sustainability Professional of the Year and Sustainability Company of the Year.

The Gulfood Green Awards Celebrate excellence in sustainability and encourage green best practice across the Food & Beverage Industry.

IMPACTFUL CONVERSATIONS TO SPUR CHANGE

The Gulfood Inspire Conference will champion core themes of: Sustainability, Quality and Access.

Ministers, global F&B value chain leaders, entrepreneurs, civil society and industry experts will lead a series of keynotes, panel discussions and showcases, addressing timely topics including: Sustainable Food Production; Food Security and Sovereignty; Agri-Food and Food Tech Investment; Innovations and Web 3 Opportunities; Nutrition Education and Access; Waste Reduction; Securing International Supply Chains; and Food Services Trends, Challenges and Innovations. Confirmed first time speakers include: Yazen Al Kodmani - Head of Operations of Emirates Bio Farm; Alessio D'Antino - Co-founder & CEO of Forward Fooding; Neha Sood - UAE Market Lead for Zomato; Rajiv Warrier - CEO GCC of Choithrams and Ruben Brunsveld, Deputy Director - EMEA, Roundtable on Sustainable Palm Oil.

Gulfood has partnered with global award-winning market intelligence agency, Mintel, to curate a thought leadership programme for the F&B industry.

As the events' Strategic Knowledge Partner, the agency has undertaken exploratory interviews with leaders across the food & drink industry, covering topics including sustainability and inflation.

Experts and leaders from around the globe, have shared challenges and priorities as food & drink professionals with the aim of collectively looking to understand the key challenges the food & drink industry faces and the solutions businesses are adopting to overcome them.

The results from the research will be shared in a whitepaper in the weeks leading up to Gulfood 2023 and to be more widely used across the industry to provide guidance and inspiration to businesses at this critical time.

'DUBAI WORLD CUISINE' MOVEMENT

Gulfood Plus will be the home of Top Table this year, where the world's best curators of award-winning dining experiences will showcase their signature dishes.

Gulfood 2023 will launch the 'Dubai World Cuisine' Movement, which aims to provide a platform for homegrown chefs to collaboratively shape the cultural identity of Dubai and establish it on the world's culinary map.

For 2023, Singapore has been selected, for the nations vibrant and diverse culinary scene from Michelin-starred restaurants to UNESCO-recognised street food.

The programme will see 6 iconic chefs from Singapore hosted in 6 restaurants in Dubai in February with

masterclasses and fringe dinners outside of the event, across the city. 2 months later in May, the Dubai chefs will then be hosted in Singapore for 6 dinners under the umbrella of Dubai World Cuisine by Gulfood.

A star-studded lineup of internationally renowned Michelin star chefs participating in the programme include: Melbourne born Michael Wilson of Marguerite in Singapore, Winner of the Michelin Guide Young Chef of the Year, Louis Han of Nae:um; and hailing from Liguria, Italy, Daniele Sperindio of Art in Singapore. Michelin star homegrown talent includes: Gregoire Berger of Ossiano, Salam Dakkak of Bait Maryam and Saverio Sbaragli of Al Muntaha - all participating in Gulfood for the very first time. Alongside Top Table, Chef Talks will offer insights and inspiration from global chefs, food editors and influencers in the culinary world.

THE LEADERS OF TOMORROW

As the first-of-its-kind launch-pad for empowering promising F&B talent with a career changing experience, the Gulfood YouthX Challenge grand finale winners, competing at Gulfood 2023, will be rewarded for their contribution to the region's influence on the global gastronomic scene with a career changing internship at an international 3-Michelin star restaurant.

In another event first, YouthX Academy Acceleration has been created to provide a pathway for culinary students to fast-track their career in the world of professional gastronomy, the YouthX Academy Challenge will see teams of talented young chefs from top international culinary schools compete with each other for the chance to secure a full-time position at one of the most coveted restaurants in the region.

FOODVERSE

Also taking place at the new Gulfood Plus - the Food Metaverse on

the blockchain will give visitors the chance to discover the incredible opportunities that the food ecosystem is presented with through Web 3.0, and learn about emerging technology trends that will pave the way for future innovations in the F&B industry.

GULFOOD INNOVATION AWARDS

The Gulfood Innovation Awards are bestowed to the industry's revolutionary pioneers, honouring excellence in new product development and championing ground-breaking new products, launched within the past calendar year.

Thousands of entries have already been submitted in 10 categories including: best beverage product, best organic product, best frozen product, best packaging design and best plant-based product.

ENABLING GLOBAL CONNECTIONS

Gulfood will create a platform for companies in the food industry to present their products, services, and solutions to influential buyers from across the globe, facilitating intercontinental business deals and serving as the ultimate focal point for the world of food and beverage sourcing.

Over 10,000 meetings have already been scheduled and confirmed via the show's meetings programme.

*Tickets for Gulfood are currently on sale at a special rate of AED 295 for a 5-day pass (instead of regular full price of AED 495) for a limited period only. Tickets can be purchased at www.gulfood.com 🏛️

Gulfood

NIRSO EZIO: since 1969, an Italian excellence

The Nirso company based in Busto Garolfo (province of Milan) was born in 1969 from an idea of Nirso Ezio.

Interested in the world of meat grinding, Ezio designs and develops a line of accessories for meat grinders, in particular it specializes in the production of molds and knives that largely satisfy most of the manufacturers of plants for the food industry and producers of cured meats on the market.

Ezio, starting from simple ideas, brings to the market an increasingly innovative and quality product over the years.

In 1991 Ezio left the family business to his son Dario, who has always been very passionate about the world of small mechanical parts, he brings the company into constant professional growth and expansion on the Italian and foreign market

Since 2007, always attentive to market developments, the Nirso company has been buying new numerical control automation systems with software able to control in a precise and detailed way the various processing phases

In 2017, Dario studies and manufactures a patented and certified cutting kit for food use for the production of mortadella, which allows to bring numerous benefits in the grinding phases.

After numerous steps between mechanical tests and paperwork, this patent repays Dario for many difficult moments, when the competition was strong and the market difficult to scratch.

After years of sacrifice and constancy, success has arrived, Nirso products have high quality standards and are among the most





requested in the preparation of foods such as cured meats. Another strong point of the company concerns the sharpening of molds and blades of any shape and size, with a department that presents high quality machinery.

In 2017, Dario added his son Marco to the company staff, representing the third generation, who deals with marketing and communication, supporting his father Dario in the various stages of mechanical processing, to steal all the secrets.

In 2021, thanks to the determination of his son Marco, the company proudly participated in the Meat Tech fair concerning the process and product technologies of the meat industry in Milan from 22 to 26 October, in conjunction with Host and Tutto Food

Humility, simplicity, constancy great human qualities at the helm of the Nirso factory have led it to today's awards.

From attention to detail to logistics, each piece that leaves the company represents the past and the future,

tools of the past and innovation come together obtaining the trust of the largest Italian food companies, all strictly Made in Italy. 🏠

www.nirsoezio.it
info@nirsoezio.it



FARA® FUNCTIONAL SYSTEMS for plant-based nutrition: FARABURGER!

Based on hydrocolloids (stabilisers and emulsifiers) Faravelli's FARA® functional systems have always guaranteed the best balance between innovation, cost and quality

FARA® functional systems, from the simplest to the most sophisticated, are tailor-made, following specific customer requests.

The blends include emulsifiers, natural hydrocolloids and functional ingredients that give foods and beverages unique characteristics, for example a well-defined structure, good resistance to thermal stress, improved consistency,

or a characteristic and consistent taste.

The added value is not limited to improving product quality.

Functional Systems, in fact, simplify the phases of research and development, quality control and approval of raw materials, with important economic, practical and operational advantages.

They can be used in the most varied sectors of the food industry.

A rapidly growing trend, **the plant-based diet** favours the consumption of plant-based foods, such as fruit and vegetables, but also nuts, seeds and oils, whole grains, and legumes. In addition, although not biologically classified as plants, mushroom and algae products are also included in the definition.

According to a 2017 Mintel study, which is also collected by the Plant Based Association, taste is the main driver in consumer decision-making, even for plant-based foods. Therefore, it is important to offer products on the market that are not only healthy but also have the organoleptic characteristics that consumers are looking for.

Faravelli has developed a range of functional systems purposely dedicated to the vegan and vegetarian sector, the latest launches being Faramix HH 105 - intended for vegetarian meat alternatives - Faramix FV 104 for bakery products, both savoury and sweet.

FARAMIX HH 105 for meat-no-meat burger

FARAMIX HH105 is a functional system to obtain a "meat-no-meat" product (hamburgers, meatballs, sausages) with visual characteristics and compactness identical to classic ones:





meaty, juicy, pleasant to the palate. Within the plant-based diet, the “meat-no-meat” category is growing just as fast and responds to the new needs and sensitivities of a growing consumer segment.

Plant-based meat is produced directly from plants. Like animal meat, it is composed of proteins, fats, vitamins, minerals and water. The new generation of plant-based meat looks, cooks, and tastes just like conventional meat.

CHARACTERISTICS OF THE FINAL PRODUCT WITH FARAMIX HH105

- very juicy despite the absence of fats

- neutral taste (soya is not perceived at all), no flavouring, therefore very adaptable to the taste.
- structure identical to the classic meat burger, without syneresis.
- very versatile, it can be adapted to the most diverse recipe and format requirements, while maintaining its juiciness and fat-free characteristics.

A product so juicy and meaty, people won't believe it's made from plants!

A food that is not only good and high in protein, but also an ally of environmental sustainability.

A certified quality production plant

First-class expertise in the selection of raw materials available on the market, special attention to food safety issues and a state-of-the-art production plant are the prerequisites to be the reliable partner in the production of powder blends.

Faravelli's production plant is located in Nerviano, near Milan.

It houses a packaging line for customizable solutions and an application laboratory where finished products are tested with methods that closely reflect the final application.

Both the production plant and the Applications Laboratory operate within the Faravelli quality system and are certified according to ISO, IFS, HACCP and FDA standards. 🏠

www.faravelligroup.com/functional
fara@faravelli.it



EXHIBITIONS 2022-2023

PROWEIN

19-21/03/2023 
DUSSELDORF

International wine & spirits exhibition.

MECSPE

29-31/03/2023 
BOLOGNA

Fair for the manufacturing industry.

VINITALY

02-05/04/2023 
VERONA

International wine & spirits exhibition.

PROSWEETS

23-25/04/2023 
COLOGNE

Fair for the sweets and snacks industry.

MACFRUT

03-05/05/2023 
RIMINI

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

CIBUS

03-06/05/2023 
PARMA

Fair of food product.

INTERPACK

04-10/05/2023 
DUSSELDORF

Technology focused on packaging, bakery, pastry technology.

HISPACK

07-10/05/2023 
BARCELONA

Technology fair for packaging.

TUTTOFOOD

08-11/05/2023 
MILAN

Fair B2B show to food & beverage.

SPS/IPC/DRIVES/ITALIA

23-25/05/2023 
PARMA

Fair for industrial automation sector.

BEER&FOOD ATTRACTION

19-22/06/2023 
RIMINI

Fair for beers, drinks, food and trends.

FISPAL

27-30/06/2023 
SÃO PAULO

Fair for product from packaging.

MCTER

29/06/23 
ROMA

Exhibition on energy efficiency.

POWTECH

26/29/10/2023 
NUREMBERG

The trade fair for powder processing.

MIDDLE EAST 2022/23

GULFHOST

2023 
DUBAI

Fair of hospitality.

GULFOOD

20-24/02/2023 
DUBAI


Fair for food and hospitality.

GASTROPAN

17-19/03/2023 
ARAD

Fair for the bakery and confectionery.

DJAZAGRO

05-08/06/2023 
ALGERI Fair for companies of the agro-food sector.

IRAN FOOD+BEV TEC

10-20/06/2023 
TEHRAN

Fair for food, beverage&packaging technology.

PROPACK ASIA

14-17/06/2023 
BANGKOK

Fair for packaging, bakery, pastry.

PACPROCESS FOOD PEX

07-09/09/2023 
MUMBAI

Fair for product from packaging.

ANUTEC

07-09/09/2023 
NEW DELHI

Fair for the food&beverage industry.

HOSPITALITY QATAR

06-08/11/2023 
DOHA

Fair of Hospitality and HORECA.

GULFOOD MANUFACTURING

07-09/11/2023 
DUBAI

Fair for packaging and plants.

EXHIBITIONS 2022-2023

HOST

13-17/10/2023 🏛️

MILAN

Fair for bakery production and for the hospitality.

SIAL

19-23/10/2023 🏛️

PARIS

Fair on food products.

IBA

22-26/10/2023 🏛️

MONACO

Fair for the bakery and confectionery industry.

CIBUS TEC

24-27/10/2023 🏛️

PARMA

Fair for food & beverage technologies trends.

SUDBACK

26-29/10/2023

STUTTGART

Fair for bakery and confectionery.

BRAU BEVIALE

28-30/11/2023 🏛️

NUREMBERG

Fair of production of beer and soft drinks.

SIMEI

2024 🏛️

MILAN

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

ANUGA FOODTEC

19-22/03/2024 🏛️

COLOGNE

Fair on food and beverage technology.

LATINPACK

16-17/04/2024 🏛️

SANTIAGO CHILE

International packaging trade fair.

FACHPACK

24-26/09/2024 🏛️

NUREMBERG

International packaging trade fair.

ALL4PACK

04-07/11/2024 🏛️

PARIS

Exhibition about packaging technology.

DRINKTEC

2025

MONACO 🏛️

Fair for the beverage, liquid food industry.

SAVE

2026

VERONA 🏛️

Fair for automation, instrumentation, sensors.



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FRUIT & VEG PROFESSIONAL SHOW

3-4-5 MAGGIO 2023
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ORGANIZZATO DA: **CESENA FIERA**

IN COLLABORAZIONE CON:

