





# LATIN PACK

**CHILE 2020** CREATING A SUSTAINABLE WORLD  
ESPACIO RIESCO AUGUST 12 -14

## THE ACCESS TO THE LATIN AMERICAN PACKAGING MARKET

# HERE YOUR COMPANY MUST BE PRESENT

### THE PACKAGING INDUSTRY, AND ITS VALUE CHAIN.

- Supplies
- Logistics - Transportation
- Public and private institutions
- Academy
- Technology and robotics
- Recycling industry
- Retail - Distributor
- Packaging processes
- Machinery and equipment
- Services
- Raw Materials
- Brand owner
- Packaging
- Winery

Follow us: #LatinPackCHILE - @ExpoLatinPack



Organized by



Produced by



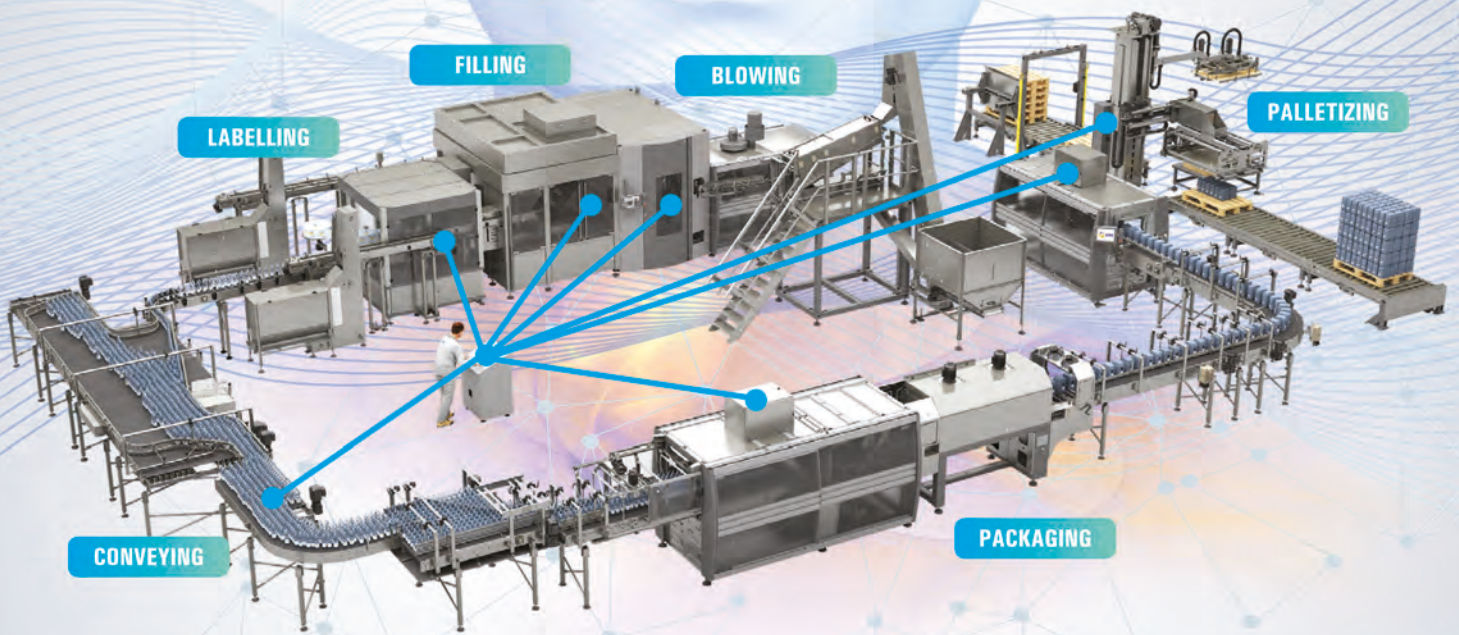
[www.latinpack.cl](http://www.latinpack.cl)



# INTERCONNECTED INTELLIGENCE BETWEEN YOU AND YOUR FACTORY



**SMI SMART  
LINES VIDEO**  
...scan & discover it!



## *the new age of smart manufacturing*

SMI is specialized in designing, producing and installing complete lines for food & beverage bottling & packaging.

SMI turn-key systems feature Industry 4.0 and IoT technologies and an output rate up to 36,800 bottles/hour.

**THE FACTORY OF THE FUTURE IS ALREADY A REALITY**



01-22

NEWS



NEWS

**SMI SPA: INNOVATION AND SUSTAINABILITY  
IN THE CIRCULAR ECONOMY**

PG. 1/6

23-46

PRESERVING



PRESERVING

**PND SRL: FRUIT PROCESSING MACHINERY  
FOR 20 YEARS, PND HAS BEEN TAKING  
ITALIAN INNOVATION TO THE WORLD**

PG. 30-31

47-71

PACKAGING

72-89

PASTA

90-98

EXHIBITIONS



PACKAGING

**OMAG SRL: OPEN DOORS  
TO THE FUTURE**

PG. 58-59





## PASTA

**REAL FORNI SRL: BOSS,  
AN UNCOMPROMISING OVEN  
PG. 75/77**



## EXHIBITIONS

**ANUTEC: INTERNATIONAL FOODTEC INDIA  
CO- LOCATED WITH PACKEX INDIA,  
ANNAPOORNA  
PG. 90/92**

editorial management  
and registered office:  
Via Cesare Cantù, 16  
20831 SEREGNO (MB) - ITALY  
Tel. +39 0362 244182  
+39 0362 244186  
web site: [www.editricezeus.com](http://www.editricezeus.com)  
e-mail: [redazione@editricezeus.com](mailto:redazione@editricezeus.com)  
portal: [www.ifoodonline.com](http://www.ifoodonline.com)  
e-mail: [marketing@ifoodonline.com](mailto:marketing@ifoodonline.com)  
skype™: editricezeus

### **Machineries, plants and equipment for food and beverage industry**

year I

#### **managing editor**

Enrico Maffizzoni  
[direzione@editricezeus.com](mailto:direzione@editricezeus.com)

#### **editorial manager**

S.V. Maffizzoni  
[redazione@editricezeus.com](mailto:redazione@editricezeus.com)

#### **editorial production**

Sonia Bennati  
[bennati@editricezeus.com](mailto:bennati@editricezeus.com)

#### **account dep. manager**

Elena Costanzo  
[amministrazione@editricezeus.com](mailto:amministrazione@editricezeus.com)

#### **project and layout design**

ZEUS Agency  
[grafica@editricezeus.com](mailto:grafica@editricezeus.com)

#### **creative dep.**

ZEUS Agency  
[grafica@editricezeus.com](mailto:grafica@editricezeus.com)

#### **translations**

MAHIMA YADAV

#### **printing**

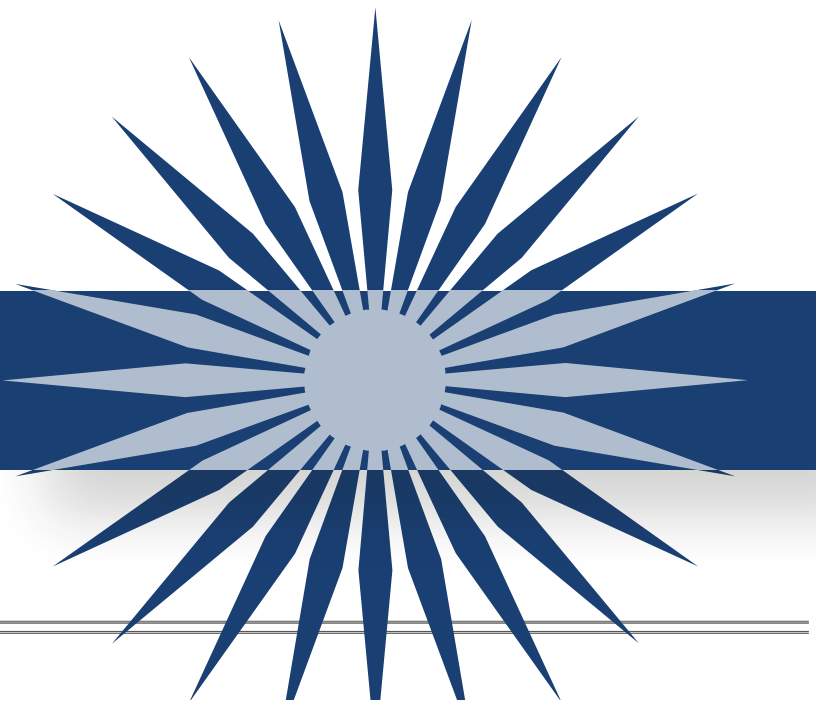
ZEUS Agency

Italian Magazine Food Processing  
Europe: single issue: Euro 25  
Annual (six issues): Euro 120  
Outside Europe: single issue: US\$ 30  
Annual (six issues): US\$ 170  
Subscription payment can be made in the name  
of Editrice Zeus sas, by bank money transfer or cheque.

#### **Italian Magazine Food Processing**

An outline of the suppliers of machines,  
plants, products and equipment for the food industry.  
Published: monthly  
Registration: Court of Monza no.10 of 05.09.2018  
Shipment by air mail art.2  
comma 20/b law 662/96 - Milan  
Panorama dei fornitori di macchine, impianti,  
prodotti e attrezzature per l'industria alimentare  
Periodicità: mensile. Autorizzazione del Tribunale  
di Monza, n.10 del 05.09.2018  
Spedizione in a. p. 45% art. 2 comma 20/b  
legge 662/96 Filiale di Milano

The reproduction of the articles and/or pictures published by this magazine is reserved (the manuscripts and/or photos sent to the Publisher will not be returned). The Editor declines all responsibilities for any mistake of photocomposition contained in the published papers of any magazine by EDITRICE ZEUS.





# SMI S.P.A. INNOVATION AND SUSTAINABILITY IN THE CIRCULAR ECONOMY



**B**y manufacturing machines with an innovative design equipped with IoT technology, SMI provides customers from all over the world with smart solutions, capable of satisfying their needs in terms of production efficiency, operational flexibility, energy saving and ease of use and monitoring of bottling and packaging lines.

The latest developments and the considerable and continuous investments in Research & Development have led to the launch of compact, ergonomic, eco-friendly machines, such as the ECOBLOC® ERGON integrated systems for the stretch-blow moulding, filling and capping of rPET containers recently installed at Danone Group's Société des Eaux de Volvic plant. When we talk about purity and

quality, it is the accurate work carried out by the bottling company Société des Eaux de Volvic that comes to mind. The whole bottling process undergoes careful controls to satisfy the high levels of quality required by the French company and its owner Danone, a goal that is achieved by protecting the water source and safeguarding the natural environment all along the distribution chain, till the moment the bottled product is consumed. All of this is taken care of in minute detail, involving partners and suppliers, as with the recent investment for the purchase of a new bottling line, for 8L containers in 100% recycled plastic (rPET), which involved SMI for the supply of an integrated system ECOBLOC® ERGON. The project is the result of a strong synergy between Volvic-Danone and SMI;

both companies shared goals and expertise from the design phase to the installation works, with every choice rotating around the necessity to get higher than average bottle performance and quality, safeguarding the final product, eco-friendliness and operational efficiency of the whole production process.

### **From the source to the table: the quality is always under control**

Sustainable development, respect for the environment and product quality and purity are the fundamental elements at Société des Eaux de Volvic SA, company, which has been part of the French Danone food and beverage group (water dept.) since 1992. The natural purity and unequalled quality of Volvic water begins by care-



fully protecting the source and accurately monitoring the natural environment from where this precious liquid flows. The water is conducted through stainless steel pipes from the source to the bottling plant, without any external contact; therefore from the depth of the volcanic stratum it reaches the protected environment of the inside of a sterile bottle. To protect the liquid from any external contamination, Volvic bottling plant was designed according to advanced automation and security criteria, fully satisfied by the ECOBLOC® ERGON integrated system supplied by SMI to the French company. The bottle has the fundamental role of maintaining the purity of the spring water and preserving the quality until the product is consumed; for this reason, the bottles blown, filled and capped by the ECOBLOC® ERGON system need to go through a long series of controls within the bottling line and every day undergo accurate tests carried out by Volvic Quality Laboratory.

### 100% rPET bottles

Volvic natural, mineral water arrives at the consumers' table as pure as when it flows from the source and is not treated in any way that can alter the taste; for this reason the container plays a vital role towards maintaining the purity of the water, from the source to when it is consumed. The most widely used material for bottling water is PET (polyethylene terephthalate), an unbreakable, plastic material that is lightweight and 100% recyclable. Volvic's high regard of environmental issues led the French company to develop modern solutions for the recycling of PET, so that a new bottle can be produced from an old one. Volvic was one of the first companies to use recycled plastic (rPET) to produce containers and caps, slowly

increasing the percentage of rPET, until it hit 100% with the new 8 litre bottle. The 8L container with a square base, in the same style as the smaller Volvic bottles, was studied by a designer at Danone to create an extremely practical, home use, container-dispenser. Its shape, part of which is slightly tilted, ensures that the bottle can be easily positioned on a flat surface and, thanks to the special cap which is used as a tap, the supply of the product is convenient and easy. The new design of the maxi container was accurately reproduced by SMI, to create the moulds that are installed on the ECOBLOC® ERGON HC EV integrated system and which allow it to manufacture a harmonious bottle with a clean design, that perfectly mirrors the purity of the water that it contains.

Eco-packaging and eco-formats are concepts that have always been a part of Volvic. Recognisable by the green cap, Volvic 0.5 L and 1.5 L bottles were the first in France to be produced with a type of plastics that is 20% of vegetable origin, favouring the use of renewable materials. Furthermore, as large capacity formats use less plastics, Volvic has always tried to promote them and produce ecological formats, like the 8L bottle, bottled by the ECOBLOC® ERGON HC EV recently supplied by SMI.

### SMI solutions for Société des Eaux de Volvic SA

To satisfy market request for bottled water, in 100% recycled PET (rPET) containers, the French com-

pany invested in the purchase of machinery from the ECOBLOC® ERGON HC EV range, supplied by SMI, the ideal solution to produce, fill and cap square based 8L containers in rPET, with a production capacity of up to 3,200 bottles/hour. The new investment was studied in detail, creating strong teamwork between the experts at Volvic and Danone and the designers at SMI. The complete production process was designed so that every step of the bottling is kept under constant control; indeed, it is here that the water coming from the deep underground comes into contact with



the external environment and is at a greater risk of contamination which would compromise the sensory, chemical, physical and microbiological properties. The Société des Eaux de Volvic SA, also, pays particular attention to everything that concerns sustainable development, environmental respect, product quality and purity; for this reason the whole bottling, packaging and distribution process was designed around these values and the machine supplied by SMI was integrated with sophisticated inspection systems, which, starting with the preforms, carry out a long series of checks to maintain the quality and purity of the spring water.

#### Main advantages of the integrated system:

- compact, flexible solution for stretch-blowing, filling and capping bottles in PET, with the advantage, in terms of reducing production costs, as the system does not need a rinser, nor conveyors between the blower and the filler or accumulation
- isolating system between the "dry" area of the blower and the "wet" one of the filler, through a jet of high pressured, sterile air in excess of 5Pa, which guarantees a clean, hygienic filling system
- application of various accessories to guarantee that the filling system is extremely clean and easy to sanitise with advanced cleaning systems
- innovative preform suction system, situated on the oven infeed star, to remove any tiny impurities that could be on the inside of the preform itself. The air that is inserted into the suction system is filtered, and is part of the air recovery system that comes as standard on all the range of SMI stretch-blow moulders.
- machine integrated with sophisticated inspection systems with cameras to guarantee the quality of the bottled water, monitor the production process and avoid particles and/or impurities being deposited on the inside of the unblown preforms
- the preforms are blown with sterile air in a sterile environment; this sterility is maintained for all the process of filling and capping
- precise and fast operation, thanks to the electronic, operation control, to motorised stretch rods and the use of high efficiency valves with flow-meters
- reduced energy consumption: the stretch-blow module is equipped with a double stage air recovery system, which allows the reduction of energy costs tied to the production of high pressure compressed air
- high energy efficiency, thanks to IR lamps fitted onto the preform heating module
- base of the filler area is made in stainless steel 316 and slightly sloped to ensure that any spilt liquids go down the drains
- electronic capping unit equipped with cap-orienting system during application, which controls correct positioning of caps, and a rejection system for over turned caps
- cap sterilisation through jets of ionised air on the cap channel
- washable cap accumulation table, in stainless steel, equipped with an optional system to suction the caps to remove any impurities that might have deposited on them while moving along the hopper
- reduced maintenance and running costs of the machine.

The SMI Group is today one of the world's largest producers of bottling and packaging plants for the food and beverage industry, PET Food, household cleaning and personal hygiene, chemical and

pharmaceutical products, able to meet production requirements up to 36.800 bottles/hour.

With the launch of the ERGON technology, SMI has inaugurated the "new age of packaging" and "the new age of bottling", showing again the ability to bring to the market advanced solutions, offering complete lines and packaging machines featuring efficiency, flexibility, eco-friendliness, ergonomics, simple management and monitoring, even more inspired by the concepts of Industry 4.0 and Internet of Things (IoT). 

[www.smigroup.it](http://www.smigroup.it)



एस एम आई समूह आज खाद्य और पेय उद्योग, पालतू पशु का भोजन, घरेलू सफाई व व्यक्तिगत स्वच्छता, रासायनिक और दवा उत्पादों की बॉटलिंग और पैकेजिंग संयंत्रों की दुनिया के सबसे बड़े उत्पादकों में से एक है। यह कम्पनी प्रति घंटे 36,800 बोतलों तक की उत्पादन आवश्यकताओं को पूरा करने में सक्षम है।

एर्गन तकनीक के शुभारंभ के साथ, एस एम आई ने "पैकेजिंग के एक नए युग" और "बॉटलिंग के एक नए युग" का उद्घाटन किया है, एक बार फिर से उन्नत समाधान लाने की अपनी क्षमता का प्रदर्शन करते हुए। दक्षता, लचीलापन, पर्यावरण-मित्रता, एर्गोनॉमिक्स, सरल प्रबंधन और निगरानी की विशेषता वाली पूर्ण लाइन और पैकेजिंग मशीनों की पेशकश करने वाले उन्नत समाधान, जो की उद्योग 4.0 तथा इंटरनेट ऑफ थिंग्स (IoT) की अवधारणाओं से प्रेरित है।





ecovapor

Worlds apart.



## THE REVOLUTION OF STEAM GENERATION SYSTEMS



**-20%**

ELECTRICAL  
CONSUMPTION



**-15%**

FUEL  
CONSUMPTION



**30 mg/kWh**

NOX  
EMISSIONS



**-30%**

DIMENSIONS



[icicaldaie.com](http://icicaldaie.com)

# 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 factory 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 sec-







tor, S4E System ([www.s4esystem.it](http://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.

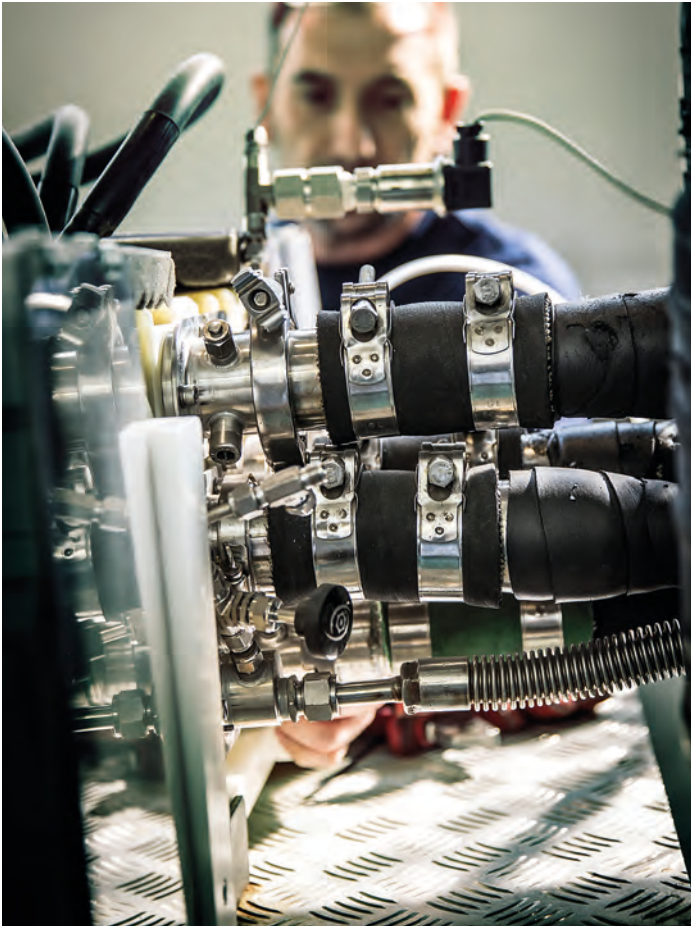
To do so, ICI Caldaie has always relied on the collaboration with national and international partners, including research centres, universities and manufacturing companies, and on innovative methods (including design thinking, a person-centred process aimed at solving complex problems). ICI Caldaie, 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 Sm<sup>3</sup>/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 CO<sub>2</sub>. 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 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

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



TOTAL ECONOMIC SAVINGS

**154.100** €/year



TONS OF CO<sub>2</sub> SAVING EVERY YEAR

**800** Ton/year

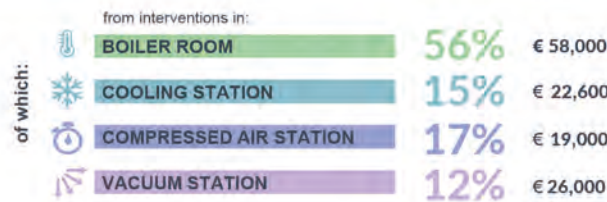


equivalent to the emissions of 100 medium-sized cars that make 65,000 km



TOTAL POWER SAVING

**1.202.359** kWh/year








compressors under inverter and replacing the plate heat exchanger with direct exchange and mixing hydraulic disconnecter 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 CO<sub>2</sub> 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 CO<sub>2</sub>. 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.

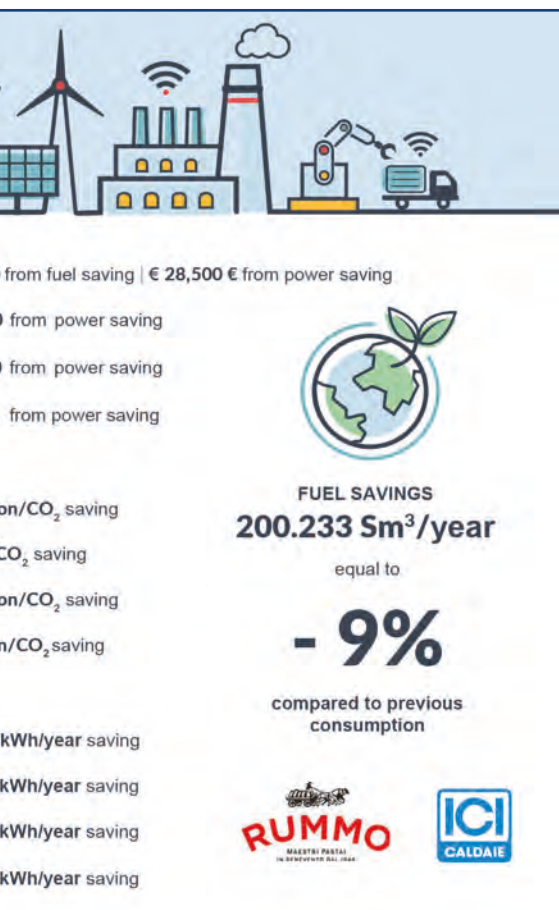
This replacement has allowed a saving of electricity of 30 kWel in addition to the non-use of chilled water for cooling, which means a saving of electricity of 237,600 kWh/year, equivalent to about 19,000 €/year and about 78.41 tons of CO<sub>2</sub> less released into the atmosphere. S4E System has 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.icicaldaie.com](http://www.icicaldaie.com)





## Ideas, solutions and plants for the food and beverage industry

Passion, expertise and innovation are the keys to the success of SAP Italia. Since 1983, the company has been offering highly technological plants for the food industry.

Over the years, SAP Italia has developed a deep know-how in different fields of application and today it plays an important role in its sector as an international leader.

Thanks to constant research and various fruitful collaborations, the company is able to meet its costumers' specific needs and provide them with tailored high-tech solutions.

The wide range of SAP Italia services includes in-depth feasibility studies, comprehensive and detailed estimates, customized design according to specific requirements, software development, installation and testing, personnel training and preventive maintenance.

Furthermore, SAP Italia's customers can always count on the support of a team of experts.

What really makes SAP Italia different from its competitors, is its personalized approach to every single project, which is designed upon the specific needs of different customers. By modeling and adjusting its technology, SAP Italia can contribute to its customers' success and to maximizing the results of their investment.



UHT Sterilization Plants



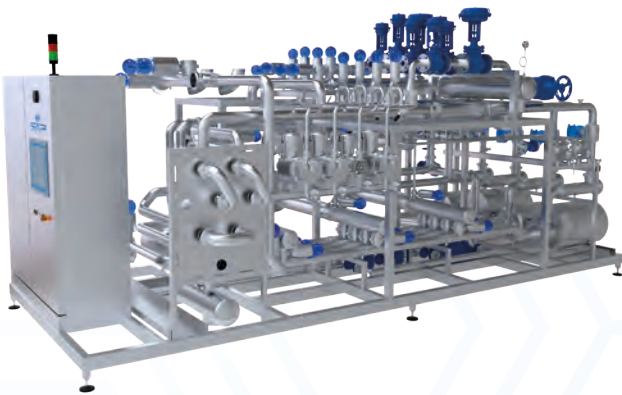
Mixing and Carbonating Units



Pasteurization Plants



Cip Cleaning Plants



Continuous Sugar Dissolvers



Syrup Rooms



Aseptic Tanks



# Food Processing Plants



SAP ITALIA SRL  
via S. Allende, 1  
20077 Melegnano (MI) Italy  
Tel. +39 02 983 867 9  
Fax +39 02 9823 17 67  
info@sapitalia.it

[www.sapitalia.it](http://www.sapitalia.it)

# IDEAS, SOLUTIONS AND PLANTS FOR THE FOOD AND BEVERAGE INDUSTRY

**T**hanks to constant efforts in the search for new solutions and numerous collaborations that have taken place over the years with leading customers in the industry, SAP Italia has gained extensive know-how in the various fields of operation and it's proud to present the new series of plants specifically studied for aseptic treatment born from a fruitful cooperation with Refresco Italia. Refresco, European leader in the business of subcontracted soft drink bottling, engaged in the expansion of its product range and focused on ensuring the final customer a consistently higher guarantee on its products, has commissioned SAP Italia the study and development of one of the most ambitious projects ever conceived in the aseptic drinks production that covers a wide range of products, such as fruit juices, traditional drinks, tea and milk. The strategy developed by the partnership, involving two of the major market leaders, is to achieve high goals if added value such as:

- full automation to ensure extreme flexibility and the detailed control of every process parameter
- reduction of waste during production
- excellent energy recovery thanks also to the integration of Asepto-R Top with a Co-generation Plant of brand new conception.

The technical staff of SAP Italia and Refresco Italia have been working together for several months, sharing decades of experience in research and production, in order to achieve perfection of the whole process and providing great attention to aspects related to the design and perfect sanitation. The result is a combination of tested technologies and new production concepts.



**Asepto-R Top** can treat any type of drink and thanks to the special construction of the tubular heat exchanger, even soft drinks containing solids or isotonic drinks with particularly aggressive salts. Each component installed on the plant has been selected with care among the best global manufacturers to ensure the reliability that SAP Italia installa-





tions are accustomed to offering in Italy. The supervision system, developed and produced specifically for this system, is intuitive, easy-to-use and reliable. Each variable is stored in the database and can be consulted at any time, ensuring full traceability of all production.

**ATK-R Top**, the top range of aseptic tanks of SAP Italia completes the supply. The tank is meant to store the product after heat treatment and maintain its sterility.

Thanks to its particular design, all possible contact with the atmosphere is protected by steam barriers. Perfect integration with the sterilisation plant of Asepto-R makes this the ideal solution to preserve product quality and sterility after the heat treatment, in stand-by for the filling process. 🏭

[www.sapitalia.it](http://www.sapitalia.it)



वर्ष 1983 से एसएपी इटालिया ने खाद्य उद्योग के लिए प्रसंस्करण संयंत्रों के निर्माण के क्षेत्र में अंतर्राष्ट्रीय स्तर पर सफलतापूर्वक काम किया है। एसएपी इटालिया ने अपने ग्राहकों को जो सेवाएं प्रदान की हैं, उनमें गहराई से व्यवहार्यता का अध्ययन, व्यापक और विस्तृत लागत अनुमान, विशिष्ट आवश्यकताओं के लिए कस्टम डिजाइन, उत्पादन, स्थापना, परीक्षण, कर्मचारी प्रशिक्षण, निवारक रखरखाव, विशेष तकनीशियनों के साथ सहायता और एक स्पेयर पार्ट्स सेवा शामिल है।

हमारी निवेश सूची (पोर्टफोलियो) में निम्नलिखित शामिल हैं:

- मिक्सिंग और कार्बोनेटिंग इकाइयाँ
- एचटीएसटी पाश्चराइजर और यूएचटी स्टेरलाइजर
- सीआईपी और एसआईपी प्लांट
- सिरप और रस तैयार करने के लिए कमरे
- बैच और लगातार चीनी घोलने के लिए उत्पाद
- सड़न रोकनेवाला खुराक और सड़न रोकनेवाला भंडारण टैंक
- तैयारशुदा परियोजनाएँ

# ANUFOOD INDIA 2019

**A**NUFOOD India 2019 had exhibitors from across countries making it a truly international event. ANUFOOD India was successful in creating India as a potential business market for all the international exhibitors present at the show. More than 80% of the participants have in principle confirmed their participation form the next edition. The show had high success rate for international companies in identifying their future prospects as well developing their export market.

## Main Objective of Exhibiting:

As an international business platform, ANUFOOD India has been a firmly established trade exhibition for Food & Beverage and Retail Market. With 14 successive editions ANUFOOD India has proved to become the platform for Food & Beverage and Retail Market. India is one of the most dynamic regions of the world, driven by economic growth, innovative technologies, food production, increasing consumption and improving lifestyles. The market of imported food products growing 24% annually. The special arrangement for store check to the major food retail outlets of Metro Cash & Carry & FoodHall was a key factor for exhibitors to understand the various aspects in food retail.

## Hosted Buyer Programme:

More than 50 importers from across India were hosted in as-

powered by



anufoodindia.com

Concurrent Activities:







# All About Food

India's international exhibition on food & beverage trade and retail market

**August 29-31, 2019**

Hall 2, Bombay Exhibition Centre, Mumbai, India

## Annapoorna


anufood  
india

sociation with Forum of Indian Food Importers (FIFI) during the show, ensuring the right audience for all the international participants. With an average of 12-14 meetings per exhibitor.

### Supporting Programme:

The CEO Round Table Discussion themed "Changing flavours of food business: Opportunities & Challenges" organised by Retailers Association of India (RAI), hosted the countries' leading retailers sharing their insights pertaining to the food retail in India. Annapoorna Food Retail Awards established itself as the most renowned platform to recognise the contribution of individuals and companies under the 11 nominated categories which had more than 400 attendees to witness achievement in food retail industry. Federation of Indian Chambers of Commerce & Industry (FICCI) organised Food World India conference with several seminars evolving around the topic "Driving Innovation in Food Processing" and have presence of eminent speakers for Kellogg's India, ITC, Britannia Industries along with the high level officials from the Central Ministry .

### High Level International Delegation:

For the first time high level international delegation from Philippines, Sri Lanka, Iran and other neighbouring countries visited the show.. 

# FROM CONVEYOR BELTS TO WEDGE WIRE SCREENS

## COSTACURTA'S WIDE RANGE OF SOLUTIONS FOR THE FOOD & BEVERAGE INDUSTRY

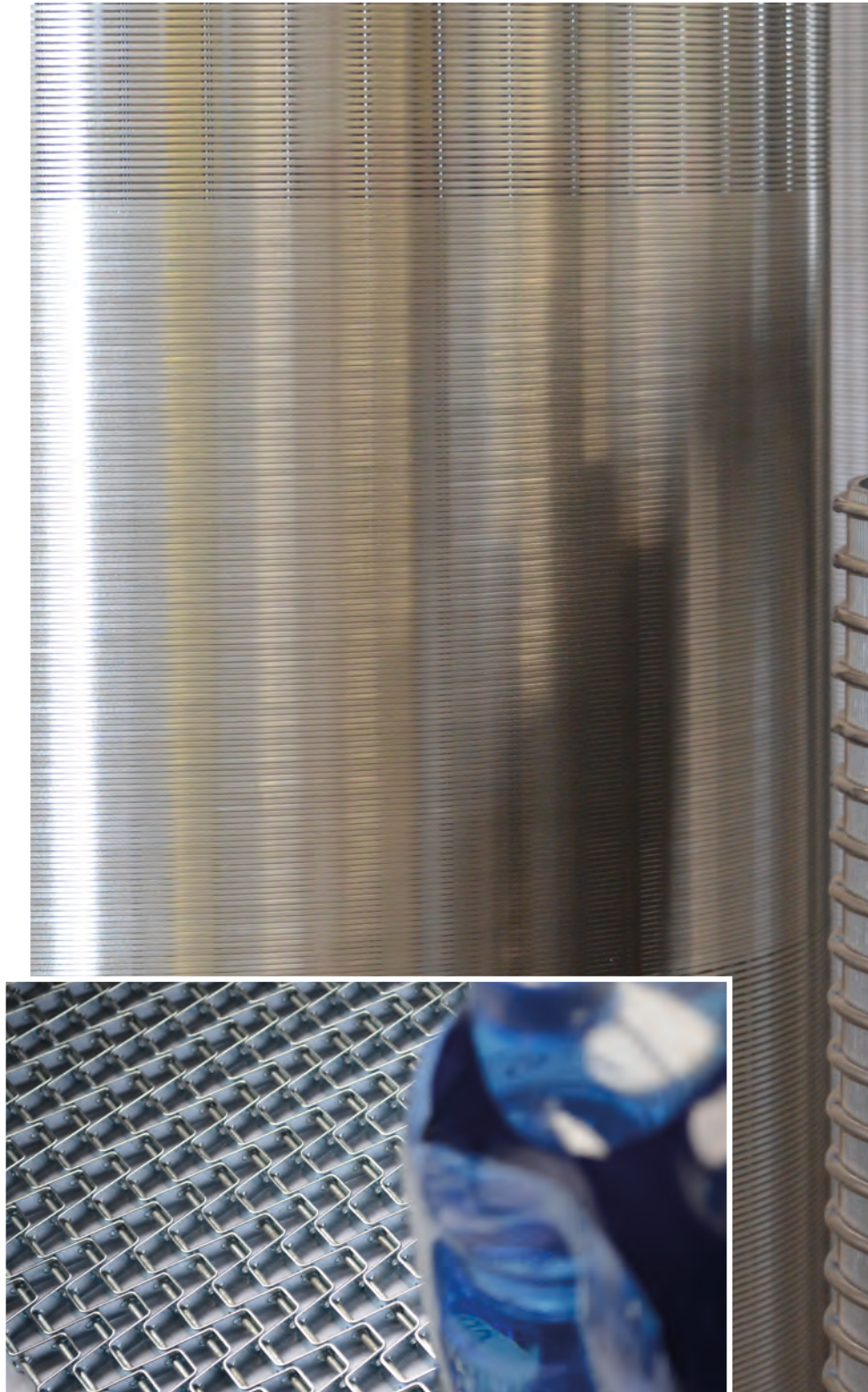
**W**hen former British Prime Minister, Teresa May, proclaimed that she wasn't opposed to scraping off mold from the top of a jar of jam and eating the product underneath, it sparked a conversation about what mouldy foods were safe to eat. Here, industry network leader for ABB's food and beverage segment, Darcy Simonis, looks at the advancing methods food producers are using to monitor the safety of their products.

On the whole, eating mouldy food is not an advisable practice – mould is the scourge of the food industry with producers striving to deliver the freshest produce possible to their customers. However, the world of technology is rapidly advancing, with applications making their way into all areas of food production, which is helping manufacturers to combat unnecessary food spoilage and waste.

In an industry where the demands of the customer are ever evolving, it is hard for food manufacturers to keep up with the latest trends. This is where data analytics can come into play, giving a level of insight that is invaluable.

The use of data analytics in marketing and customer insight is well known, but its uses can go far wider, helping food producers to keep their products at the pinnacle of quality and freshness.

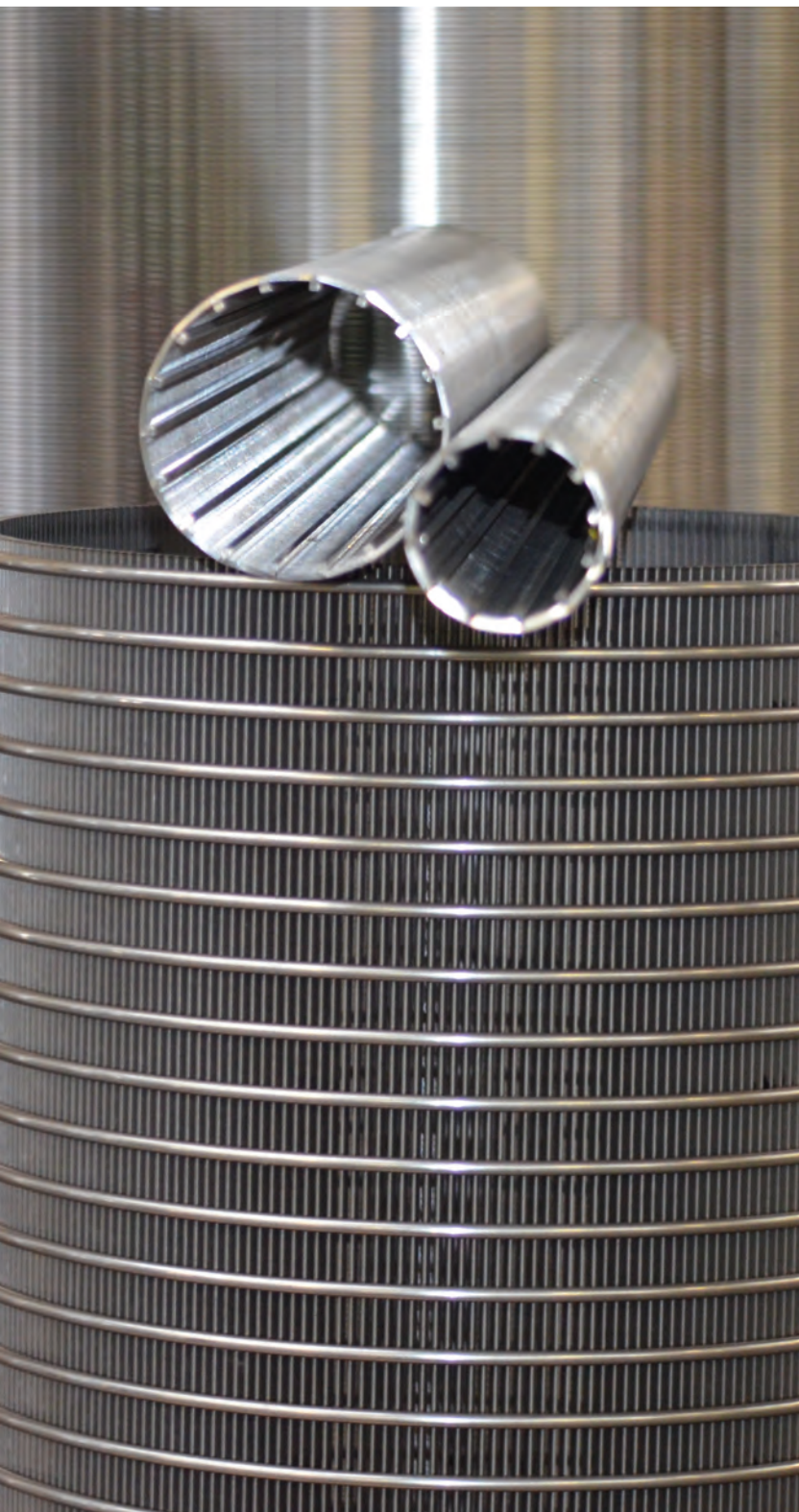
Over the course of time, the quality and the characteristics of a product can change. Yet, by using integrated data analytics, manufacturers can








# VI co Costacurta



learn more about the factors that affect the shelf life of their products. This information can then be used to adapt the product or process to increase shelf life, potentially saving the manufacturer money and time, as well as reducing food waste. Data analytics also has its uses when maintaining and improving the quality of a consumable product. For instance, during the beer brewing process, monitoring alcohol levels is critical and is something that is regularly analyzed. However, it is a time-consuming process and can be disruptive to the production line. As a result, there are new methods coming into play that allow testing to be carried out without disrupting production and data analytics is being used to measure whether these methods are as insightful and effective as the traditional wet chemistry method. Monitoring and analysis in the food and beverage industry is vital – customers demand that their favorite product tastes the same no matter where they are in the world or where it was manufactured or packaged. The process requires strict control and repeatable standard solutions that can be rolled out across multiple production sites.

Manufacturing Execution System (MES) services from ABB comprise of a wide portfolio of visibility and transparency of the complete end-to-end process, from incoming raw materials to the finished shipped product. The MES incorporates functions such as equipment maintenance management, genealogy tracking from raw material as well as material tracing and tracking management. All these features are designed to support food and beverage manufacturers maximize the performance of their plant.

So, even if your customers tastes are as strange as Teresa May's, by incorporating rigorous monitoring and data analysis across your manufacturing facility, you can be sure that your product is at its very best when it reaches the customer. 

[www.costacurta.it](http://www.costacurta.it)

# WOULD YOU LIKE A SIDE OF MOLD, SIR?

**W**hen former British Prime Minister, Teresa May, proclaimed that she wasn't opposed to scraping off mold from the top of a jar of jam and eating the product underneath, it sparked a conversation about what mouldy foods were safe to eat. Here, industry network leader for ABB's food and beverage segment, Darcy Simonis, looks at the advancing methods food producers are using to monitor the safety of their products.

On the whole, eating mouldy food is not an advisable practice – mould is the scourge of the food industry with producers striving to deliver the freshest produce possible to their customers. However, the world of technology is rapidly advancing, with applications making their way into all areas of food production, which is helping manufacturers to combat unnecessary food spoilage and waste.

In an industry where the demands of the customer are ever evolving, it is hard for food manufacturers to keep up with the latest trends. This is where data analytics can come into play, giving a level of insight that is invaluable.

The use of data analytics in marketing and customer insight is well known, but its uses can go far wider, helping food producers to keep their products at the pinnacle of quality and freshness.

Over the course of time, the quality and the characteristics of a product can change. Yet, by using integrated data analytics, manufacturers can learn more about the factors that







# ABB







affect the shelf life of their products. This information can then be used to adapt the product or process to increase shelf life, potentially saving the manufacturer money and time, as well as reducing food waste.

Data analytics also has its uses when maintaining and improving the quality of a consumable product. For instance, during the beer brewing process, monitoring alcohol levels is critical and is something that is regularly analyzed. However, it is a time-consuming process and can be disruptive to the production line. As a result, there are new methods coming into play that allow testing to be carried out without disrupting production and data analytics is being used to measure whether these methods are as insightful and effective as the traditional wet chemistry method.

Monitoring and analysis in the food and beverage industry is vital – customers demand that their favorite product tastes the same no matter where

they are in the world or where it was manufactured or packaged. The process requires strict control and repeatable standard solutions that can be rolled out across multiple production sites.

Manufacturing Execution System (MES) services from ABB comprise of a wide portfolio of visibility and transparency of the complete end-to-end process, from incoming raw materials to the finished shipped product. The MES incorporates functions such as equipment maintenance management, genealogy tracking from raw material as well as material tracing and tracking management. All these features are designed to support food and beverage manufacturers maximize the performance of their plant.

So, even if your customers tastes are as strange as Teresa May's, by incorporating rigorous monitoring and data analysis across your manufacturing facility, you can be sure that your product is at its very best when it reaches the customer. 🏠







**DOSATRICE ROTATIVA A PISTONI**  
**ROTARY PISTON FILLER**




# F.B.L. - MACHINES AND EQUIPMENT FOR THE FOOD INDUSTRY



**F**.B.L. FOOD MACHINERY S.R.L. is located in Sala Baganza (PR). We have started our activity in 1970 and now, with over fifty years of experience, we are a leading company in the food packaging sector specializing in filling bottles, cans and jars. We offer a wide range of stainless steel machines with high technological and manufacturing know-how and are able to meet our multiple customers' needs.

**We are specialized in the manufacturing of the following machines:**

- Complete packaging lines;
- Automatic and semi-automatic depalletizers;
- Blower machines driven by compressed air, steam or water;
- Vibrating linear filling machines to fill containers with olives, onions, cucumbers, artichokes, capers, mushrooms, cherries, mixed vegetables, etc;
- Rotative lowerator machines for vegetables;
- Rotative vacuum fillers to fill containers with liquid products such as as olive oil, brine, vinegar, syrups, sauces, etc;
- Linear and rotative piston fillers to fill containers with dense or semi-dense food products such as jam, sauce, honey, cream, ketchup, mustard, mayonnaise, etc;
- Automatic linear capping machines ideal to close glass containers with twist-off caps of different dimensions;
- Pasteuriser and cooler machines;
- Vacuum detectors;
- Linear and curvilinear conveyor belts;

- Automatic and semi-automatic palletizers;
- Robot pal-depal. 

[www.fbl-it.it](http://www.fbl-it.it)



साला बागांजा (पारमा) में आधारित, एफ.बी.एल. फूड मशीनरी एस.आर.एल. वर्ष 1970 से बाजार में मौजूद है। हम जार, बोतल, डिब्बे में खाद्य उत्पादों के पैकेजिंग क्षेत्र में अग्रणी हैं और इसका श्रेय हमारे 50 वर्षों के अनुभव को जाता है। यह कंपनी पूरी तरह से स्टेनलेस स्टील में निर्मित मशीनों की एक विस्तृत श्रृंखला की पेशकश करने में और उच्च तकनीकी और उत्पादन के अनुभव से बाजार की विभिन्न आवश्यकताओं को पूरा करने में सक्षम है।







# COMPLETE ROASTING COFFEE PLANTS



**P**etroncini, the renowned Italian company that since the 1919 has been operating in the coffee processing field, today is a part of the IMA Group specialized in complete roasting coffee plants, providing machines with capabilities to roast from 3,5 kg/h up to 3.5 tons/h, for any kind of coffee brewing style: from espresso to drip, from Instant to Turkish coffee.

Furthermore, Petroncini provides complete coffee processing systems, from the green coffee intake up to the feeding the packaging machines with beans and ground coffee, thereby providing supe-

rior expertise in feeding solutions for capsule and pod packaging lines. Petroncini roasters ensure uniformity, repeatability and allow the coffee to achieve the favorite aroma.

Particularly suitable for small and medium productions, TT Roasters Model can be equipped with different systems for the control and management of the roasting profile and it is available also in TTR Version with Heat Recovery and Air Recirculation systems.

This model requires a limited layout space and an easy and fast installation on site.



TMR Roasters Model has been specially designed for industrial productions that require high profitability and repeatability of the roasting processes during the various working stages, allowing to achieve the desired roasting profile in terms of time, color and flavor.

TMR single burner system and the efficient heat recovery guarantee the lowest energy consumption. Petroncini roasters can ensure the maximum efficiency of green coffee, even for small productions.

Specialty Roasters are the perfect solutions for handcrafted roasteries that require high quality roasted coffee.

These models can roast up to 60kg/h and are available in manual version or with the Profile Roasting Control system.

The machines are fitted with a modulating burner and a double output signal to connect external data loggers. R&D Lab Roaster counts on the same technical features of the industrial Modular Roasters and it can roast up to 25 kg/cycle, thus



minimizing the waste of energy and good quality coffees.

The roasting profiles achieved can be transferred on industrial roaster without any parameters modifications, indeed it allows to analyze and improve the quality of the product and its performance, carry out specific test before starting industrial production.

One unit of R&D Lab Roaster is at disposal for test and trial at the Petroncini Coffee R&D Lab, where is also possible make product analysis and cup tasting.

The research and development of new technologies and effective synergies have allowed Petroncini to realize roasting systems suitable also for products with a high concentration of oily components, such as cocoa, barley, peanuts, hazelnuts, almonds, pistachios. 🏭

[www.petroncini.com](http://www.petroncini.com)







***IQF Freezers - EASY Freeze***



***Spiral Freezers - EASY Freeze***



**P i G o**®

**Food Processing Machinery**

***EFD Freeze Dryers - Lyophilizers***



[www.pigo.it](http://www.pigo.it)



**MADE IN ITALY**

***PG135 - Adiabatic Multistage Belt Dryer and  
PG 128 Tunnel Dryer***

***Stone Fruit and Berries Processing***

Our philosophy is very simple:  
"Give our best for people who expect the best" (D.Z.)





# OUR VISION, OUR MISSION AND PHILOSOPHY OF EXCELLENCE

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



**T**he 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 simplicity of the high technology, simplicity for the user and economical advantage are all concentrated in our EFD Easy Freeze Dryer. Our long term experience in fruit and vegetables processing brought us 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 ice contained in the product is sublimated, hence transformed from solid to gas and then trapped inside the condensation system. The sensorial properties of the finished product are absolutely superimposable to those of the fresh product. At the completion of the process, the treated product will have retained its form, volume and original structure, as well as all its physical, chemical and biological properties. It can then be stored (if provided packaging preventing the moisture migration) for an almost indefinite period of time. As the product is porous,

it can be re dissolved by the simple addition of a proper solvent (water). For the process of lyophilisation (freeze drying) it is necessary the IQF freezing process of the product. And for the perfect IQF process before lyophilisation we recommend our EASY Freeze IQF Freezer. Full 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 machinery. Besides Easy Freeze Dryer EFD our main machines for drying process are Adiabatic Multistage Belt Dryer PG135 and Tunnel Dryer PG128. As for freezing besides the IQF Freezers EASY Freeze PIGO also produces Spiral





Freezers EASY Freeze SPYRO. The key advantages of PIGO Technology and competitive technologies:

**MONEY SAVING PROCESS**, thanks to **FASTER FREEZING AND DRYING WITH LOWER POWER CONSUMPTION** - Our proprietary freezing method reduces freezing time by up to 25% while consuming less energy.

**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

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

**INDUSTRY 4.0 CAPABLE SYSTEM - "smart factory enabled"**

Besides the above mentioned machines PIGO also produces complete stone fruit processing lines. one of our main machines is high capacity automatic pitting machine PG 103.

**For more information we invite you to visit our website [www.pigo.it](http://www.pigo.it) or simply send an e-mail to [info@pigo.it](mailto:info@pigo.it). There are also some short video clips of our machines in operation on [www.youtube.com](http://www.youtube.com) , look for PIGOsrl.**

Recalling our philosophy "give the best to people who expect the best. (D.Z.)" we invite you to give us a try. 🏠



पीगो ने फ्रीजर, फ्रीज ड्रायर और निरंतर मल्टीस्टेज बेल्ट एडियाबेटिक ड्रायर के निर्माण में विशेषज्ञता प्राप्त की है, साथ ही फल और सब्जी प्रसंस्करण उपकरण, उत्पाद लाइन बनाने में माहिर है। इस

उत्पाद लाइन में मानक और कस्टम इकाइयों की एक विस्तृत श्रृंखला शामिल है, हिमीकरण और फल और सब्जी प्रसंस्करण दोनों में व्यापक अनुभव के साथ। अपने भागीदारों के साथ मिलकर, हमने दुनिया भर में अपनी मशीनें स्थापित की हैं। हमारी कंपनी ने उद्योग में अपने भागीदारों के साथ यूरोप, अफ्रीका, ऑस्ट्रेलिया, अमेरिका और एशिया की कंपनियों को अपने सिस्टम की आपूर्ति की है।

मजबूत अंतर्राष्ट्रीयकरण और दुनिया भर के बाजार लक्ष्यीकरण ने पीगो को अपने उत्पादों के निर्माण में लचीलेपन की अवधारणा का समर्थन करने और फायदा उठाने के लिए प्रेरित किया है।

हमारी उत्पादन प्रक्रिया विशेष रूप से संरचित और चरणों में विभाजित है, इस प्रकार प्रत्येक घटक / चरण की शीर्ष गुणवत्ता सुनिश्चित की जाती है। संपूर्ण निर्माण और स्थापना प्रक्रिया इंजीनियरों की एक मजबूत टीम के नेतृत्व में है जो वर्षों से हमारी मशीनों को उनकी वर्तमान विशेषताओं के लिए डिजाइन और विकसित करती है।

हमारी अवधारणाओं की ताकत और हमारे उत्पादों की उच्च गुणवत्ता की पुष्टि कई संदर्भों और हमारे ग्राहकों की संतुष्टि से होती है।



# FRUIT PROCESSING MACHINERY FOR 20 YEARS, PND HAS BEEN TAKING ITALIAN INNOVATION TO THE WORLD

**N**ow in the year of its twentieth anniversary, PND, Italian leader company in manufacturing of fruit processing machinery in the world, continues to invest in quality and innovation and to present its tailor-made solutions for food companies at the main trade fairs worldwide.

After formally kicking off its 20th anniversary year at Fruit Logistica in Berlin, where it gathered together its dedicated sales agents from all over the world, the PND will continue to exhibit at other trade fairs throughout 2020 on all 5 continents.

These events will provide an opportunity to personally evaluate the advanced solutions for Fresh-Cut (fruit ready-to-eat) companies, as well as for the canned, frozen and dehydrated food industries, but also to present its new machinery.

The latest addition to the PND family is the pineapple cylinder machine mod. PENCYL8. It is a highly versatile machine able to perform different cuts for pineapple processing: cylinders, fingers, chunks and rings. With its innovative design and compact shape, it is an ideal partner for this processing. Born 6 months ago, 3 units have been already sold in Europe.

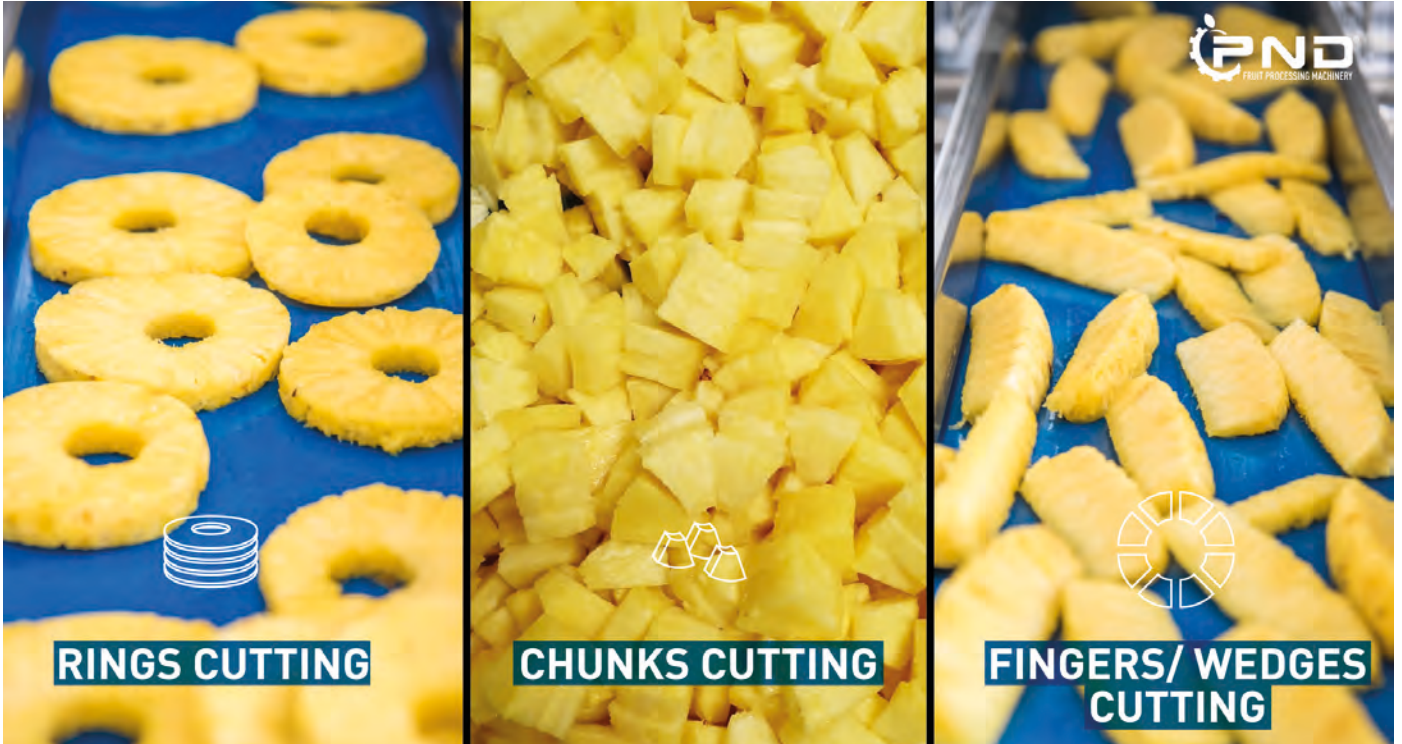
Alongside it we find the other 18 machines in our catalogue which can process a large range of fruit, such as: apples, pears, pineapples, kiwis, peaches, oranges, lemons, followed by melons, pineapples, mangoes and strawberries.

Some updates are on the machine mod. PL6M, a semi-automatic peeler with six processing heads, initially dedicated to peeling mango: nowadays it is also able to peel kiwi.

The advantages of the machine PL6M are enormous: adjusting of peel thickness, managing of production speed and fruit rotation through an inverter, adding to the possibility of different sizes fruits processing without any adjustment and with fast maintenance. Now they are available for mango and kiwi.








When choosing one of the 18 semi-automatic machines, manual or automatic ones in the PND catalogue, you are choosing a standard machine that can be tailored to your needs.

One example is the new coring – ring machine mod. DRR, which is capable of coring and slicing apples and peaches, with a minimum round cut thickness: 3 mm. The loading plate rotates at regular steps, so that when the plate stops, the three work operations of manual loading, coring and slicing are carried out at the same time.

These are industrial machines with manual and automatic feeding, mostly mechanical, easy to understand and maintain. They are user-friendly machines that first make the technicians fall in love and then the operators!

Tenacity and innovation have led PND to become a company capable of operating on a global scale. With an export turnover of 95%, today it has a strong presence in Europe, South America, United States, Canada, Mexico, Australia, Africa and Asia.

Visit our website to be always updated on latest news or write to us at [info@pndsri.it](mailto:info@pndsri.it) 



दुनिया में फल प्रसंस्करण मशीनों के सबसे बड़े निर्माताओं में से एक है पीएनडी। वर्ष 2000 में स्थापित, इस कंपनी ने लगातार गुणवत्ता और नवाचार में निवेश किया है, फल सलाद और उत्पादन कंपनियों के लिए उन्नत समाधानों के डिजाइन और विकास में इस कंपनी की विशेषज्ञता है, साथ ही साथ पहले से समेकित कैनिंग, फ्रीजिंग और निर्जलित उद्योगों में भी निवेश किया है। कंपनी के शीर्ष उत्पादों में फलों की कई किस्मों जैसे नाशपाती, सेब, कीवी, संतरा, अंगूर, नींबू, अनानास, नींबू, आम, स्ट्रॉबेरी और आइ के साथ-साथ स्वचालित और मैनुअल छीलने, कोरिंग और काटने की मशीनें हैं, साथ ही साथ उपचार के लिए और पूर्व धोने के लिए टैंक भी उपलब्ध हैं। पीएनडी कंपनी मानक और अनुरूप मशीनरी की आपूर्ति करती है, लगातार प्रदर्शन की गारंटी देती है और संदूषण के किसी भी जोखिम को काफी कम करती है। एजेंटों के एक करीबी नेटवर्क के साथ, त्वरित और प्रभावी बिक्री के बाद ग्राहक सहायता सेवा के साथ, यह कंपनी दुनिया के किसी भी हिस्से में विविध और मांग वाले ग्राहकों की संतुष्टि और सहायता के लिए सदैव तैयार है। पीएनडी कंपनी की मशीनों को यूरोप, दक्षिण अमेरिका, संयुक्त अमेरिका, एशिया, ऑस्ट्रेलिया और अफ्रीका में पूरी क्षमता से बेचा गया है तथा इन मशीनों ने पूरी क्षमता से अपना काम किया है।

# BERRYPLANT: FOCUS ON BREEDING AND QUALITY

**B**erryplant's effort in the selection of new varieties of raspberry has been growing for the last years, as it has become clearer and clearer that breeding was the future of berry market.

Its 25 years' experience in berry propagation has obviously been an excellent starting point to begin, back in 2006, selecting plants to fulfil the needs of fresh consumption market. "Growers are looking for fruits with a bright red color and a long shelf life and, at the same time, for plants with low managing requirements, able to guarantee also lower labor costs", explains Diego Ioriatti, the breeding manager and co-owner of Berryplant.

Keeping this clearly in mind, Berryplant developed in the past years two patented varieties, Amira and Regina, which are yet among the most profitable cultivars especially for certain markets. "But we wanted to do something more", continues Diego. "And here comes Primalba! It is a primocane raspberry that we selected primarily for its early ripening characteristics." It is, in fact, at the moment, the earliest ripening on the market, about 6/8 days before Polka, which is still considered a benchmark. Since the first tests in their greenhouse in Baselga di Pinè (an area of Trentino, Italy, historically devoted to berries production), its ripening timing has been considered very stimulating, in particular for cultivation in Northern climates. After the first year of actual production, its good results seem to be greatly confirmed. "Growers could start harvesting just 85 days after planting!", says Diego, proudly, "And this is so promising because it could theoretically fill up the production







The R&I program of this Italian Rubus propagator, presents its latest result: the new primocane raspberry Primalba!







gap between floricanes and primocane productions, when fruit prices are higher as product availability is really low.”

What came out from this first harvest of Primalba, is that this plant has many other qualities which growers could widely appreciate: it requires few managements, because the plant is very compact and has short laterals, water requirement is low -making it less sensitive to water stress - and no sensitivity to main fungi and mites is known. Talking about the fruits of Primalba: they're good looking and flavor is excellent; shelf life is good and they can be harvested even when not completely ripe - leading to very fast picking and high quantities-.

“The upcoming season we're planning to test the new variety also in hot climates to understand if Primalba could be a good deal also for growers in Spain, Portugal or Morocco, who represents an important market; nevertheless, new materials are raising from the breeding program and few new selections, maybe even more suitable for these areas, are in the process of advanced trials to some of our clients as a collaboration”.

“Concentrating on breeding does not mean forgetting about the basis of our business, which is propagating and selling quality plants.”, interrupts Maddalena Grisenti, the owner and founder of Berryplant, “We accustomed our clients to a very high-quality standard. And we do not want to disappoint them.” In practice, it means that Berryplant is carrying on a 3 years' control on the plants it's propagating, starting from a certified pre-basic material, free from pest and diseases, and continuing with a 2 years pomological and phytosanitary control on the mother plants. “We're known as Rubus specialists (and we proudly declare it in our logo!), so what customers expect from us, is to receive the best Rubus plants, in terms of innovation and quality.”

Going back to breeding, research is not limited to raspberry as Diego and Maddalena do strongly believe that blackberry has a great potential, too: “Its success on the market at the moment is limited because there are no good blackberries in the supermarket. This is the reason we're working hard to select a blackberry cultivar that gives fruits with excellent traits to be profitable for the growers, such as great quality and shelf life brought by hard plants with broad resistance basis. And we're confident to gather the first results within 3 years now.” 🏛️

[www.berryplant.com](http://www.berryplant.com)







## WHAT WE DO BETTER IS HIGH PRESSURE HOMOGENISERS & PISTON PUMPS.

...and we'll always do it better and better.

A complete range to suit a wide variety of applications and products



### WE WILL BE PRESENT AT:



#### DAIRYTECH

Moscow (Russia), February 18<sup>th</sup> - 21<sup>st</sup> 2020, Crocus Expo, Pavilion 2



#### 48<sup>TH</sup> DAIRY INDUSTRY CONFERENCE

Jaipur (India),  
February 20<sup>th</sup> - 22<sup>nd</sup> 2020



#### FERIA TECNOLACTEOS CARNICOS

Bogotá (Colombia),  
April 20<sup>th</sup> - 21<sup>st</sup> 2020



#### FISPAL TECNOLOGIA

São Paulo (Brazil), June 16<sup>th</sup> - 19<sup>th</sup> 2020, São Paulo Expo



#### PROPAK ASIA

Bangkok (Thailand),  
June 17<sup>th</sup> - 20<sup>th</sup> 2020



#### AGROPRODMASH

Moscow (Russia), October 5<sup>th</sup> - 9<sup>th</sup> 2020, Expocentre Fairgrounds



#### ALIMENTARIA FOOD TECH

Barcelona (Spain), October 6<sup>th</sup> - 9<sup>th</sup> 2020, Gran Via Venue



#### GULFOOD MANUFACTURING

Dubai (UAE),  
October 27<sup>th</sup> - 29<sup>th</sup> 2020



#### WORLD FOOD UKRAINE

Kiev (Ukraine),  
November 3<sup>rd</sup> - 5<sup>th</sup> 2020



**FBF Italia S.r.l.**

Via Are, 2 • 43038 Sala Baganza (Parma) Italy  
Phone: + 39 0521 548200 • Fax: +39 0521 835179  
www.fbfitalia.it - info@fbfitalia.it



# HIGH QUALITY, INNOVATION, AND DURABILITY

FBF Italia's equipment can process a variety of products and is ready for an easy in-line integration, available in both sanitary and aseptic design

**T**he extraordinary world-wide expansion made possible to set up 21 authorized sales and service centers. In addition, FBF has a large number of dealers and served customers in more than 125 countries. In general, the main target markets for FBF Italia's products are:

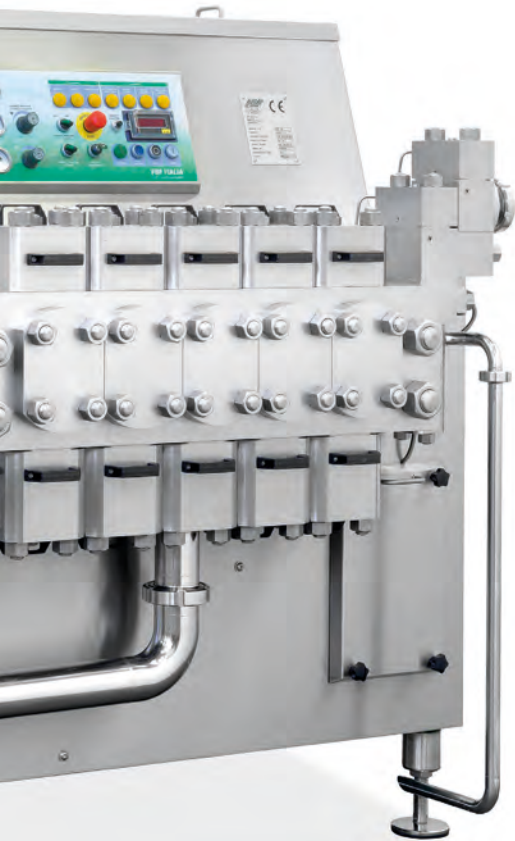
- dairy industry (milk, cream, cheese, yoghurt, caseinates, pro-teins, etc.);
- food, processing and beverage industry (fruit juices, tomato sauces, oil, ketchup, eggs, vegetable greases, emulsions, con-centrates, baby food, etc.);
- alternative beverages industry (soy milk, walnut milk, oat milk, rice milk, etc.);
- ice-cream industry;
- cosmetic, pharmaceutical, chemi-cal and petrol-chemical industries (starch, cellulose, wax, color-ants, beauty creams, toothpaste, deter-gents, disinfectants, emulsions, inks, latex, lotions, emulsifiers oils, pigments, proteins, resins, vita-mins, etc.).

On-going innovation, accurate use of special materials, strict quality controls and endurance tests allowed FBF Italia to provide state-of-the-art, durable and reliable products. The equipment, can process a large variety of products and can be easily integrated in existing process and pro-duction lines. The units, are heavy duty, can be in sanitary or aseptic version, and can feature innovative design and manufacturing solutions always focusing on an easy and low-cost maintenance, with user-friendly controls. In addition, FBF products can have a variable flow rate to address and meet the future needs of the customer.

As far as scope of work, all the homogenizers are used to permanently mix one or more substances in a liq-uid to micronize and disperse the particles suspended in the fluid. The homogenizing process makes the product chemically stable, more digestible, and more suitable for other treatments and storage. The product, reaches the homogeniz-ing







valve at a low speed and at a high pressure. As it passes through the homogenizing chamber, the product is subjected to many types of forces that cause the micronization of the particles. A violent acceleration followed by an immediate deceleration causes cavitation, then the explosion of the product's globules and an intense turbulence with high-frequency vibrations.

Homogenization, can occur with the use of a single stage homogenizer (which micronizes particles), or double stage homogenizer (recommended for dispersion, mainly used for emulsions and for viscosity control when requested). Positive displacement pumps are used for a large variety of applications when the product, with different levels of density and viscosity, must be pushed at high pressure through the processing system.

Among the existing sales and service centers, the company has a valuable reference point in India, precisely in the town of Vadodara (State of Gujarat). FBF India was established about ten years ago and operates in several different fields mainly focusing on dairy, food and beverage applications. FBF India, along with FBF Italia's business philosophy, offers to all of its customers high quality, innovative, durable products along with an excellent sales and post sales service. Developing and maintaining a friendly and solid relationship with the customer is one of the primary attentions of all local employees. In fact, one of the most important goals of the company, is to grow with the customer, become a problem-solver and a reliable partner. The business philosophy is based upon efficiently meet the customer needs in a timely manner. This service model supports the ongoing operations of the customer's and can effectively prevent any downtime due to lack of ordinary and extraordinary maintenance. 🏠

[www.fbfitalia.it](http://www.fbfitalia.it)



वर्ष 1987 से, एफबीएफ इटालिया ने उच्च दबाव वाले होमोजेनाइजर्स, पॉजिटिव विस्थापन पंप, प्रयोगशाला होमोजेनाइजर्स का डिजाइन और निर्माण किया है। क्षेत्र के अनुभव के लिए एक उल्लेखनीय धन्यवाद, एफबीएफ इटालिया कंपनी इंजीनियरिंग कंपनियों, सिस्टम इंटीग्रेटर्स, "टर्नकी" उपकरणों के आपूर्तिकर्ताओं और डेयरी, खाद्य, पेय, रसायन और दवा क्षेत्रों के अंतिम उपयोगकर्ताओं के लिए एक महत्वपूर्ण भागीदार बन गई है।



# KILL TWO BIRDS WITH ONE STONE: TO CUT FOOD WASTE AND TO CUT UNEMPLOYMENT

**B**eside profit, a powerful incentive for productivity is the sensible reduction of food waste and the respect for international laws and morality. This has been the path taken by the 1991-founded Italian company Tropical Food Machinery, specialized designing, building and selling high quality multi-fruit multi-capability complete manufacturing plants ranging from 200kgs to 20 hourly tons of fresh product.

Beside answering the call of juice and concentrate producers Tropical Food Machinery is focusing actively on training small growers worldwide to more complex activities. Through commercialization of smaller productive lines, growers living in underdeveloped countries are stimulated to make good use of raw materials - benefitting from producing fruit conserve or juice and reduce food waste.

«We help farmers to get on their own feet, giving them the chance to start a production line with less imposing equipments, in order to be able to produce their natural juice locally», says Katia Cassol, Sales Director.

All with a smaller investment. The whole manufacturing line is in-house designed, constructed and tested before delivery: this verticalization of the productive process, while sparing expenses, ensures a flexible but polished final product and a dedicated post-sales follow-up, inclusive of technical

**TROPICAL FOOD MACHINERY**  
food processing technology







Respecting the environment: the  
italian example of TROPICAL FOOD  
MACHINERY






and maintenance workshops on site with multi-level training and video assistance. The company use proven extraction technologies that prevent fruit quality loss or alteration of its natural characteristics. It boosts a quality niche production aimed at constructing and delivering plants of lower productive rate to smaller farmers, growers and associations, enabling them to reach a wider and bigger market thanks to their renewed artisanal-quality professionally-made production of juice, conserves or canned fruit. The dual structure of the firm, with one factory in Busseto (Parma, Italy) and another one in Pouso Alegre (Minas Gerais, Brazil), is the main drive behind this worldwide strategy. The countries where Tropical Food Machinery is most active are located in Asia, India and Africa, Southern America and Mexico.

«Thanks to our direct knowledge of international products and our ability to adapt to the client's request, we held a leading position for high-productive manufacturing plants» says Cassol.

Tropical Food Machinery offers a wide gamma of multi-fruit lines starting from scratch: pilot, mini and mobile plants of easy use and transport, and big capacity lines, fully automated and controlled by a remote Scada supervision system.

#### Production gamma includes:

- a multi-fruit line with manual peel system and mechanical treatment of the fruit pulp to produce natural juice, conserves, canned fruit
- an automated multi-fruit line to produce natural or concentrated aseptic juice filling presterilized bags ranging from 20 to 220 liters
- specific lines for treatment of a singular kind of fruit such as bananas, pineapple, passion fruit and other varieties; reprocessing lines of different output range. 

This article and other information are available on the Company's portal

[www.tropicalfood.net](http://www.tropicalfood.net)



FRUIT PROCESSING TECHNOLOGY



लाभ के अलावा, उत्पादकता के लिए एक शक्तिशाली प्रोत्साहन भोजन की कम से कम बर्बादी और अंतरराष्ट्रीय कानूनों और नैतिकता के लिए सम्मान है। यह मार्ग वर्ष 1991 में स्थापित इतालवी कंपनी ट्रॉपिकल फूड मशीनरी द्वारा लिया गया है। यह कंपनी 200 किलोग्राम से लेकर 20 टन प्रति घंटे के उत्पाद के साथ उच्च गुणवत्ता वाले बहु-फल, बहु-क्षमता, पूर्ण निर्माण संयंत्रों को डिजाइन, निर्माण और बिक्री करने में माहिर है।





## Boost up the taste of nature

Discover GEA homogenizers.  
The highly customized process solutions that  
ensure excellence in food products

- Improved organoleptic properties
- Longer shelf-life
- Reduced use of additives or stabilizers
- Reduced oxidation and alteration processes
- Improved viscosity, mouth feeling and taste
- Aseptic execution available

# GEA HIGH PRESSURE HOMOGENIZATION TECHNOLOGY IN FOOD & BEVERAGE APPLICATIONS

**G**EA 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 digestibility 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 development 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](http://www.gea.com/homogenizers)



### जीईए होमोजेनाइजर्स उत्पादन साइट – पार्मा

साल 1947 में सोवि परिवार द्वारा इंजीनियरिंग के उद्देश्य से स्थापित और डेयरी उद्योग के लिए उच्च दबाव वाले होमोजेनाइजर्स का उत्पादन करने के लिए, इस कंपनी ने जल्द ही अपने मुख्य व्यवसाय का विस्तार करना शुरू कर दिया और बढ़ती ग्राहक मांगों को पूरा करने के लिए विदेशों में निर्यात किया। जीईए समूह द्वारा अधिग्रहण के बाद, इंजीनियरिंग और विनिर्माण क्षेत्र में वैश्विक प्रौद्योगिकी के नेता, साल 1994 में जीईए नीरो सोवि की वैश्विक दृश्यता और ताकत उच्चतम झलक पर पहुंच गई, जो कि होमोजेनाइजेशन तकनीक में दुनिया भर में अग्रणी बन गई। 150 से अधिक कर्मचारी, 20,000 मीटर वर्ग का उत्पादन क्षेत्र और दुनिया भर में 10,000 ऑपरेटिंग मशीन, भविष्य, नवाचार और ग्राहकों की संतुष्टि पर ध्यान केंद्रित करने के साथ साथ एक लंबे समय तक चलने वाली उत्कृष्टता विशेषज्ञता को हमेशा प्रदर्शित करते हैं।

जीईए के उच्च दाब वाले होमोजेनाइजर्स का उत्पादन स्थल इटली के पार्मा में स्थित है।

यह क्षेत्र इटली की फूड वैली के रूप में भी जाना जाता है, कई बाजार-अग्रणी खाद्य प्रसंस्करण कंपनियों के कारण, जिन्होंने यहां अपना व्यवसाय शुरू किया और विकसित किया।

इस अनूठे वातावरण ने जीईए को इस प्रवृत्ति का पालन करने में मदद की है: उत्कृष्ट निर्माण क्षमताएं एक ऐसी मुख्य विशेषता है, जो हमारे होमोजेनाइजर्स को उच्च गुणवत्ता वाले परिणाम सुनिश्चित करने में सक्षम बनाती हैं, साथ ही साथ विश्वविद्यालयों और अनुसंधान केंद्रों का सहयोग भी कंपनी के साथ है।







## Machines and complete plants for fruit processing

Multifruit NFC and chilled juice processing line with the CitroEvolution<sup>3</sup> and the Pinetronic 1SS for the extraction of high quality orange and pineapple juice



YOUR ITALIAN PARTNER SINCE  
**1936**



# EQUIPMENT FOR TROPICAL FOOD PROCESSING


**T**he standards for quality for tropical fruits are becoming more and more stringent. It is therefore mandatory that the equipment used for their processing be continuously updated in order to maximize the yield and quality of the juice / puree extracted. This is in fact the basis to keep quality in the subsequent operations of heat treatment, evaporation (when it occurs) and packaging.

One of the way to meet the target of a good extraction is the use of dedicated machines for the various "families" of fruits having similar characteristics.

On the contrary of the "Universal machines" the dedicated juice / puree extraction machines are tailor made taking into account the peculiarities of the fruits: the good juice extraction from a passion fruit, for instance, is something of completely different from the extraction of juice / pulp from a pineapple. The use of dedicated machines avoids the compromises that, otherwise, has to be accepted.

The use of dedicated machines avoids to a large extent the contamination caused by the peel to the juice / puree.

This contamination can consists in color (for instance the purple variety of passion fruit, the chlorophyll of the pineapple peel etc) as well as in the bitter / not palatable components as well as the pesticides and other chemicals.

Bertuzzi Food Processing, a leading Italian Company operates since 1936 in the design and construction of machinery and plants for the processing of fruits and vegetables and has gained a wide experience in the field of tropical fruits processing for which has developed a number of specific, dedicated machines and technologies for the juicing of pineapple, passion fruit, acerola, dragon fruit, pomelo, banana, mango, guava, litchee, rambutan, coconut etc. 

[www.bertuzzi.it](http://www.bertuzzi.it)



बेरतूजी फूड प्रोसेसिंग, फल और सब्जियों के प्रसंस्करण के लिए मशीनरी के डिजाइन और निर्माण में 1936 से संचालित एक अग्रणी इतालवी कंपनी है। इस कंपनी ने उष्णकटिबंधीय फल प्रसंस्करण के क्षेत्र में व्यापक अनुभव प्राप्त किया है, जिसके लिए इसने अनानास, पैशन फ्रूट, एसरोला चेरी, ड्रैगन फ्रूट, पोमेलो, केला, आम, अमरूद, लीची, रामबूटन, नारियल, आदि फलों के रस के लिए कई विशिष्ट, समर्पित मशीनों और तकनीकों का विकास किया है।



# LABELLING SOLUTIONS FOR FOOD TRAYS



**O**n the back of its extensive experience in the labelling and coding sector, ALTECH offers industrial labelling machines for all sectors featuring rapid and efficient application at highly competitive costs. To meet the coding and labelling requirements of the food sector, ALTECH has produced a line of labelling machines purposely designed for flat products (food trays mainly) used to preserve an extensive variety of foodstuff. This line is called ALbelt, successfully traded in Italy and abroad by the company. It is a compact and completely automatic linear system equipped with one or more labelling heads of the series ALstep or ALritma, depending on the best configuration required by the application. The most classic configurations can be found in the systems for top labelling, top and bottom labelling, angle and U- labelling, typical of the seals of the trays commonly used to preserve fresh products such as pasta, meat, salad, and more. For bottom labelling, the system is provided with a two-section conveyor with a label dispenser blade installed between the two sections, or a high-adhesion side belts system to lay the lower part of the product for labelling. Highly flexible and with expandable and totally customisable components, ALbelt can also be configured as to meet any labelling requirement. As well as applying one or more labels on

various parts of the product, ALbelt can be used for more complex applications, such as applying overlapping labels (to propose a discount or special offer) or making a non-stop system for continuous labelling. This picture shows a configuration made up of three ALritma labelling heads for the application of two labels on the upper side and one on the lower side of vegetables trays. Due to the uneven surface of the products, the two upper ALritma heads are equipped with an air-jet applicator for no contact application to moving trays. The lower and the first upper heads are also fitted with a printer module for printing variable data. Rounding off the system is a downstream adapter by rotary brushes, which ensures optimum adhesion of the label to the product surface. The ALstep/ALritma labelling heads can also be equipped with thermal transfer printers to apply variable data, such as best before dates, barcodes, and other useful information. ALTECH Srl is a leading Italian company specializing in the production of labelling machines and material coding and identification systems. Based in Bareggio, near Milan, it counts subsidiaries in the UK, the USA and South America, as well as over 80 distributors who offer sales and support in five continents.

For further information:  [www.altech.it](http://www.altech.it) - [info@altech.it](mailto:info@altech.it)



# ILAPAK:FLEXIBLE PACKAGING

Ilapak, with its vast range of flexible packaging solutions, can satisfy every form, fill and seal packaging requirement of food, pharma, medical devices and wet wipe industries.

Besides flow wrappers and vertical baggers, Ilapak portfolio includes systems for modified atmosphere applications, product handling solutions, counting and weighing systems and complete, fully automated lines.

Ilapak's purpose is to provide our customers with packaging solutions tailored precisely to their needs, minimizing their cost per pack by means of very reliable equipment and efficient service.

We believe that being well focused in everything we do at Ilapak is key to customer satisfaction. This focus describes our Industry oriented approach to our customers, technology and developments – we do not produce generic machines, rather we engineer our products with your specific needs in mind right from the start. Our specialists for

food industry are in touch with market conditions and aim to be up to date with the latest research and development in their fields.

Customer service begins with a tailor-made system and continues through installation, commissioning, training, technical assistance and the supply of spare parts. We know how important Service is to you, what a difference it can make to your performance, and how it is the details, like communicating in your local language with our locally-based engineers, that make the difference.

With headquarters in Lugano, Switzerland, Ilapak has fifteen sales and service subsidiaries in different countries across the world, as well as a significant number of qualified sales and service agents









  
 part of the **IMA** group



in other countries. This network allows us to proudly offer our customers one of the largest, and we believe most effective, locally based sales and service teams in the market,

focused on our customers' individual and local requirements. 

**[www.ilapak.it](http://www.ilapak.it)**





# COMPLETE PACKING SOLUTION FOR DRIED FRUIT SNACKS



**T**his text takes us through the 70-years of one of Italy's machinery manufacturers - **Officina Meccanica Sestese (OMS)** - right from the beginnings up to the present day. We want to illustrate how what was a small artisan company has become an important engineering company with more than 10 branches and representative companies around the world.

## **FOUNDING THE COMPANY 70 YEARS AGO**

Officina Meccanica Sestese was founded in 1949 by Maurizio Rossi and Luigi Cristina, during the difficult period after the second World War. At that time, the company's activities

were dedicated to equipment and accessories for furnaces for the production of bricks.

OMS' products soon had an important place in the market, and in 1958, new premises were opened in Arona (NO), where, the production of equipment for furnaces continued with new technology. In 1971, OMS patented the 'Forca Artiglio' for the handling and transport of bricks, with sales covering five continents.

Following on from this important growth, and newly developed products, the new premises in Paruzzaro (northern Italy, near Novara), were inaugurated in 1980.

During 1990, OMS designed and manufactured the first strapping head - the R10 - the cornerstone product that has enabled Officina Meccanica Sestese to become the leading reference company in the sector for automatic strapping.

## **DEDICATED TO THE PACKAGING SECTOR**

Since then up to the present day, a number of new machines have been designed and built: heat shrinking and stretch hooding machines,





wrapping machines, new modular strapping heads, as well as strapping machines specifically for the paper and cardboard packaging sector. Last but not least, the development of special lines dedicated to other sectors. Working in the most diverse productive and applicative sectors has increased considerably OMS' global reputation, leading it, today, to become an engineering company with more than 10 branches and representative companies around the world.

The cornerstones on which OMS is founded are its history - of course - as well as its vast number of technological solutions, combines with solid relationships with clients who want to invest in strategic technology for their production processes, and therefore require partners that are well-prepared and who are able to provide machinery with guaranteed reliability over time. OMS is, in fact, able to offer a complete series of machines and plants for end-of-line packaging, such as strapping, stretch & shrink hooding, wrapping.

#### **RESPONDING TO THE MARKET WITH RELIABILITY, EXPERIENCE, FLEXIBILITY**

Reliability, experience and flexibility are three important characteristics that enable OMS to respond to today's market demands, from the most simple strapping machine up to the most sophisticated packaging plant.

All this is made possible thanks to OMS' many years working in this market sector, as well as the large number of ad hoc solutions studied for its clients. The important results achieved by the company are also thanks to three generations of businessmen who have continued to be involved closely with the market, with the vision of a future characterized by innovation and continuous improvement.

#### **2019 AND THE FUTURE**

OMS is now undergoing a phase of transformation from a high level 'artisan' company to an industrial enterprise, involving a series of organizational, design, commercial and production choices, aimed at guaranteeing - more and more - top-level service to its customers and consolidating its position in its target markets.

During this renewal process, OMS will also celebrate its 70th year of foundation with a series of actions and events specifically thought of for this important moment

Our motto: "Because looking back, we don't always remember all the steps of our journey, but we recognize the footprints we have left. And we look ahead to our new goals." 🏛️

[www.ishidaeurope.com](http://www.ishidaeurope.com)



# EXTREMELY LIGHT AND FULLY RECYCLABLE: KHS AND ALPLA GROUP DEVELOP RETURNABLE PET BOTTLE

- Focus on weight reduction and conservation of resources
- Packaging weighs just 55 grams thanks to optimized base and neck
- Returnable bottle containing up to 35% recycle

“O WPACK represents an excellence in terms of CMZ know-how for the software experience and also for hardware technologies, very scalable according to the needs of the customer to satisfy both the dynamics of the machine and cost savings.

“Reduce, reuse, recycle”: for the KHS Group these three pillars of sustainability are a composite part of its corporate philosophy. The manufacturer of filling and packaging



#### Arne Wiese

We aimed to produce a returnable container system that's as environmentally friendly as possible. Two parameters are of prime importance here: low weight and a high percentage of recycle”, says Arne Wiese, Bottles & Shapes product manager at the KHS Group.

**Returnable PET bottle from KHS and ALPLA**  
The new 1.0-liter returnable PET bottle from KHS and ALPLA is made of up to 35% recycle.





technology consistently focuses on resource-saving, recycling-friendly systems and solutions.

Together with Austrian packaging expert ALPLA KHS has now developed a returnable PET container that at 55 grams is extremely light. The 1.0-liter bottle's high recyclate content of 35% also has a very positive effect on its overall ecobalance.

For decades the KHS Group has been heralded as a technological leader in returnable container systems, chiefly driven by its great innovative strength and striving to develop sustainable, future-proof plant engineering. The various partnerships it has formed with innovative figures in the industry have proved a further recipe for success.

Together with ALPLA KHS has now developed a returnable PET bottle that is impressive with its low weight and high recyclate content.

With this development the engineering company adheres to its maxim of "reduce and recycle", states Arne Wiese, Bottles & Shapes product manager at the KHS Group. "We aimed to produce a returnable container system that's as environmentally friendly as possible. Two parameters are of prime importance here: low weight and a high percentage of recyclate."

#### **Environmentally friendly: returnable bottle's low weight convincing**

By optimizing the bottle base and neck the packaging experts managed to considerably cut down on weight compared to conventional returnable PET containers. At 55 grams, on average the 1.0-liter bottle is ten grams lighter than its standard counterparts.

Compared to glass containers it clocks up just a tenth of the weight on the scales. "This optimization means that the amount of material used is much lower. At the same time, fuel consumption and thus also CO<sub>2</sub> emissions drop during transportation," Wiese explains. Both have a positive effect on the bottle's ecobalance.


Despite less use of materials the returnable system is ideal for a high circulation. The PET bottle has good resistance to caustic, meaning that its quality and appearance are maintained even after numerous washing cycles.

#### **Sustainable: packaging system with high recyclate content**

The aspects of easy recyclability and the use of recyclate also played a major role in the bottle's development. The environmentally-friendly returnable container is not

only fully recyclable and thus remains in the recycling loop; its high recyclate content is also compelling. "We've had outstanding test results with preforms made of up to 35% recycled materials; preforms containing 50% recyclate are also feasible for some brands," states Wiese.

The PET system devised by KHS and ALPLA therefore more than satisfies the European Commission's requirement that one-way PET bottles comprise 30% recyclate by 2030.

The optimized preforms can be blown on all KHS stretch blow molders for returnable containers. These include the particularly resource-saving InnoPET Blomax Series V. The new packaging system is suitable for all types of beverage in the returnable container segment. "We're convinced that we can place our ecofriendly PET bottle on the market quickly and successfully. Our aim is to implement the market launch in close cooperation with bottling companies," Wiese concludes. 

For more information go to:

**[www.khs.com/en/media](http://www.khs.com/en/media)**

The KHS Group is one of the leading manufacturers of filling and packaging systems for the beverage and liquid food industries.

The KHS Group includes the following companies: KHS GmbH, KHS Corpoplast GmbH and numerous subsidiaries outside Germany, located in Ahmedabad (India), Sarasota and Waukesha (USA), Zinacantepec (Mexico), São Paulo (Brazil) and Suzhou (China).

KHS manufactures modern filling and packaging systems for the high-capacity range at its headquarters in Dortmund, Germany, and at its factories in Bad Kreuznach, Kleve, Worms and Hamburg, where the group's PET expertise is pooled.

The KHS Group is a wholly owned subsidiary of the SDAX-listed Salzgitter AG corporation. In 2019 the KHS Group and its 5,149 employees achieved a turnover of around €1.260 billion.



# working together to the end of packaging as an environmental issue worldwide

## WHAT IS PUMA?

PUMA is the collective effort of the packaging business community to end packaging as an environmental issue worldwide.

## WHAT IS PACKAGING?

Packaging is the activity of temporarily integrating an external function and a product to enable the use of the product.



*Waste essentially is an unwanted by-product of a (manufacturing) process*



## WHAT IS NVC?

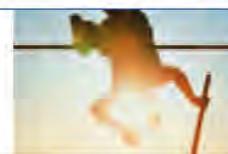
NVC Netherlands Packaging Centre was established in 1953 to stimulate the knowledge and expertise in packaging. Since then, we have grown into an association with over 500 member companies in the Netherlands and abroad. The packing-filling (FMCG) industry, packaging manufacturers, retailers, manufacturers of packaging machines, wholesalers, recyclers, designers, even a number of financial institutions: they all are members of the large and vital NVC business family. The NVC membership, innovation projects (like PUMA), information services and education programme stimulate the continuous improvement of packaging worldwide.

## WHEN IS PACKAGING AN ENVIRONMENTAL ISSUE?

Environmental issues are harmful effects of human activity on the biophysical environment. Waste essentially is an unwanted by-product of a (manufacturing) process. The activity of packaging creates environmental issues when the resources involved, either wanted or unwanted ('waste'), constitute an environmental issue.



*Environmental (planetary) problems caused by us, People, can – and will – also be solved by us, People*



## WHY DO WE HAVE TO ACT NOW?

Packaging has been with mankind already since ancient times in some moderate form, but the 20<sup>th</sup> century has brought a dramatic acceleration. The world 'does it' now at least 320,000 times per second and this is causing substantial environmental concerns. Packaging will only keep it's societal licence to operate if these concerns are properly addressed.

## ABOUT THE MANIFESTO

This Manifesto outlines the way forward to end packaging as an environmental issue worldwide. It consists of the PUMA Model to describe the essentials of the packaging activity and its relation with the resources involved. A conceptual roadmap is presented to be applied by every individual actor and the world packaging community as a whole in a self-organising manner. Key elements are open-minded sharing of reliable information, continuous knowledge development and truly holistic innovation. Environmental planetary problems caused by us, People can – and will - also be solved by us, People.



*Packaging will only keep it's societal licence to operate if the environmental concerns are properly addressed*





# THE PUMA MODEL

## THE VOCABULARY

First, PUMA defines the activity of packaging: temporarily integrating an external function and a product to enable the use of the product. There is no Law prescribing that we must do it (packaging). For instance in recorded music, streaming services like Spotify show that we can live without. If we decide to engage in the activity of packaging, the pack-use-empty (verb) spiral P-U-E is a consequence. This results in emptied packs later in time and at a different location. Waste is defined as an un-wanted effect of a (human) activity. Consequently a collect-control step must be built-in, followed by a postulated backend (BE) process step. Mirror-wise, a frontend (FE) step is required to obtain the necessary packaging materials. Philosophically and thermodynamically and in terms of information science, the situation at the backend is fundamentally different from that at the frontend. Both processes may be described in terms of converting, though.

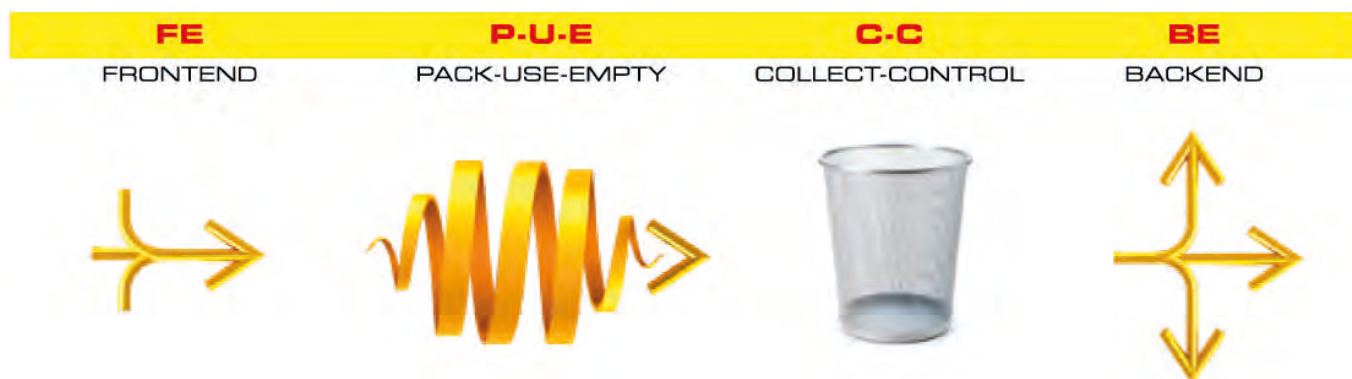


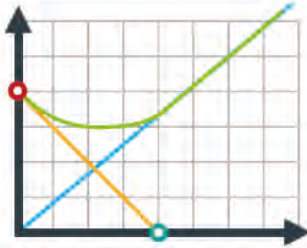
*Holistic innovation is needed as we are all interconnected in packaging*



## ADDRESSING THE ENVIRONMENTAL ISSUES

Environmental issues may come and go, depending on the many different interactions between our human activity and planet earth. Whereas the PUMA model remains unchanged, its application to environmental issues may vary in the course of time. In this first edition of the PUMA Manifesto we focus on litter, CO<sub>2</sub> and (inadequate) pack optimisation. These three issues are deemed to be the most important in the current environmental packaging debate. The resulting table serves as the basis for addressing (future) environmental issues adequately.



	FE	P-U-E	C-C	BE
Litter			✓	
CO <sub>2</sub>	✓			✓
Inadequate pack optimisation <div style="text-align: center;"> <span style="color: red;">Product</span>  <span style="color: blue;">Packaging material</span> +  <hr style="width: 50%; margin: 0 auto;"/> <span style="color: green;">Total environmental impact</span> </div>				
Future issues	✓	✓	✓	✓



NVC NETHERLANDS PACKAGING CENTRE

*Sharing the future in packaging*

☎ +31-(0)182-512411

✉ [info@nvc.nl](mailto:info@nvc.nl)





# OFFICINA MECCANICA SESTESE (OMS)

70 years of activities; special lines and machines for the packaging sectors

**T**his text takes us through the 70-years of one of Italy's machinery manufacturers - Officina Meccanica Sestese (OMS) - right from the beginnings up to the present day.

We want to illustrate how what was a small artisan company has become an important engineering company with more than 10 branches and representative companies around the world.

## FOUNDING THE COMPANY 70 YEARS AGO

Officina Meccanica Sestese was founded in 1949 by Maurizio Rossi and Luigi Cristina, during the difficult period after the second World War. At that time, the company's activities were dedicated to equipment and accessories for furnaces for the production of bricks.

OMS' products soon had an important place in the market, and in 1958, new premises were opened in Arona (NO), where, the production of equipment for furnaces continued with new technology. In 1971, OMS patented the 'Forca Artiglio' for the handling and transport of bricks, with sales covering five continents.

Following on from this important growth, and newly developed products, the new premises in Paruzzaro (northern Italy, near Novara), were inaugurated in 1980.

During 1990, OMS designed and manufactured the first strapping head - the R10 - the cornerstone product that has enabled Officina Meccanica Sestese to become the leading reference company in the sector for automatic strapping.

## DEDICATED TO THE PACKAGING SECTOR

Since then up to the present day, a number of new machines have been designed and built: heat shrinking and stretch hooding machines, wrapping machines, new modular strapping heads, as well as strapping machines specifically for the paper and cardboard packaging sector. Last but not least, the development of special lines dedicated to other sectors. Working in the most diverse productive and applicative sectors has increased considerably OMS' global reputation,



leading it, today, to become an engineering company with more than 10 branches and representative companies around the world.

The cornerstones on which OMS is founded are its history - of course - as well as its vast number of technological solutions, combines with solid relationships with clients who want to invest in strategic technology for their production processes, and therefore require partners that are well-prepared and who are able to provide machinery with guaranteed reliability over time.

OMS is, in fact, able to offer a complete series of machines and plants for end-of-line packaging, such as strapping, stretch & shrink hooding, wrapping.

## RESPONDING TO THE MARKET WITH RELIABILITY, EXPERIENCE, FLEXIBILITY

Reliability, experience and flexibility are three important





characteristics that enable OMS to respond to today's market demands, from the most simple strapping machine up to the most sophisticated packaging plant.

All this is made possible thanks to OMS' many years working in this market sector, as well as the large number of ad hoc solutions studied for its clients. The important results achieved by the company are also thanks to three generations of businessmen who have continued to be involved closely with the market, with the vision of a future characterized by innovation and continuous improvement.

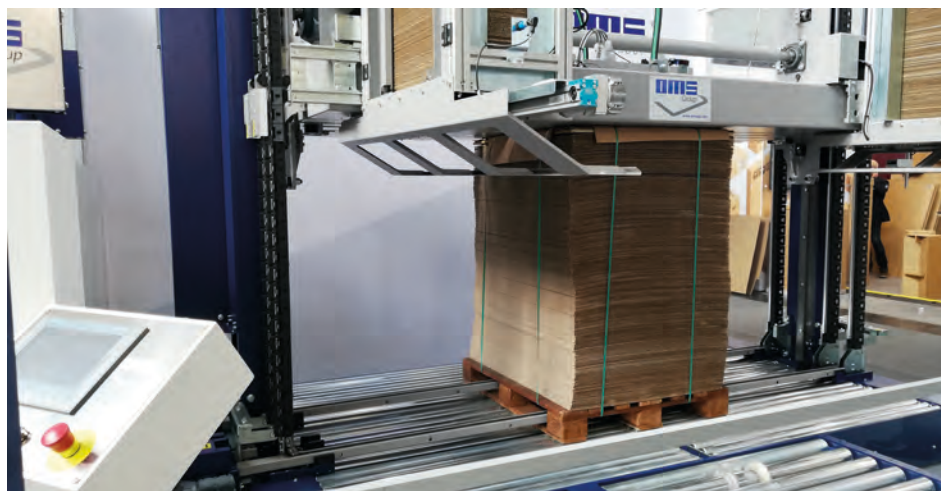
### 2019 AND THE FUTURE

OMS is now undergoing a phase of transformation from a high level 'artisan' company to an industrial enterprise, involving a series of organizational, design, commercial and production choices, aimed at guaranteeing – more and more – top-level service to its customers and consolidating its position in its target markets. During this renewal process, OMS will also celebrate its 70th

year of foundation with a series of actions and events specifically thought of for this important moment

Our motto: "Because looking back, we don't always remember all the steps of our journey, but we recognize the footprints we have left. And we look ahead to our new goals." 🏛️

[www.omsspa.com](http://www.omsspa.com)





# OMAG: OPEN DOORS TO THE FUTURE

Since 1973 Omag has been designing and developing vertical and horizontal packaging machines and complete lines for 4-side sealed sachets, stick-pack and doy-pack for food, cosmetic, chemical and pharmaceutical industries; with more than 45 years of experience in the packaging industry has acquired a unique know-how.

Every machine is customizable, can easily pack a wide range of products (powdery, granular, liquid, pasty, tablets and capsules) in different pouches dimensions and sizes and can be designed on one or more packaging lanes according to customer's indications about speed and production.

Omag machines can be completed with robot counting and feeding systems, cartoning machines, customized with a large variety of optionals and finishing on the base of customer specifications.

## Innovation and Industry 4.0

Continuous innovation and technical research allows Omag to guarantee strength, reliability and durability of its machines, all built with a pleasant design and according to GMP and FDA standards: "cantilever" design makes cleaning procedures and replacement of any component easier, every part in contact with the product is in stainless steel, the limited number of components present ensures that the machine is compact for the installation in restricted places.

In the last years Omag has nationally and internationally excelled with a strong economic



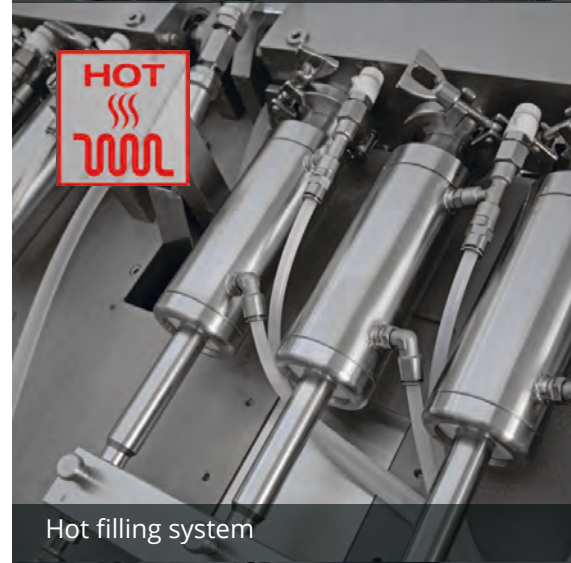




**omag**  
Flexibility in Packaging



"CIP" cleaning in place system




Hot filling system



Ink-jet or laser coding system

and employment growth in the packaging world. The key factors for this sustained rate of growth is the constant investment in research and development to be always up to date with Industry 4.0 new technologies: sensors, smart cameras, robotic systems and augmented reality implemented on the machines.

Omag is now actively implementing predictive maintenance on its machines: thanks to IoT technologies, remote control and machines interconnection, in a very near future will be possible to constantly monitor the machine status, components lifecycle and system performances in order to minimize the risk of machine downtime.

Visit [www.omag-pack.com](http://www.omag-pack.com) to see our packaging machines and to be always update with the latest news and events. 





# FLEXIBLE, SINGLE-PLATFORM PACKAGING SOLUTION DELIVERS FORMAT AGILITY AND DELICATE HANDLING OF CRAFT-MADE ITALIAN CAKES

**L**ivetech selected Rockwell Automation solutions to build a secondary packaging line for Galbusera-Tre Marie, an Italian brand with a long history in the bakery industry and with a strong commitment to preserving the craft-made quality of its cakes.

## Background

For Galbusera, an Italian company formed in 1938 in Morbegno, in Valtellina, the quality of its baked products – biscuits, snacks and crackers – has always been a priority. In 2014 Galbusera acquired Tre Marie, a Milan-based brand with a long tradition in the production of Italian panettoni and colombe and launched an important investment plan to modernize its manufacturing lines. Since January 2018, Tre Marie leavened products – colombe and panettoni – have been produced in the new plant in Vellezzo Bellini. Tre Marie products have always been characterized by their craft made taste, which is the result of a long and delicate production process: “Seventy-two hours are needed to produce a panettone or a colomba,” Franco Ronconi, Technical Director at Galbusera, explains. “Our technicians keep the craftsmanship of our products alive even if the process is highly automated: we bake and package 1,800 colombe per hour and 2,200-2,400 panettoni per hour.”

## Challenge

When Galbusera transferred the production line from the Tre Marie headquarter in Milan to the new production site, a major renovation involved the leavened packaging process. “We were looking for a technology supplier that could give us a post-installation support too and we found out that Livetech could be the right one,” Ronconi says. Livetech, a company delivering engineering, consultancy and production of complete packaging systems, proposed an innovative solution for the secondary packaging of panettoni and colombe; a system based on an automatic wrapping line that forms a display tray (couvette) from a cardboard die-cut. The line includes three robots that place the packed products on the tray.

As Federico Scornaienchi,  
Area Manager at







Livotech, explains: “The display tray is a very smart solution for the employees in stores, as they don’t have to extract the products from any closed box to expose them; the so-called couvette is therefore a plus for Galbusera when contracting with deliverers and an interesting marketing tool, because the product is immediately visible and accessible to the end user as soon as the tray is placed in the store.”

Furthermore, in the secondary packaging process, the new solution offers several benefits compared to the American box, which was previously used by Galbusera. It is more flexible, because a cardboard die-cut can be used to form different tray models, while the American box has standardized dimensions; and it helps to save materials used for the secondary packaging, because additional background and cardboard internal dividers are not needed.

Galbusera decided then to transform its secondary packaging concept radically. The most challenging step of the project concerned the ability of the line to realize the right batches required by Galbusera sales office and to meet the palletizing requirements: “We had to respect the quantity per sale unit and per pallet,” Scornaienchi explains. The manipulation of the finished product was another peculiarity that Livotech and Galbusera had to cater for: “We had to comply with severe constraints in moving the product along the secondary packaging and transporting steps.” Ronconi points out. “Products can’t be allowed to deteriorate in their package, in terms of shape and appearance. Tre Marie panettoni and colombe are appreciated for their high quality and customers who choose them expect the same quality even in the packaging.”

Robots have to load the tray not only with carton-packed products, but also flow-packed products, which are conceived to be sold in outlets. “In this second case, products in bags have to

be picked and moved more delicately, because they are less protected than they are in a carton box, and we initially had some perplexities: could a robot deliver the same care as an operator's hand?" Scornaienchi continues. "Thanks to special gripping tools and advanced control configuration, the robots are able to offer delicate handling, preserving the product in both cases."

### Solution

Livetechn designed a multi-format line for Galbusera, in order to form, fill and close the trays. The first station comprises an automatic unit that loads and forms the die-cut cardboard. Three robotic islands are the core of the line: they take the products coming from the conveyor belt – which is connected to the primary packaging machine – and place them on the tray in the correct numbers. Different gripping tools are used depending on the package of the single product (case or bag).

When a format changeover is needed, the robots rotate towards the operator, who can replace the gripping equipment.

The tray then passes to a weighing station, where a cell verifies weight parameters: if they respond to set requirements – that is, the tray contains the right quantity of pieces – they move to the next robotic isle, where the robot puts glue to the edges of the cardboard die-cut and folds them,

forming a containment perimeter. Then another piece of cardboard is placed above to cover the products. The trays are stacked one on top of the other, up to a maximum of three, and move to palletizing station.

The automation architecture implemented by Livetechn is based on an Allen-Bradley® CompactLogix™ 1769-L36 programmable automation controller (PAC) from Rockwell Automation. This automation platform helped to minimize installation and start-up time in Galbusera plant, thanks to a common software environment and an integrated axis control, which met the precision and speed requirements of the robotic islands.

Two Allen-Bradley Kinetix® 5500 servo-drives are connected to the controller, while four Allen-Bradley Kinetix single-cable VPL servo-motors are connected to the servo-drives. An Allen-Bradley PowerFlex® 525 variable-speed drive, an Allen-Bradley PanelView™ Plus7 graphic terminal and several Allen-Bradley POINT I/O™ modules complete the architecture.

The power system is a Rockwell Automation one too and is based on 1606 Series-XLS Switched-Mode Power Supplies. "Quality, integration and ease of use are the values we share with Rockwell Automation when it comes to selecting the right technology for a specific application," Scornaienchi says. "The CompactLogix platform helped us to build a flexible multi-format line."







*Thanks to Livetech and Rockwell Automation, Galbusera now has a more automatized secondary packaging process without compromising the high quality for which its products are appreciated.*

*The new solution offers several benefits compared to the American box, which was previously used by Galbusera.*

*A cardboard die-cut can be used to form different tray models*

## Results

Thanks to Livetech and Rockwell Automation, Galbusera now has a more automatized secondary packaging process, without compromising the high quality for which its products are appreciated. Ronconi points out that in Galbusera automation is adopted where it's worth: "The secondary packaging of small batches is still manual," he says, "and our operators have the possibility to control and supervise the line." The Rockwell Automation platform helped to improve the flexibility of the secondary packaging line too: "We initially wanted to standardize the trays, but while developing the system, we changed our minds and chose a flexible solution, that had to be able to adapt the bottom of the tray according to the quantity of the pieces to be contained."

The CompactLogix PAC with integrated motion allows operators to perform quicker format changeovers and doesn't require the plant to be stopped upstream. Preserving and handling products correctly throughout the process is a must for Galbusera and thanks to Livetech and Rockwell Automation the Italian company got it: it can be sure that its colombe and panettoni come to the consumer in perfect conditions.

## Challenge

Historic Italian bakery needed an upgrade path that balanced modern automation agility with delicate handling of its baked products.


## Solutions

A Rockwell Automation solution was installed, which included:

- Allen-Bradley CompactLogix programmable automation controller
- Allen-Bradley Kinetix 5500 servo-drives
- Allen-Bradley Kinetix single-cable VPL servo-motors
- Allen-Bradley PowerFlex variable-speed drives
- Allen-Bradley PanelView Plus7 graphic terminal
- Allen-Bradley POINT I/O™ modules
- 1606 Series-XLS Switched Mode Power Supplies

## Results

Common software environment

Integrated axis control that meets the precision and speed requirements of the robotic islands  
 PAC with integrated motion delivers quicker tray format changeover and doesn't require the plant to be stopped upstream. 

[www.rockwellautomation.com](http://www.rockwellautomation.com)

# A FANCY AND ADVANCED PACKAGING TO PROTECT THE QUALITY OF YOUR PRODUCTS

**“W**e’re sure that our pizza will always be true to us”, said Tiziano Zanuto in an interview to the business magazine “Mondo” in the 1990s. He is one of the founders and current CEO of Prodal Srl, a company that produces frozen pizza and snacks based in San Donà di Piave, in the province of Venice. The activity was founded in 1994 when the Zanuto family, already working in the field of pizza making, started up a new business thanks to the courage of a twenty-year-old Tiziano who made good use of the governmental support given to young entrepreneurs.

Time seems to have proved him right considering that today, after twenty-five years of activity, the adventure that began in a small laboratory has turned into a real business, going from about ten employees to a double shift work on two lines, with a production capacity of 100,000 pizzas per day against a few thousand in the first years. At the beginning of its activity, the Venetian company decided to focus on the Italian market only, mainly for two reasons: on the one hand, it was necessary to gain sufficient experience to deal with the market; on the other hand, it was important to receive a positive feedback on the quality of the product.

In the wake of the excellent results achieved in Italy, Prodal decided to enter the foreign market, which was very demanding







The famous frozen pizza brand, Prodal Srl, celebrates its 25th anniversary and chooses the know-how of Tecno Pack S.p.A. to re-think and automatize its packaging department

**Tecno Pack**  
PACKAGING MACHINES

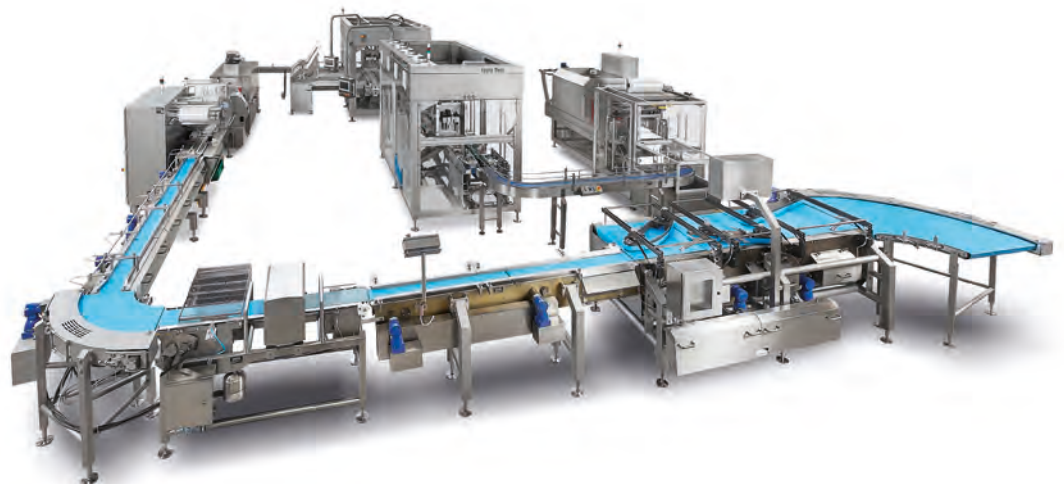


in terms of product standardisation. Soon after, Prodal's commercial success, its constant growth and the development of its range of food products led the company to focus more and more on the exports. Intending to constantly improve and invest in process innovations, in 2011 Prodal built a new plant of around 5,000 m<sup>2</sup>.

The implementation of a cutting-edge automation system has meant a significant reduction in costs as well as an improvement in quality and a drastic reduction in the number of non-compliant products, too.

Here, it is worth mentioning an innovative solution introduced in 2018: a brand new blast chilling and storing system, with latest-generation cool stores, able to triplicate the product storing capacity. These structural and operational improvements project the company towards the world of Industry 4.0.

In 2014 Prodal started a collaboration with Tecno Pack S.p.A. to develop a high level of technological innovation in its packaging department. The fruitful union between the two companies has led to two great results: the innovative mod-





ified atmosphere flow pack packing and the heat shrink film packaging.

Since the very first meeting with Andrea Motta, area manager of Tecno Pack, Prodal made it clear that they weren't just looking for a simple supplier, but were looking forward to establishing a long-term and constructive partnership with a leading manufacturer able to provide guarantees and, above all, to be willing to grow together, with the common aim of creating an advanced technology to ensure the best dress for the queen of Italian food: pizza.

This is how Tecno Pack has been providing Prodal with high-performance, flexible and efficient systems for the past 5 years. The forthcoming delivery of a third line is part of further success.

"The great teamwork with Tecno Pack", says Zanuto, "has led to great results that certainly make us proud, but at the same time remind us of the great responsibility we have for our product.

Respecting traditional methods and approaches must be the guiding light for our production". Prodal's CEO continues:

"One of the primary aspects of our mission is certainly the careful selection of the ingredients and the meticulous compliance with national and international standards regulating the food supply chains".

In fact, Prodal complies with European and international standards for both management and food safety in the production, packaging and storage, and is certified to ISO 22000, IFS Food and BRC Food. This aspect, together with the active participation in the main national and international trade fairs, allows Prodal to make its way in the global market, exporting its products in a lot of territories, from Tyrol to Germany, from Dublin to Amsterdam, from New York to Sydney, up to Dubai, Hong Kong and Johannesburg. And if Tiziano Zanuto admits that he is quite happy with the work he has done so far, he nevertheless insists on not lowering his guard. "Otherwise", he says with a smile, "I wouldn't be true to my pizza".

The collaboration between two large companies, both market leaders in their respective sector, could only lead to new, great success. 🏢

[www.tecnopackspa.it](http://www.tecnopackspa.it)



प्रवाह पैक, तकिया पैक, प्राथमिक और माध्यमिक पैकेजिंग के क्षेत्र में प्रौद्योगिकी, अनुभव और संदर्भ सेवा। खाद्य के लिए हमेशा एक विशेष समर्पण रखते हुये, हम ऐसे समाधानों के साथ बाजार में अग्रणी हैं जो हमेशा विशिष्ट हैं और प्रत्येक अनुप्रयोग क्षेत्र के लिए समर्पित हैं। छोटे, मैनुअल रूप से लोड किए गए इलेक्ट्रॉनिक फ्लो पैक पैकेजिंग मशीन से लेकर, पूरी प्रणाली जो उत्पादन से उत्पाद लेती है और इसे एकल या कई पैकेजों में संरक्षित करती है, जिन्हें फिर अन्य चरणों के माध्यम से पैलेटाइजेशन में लाया जाता है, हमारे पास सभी प्रकार की पैकेजिंग तकनीक है जो आपकी कंपनी को चाहिए। तकनीकी रूप से सक्षम विशेषज्ञों की एक वाणिज्यिक टीम, एक शक्तिशाली और लोचदार तकनीकी कार्यालय, सभी यांत्रिक भागों का आंतरिक उत्पादन, वाणिज्यिक सामग्रियों का कठोर चयन, पूर्ण उत्कृष्टता की एक उत्पादन टीम और पूरी दुनिया में मौजूद एक समयनिष्ठ बिक्री के बाद सेवा, यह सब हमें अपने उपयोगकर्ताओं को "टेलर-मेड" रूप में मानी जाने वाली मशीनों और प्रणालियों की पेशकश करने की अनुमति देता है, और प्रसिद्ध कंपनियों जैसे कि बारिला समूह, नेस्ले, पवेसी, क्राफ्ट, बैक्सटर, चिपिटा, पेप्सिको आदि कई अन्य कंपनियों द्वारा कला की वर्तमान स्थिति की अधिकतम अभिव्यक्ति के रूप में मान्यता प्राप्त करवाता है। कंपनी की प्रणाली में उच्च गति, लचीलापन, संशोधित वातावरण, उत्पाद शेल्फ जीवन, पैकेजिंग का वैश्विक एकीकरण, कुछ ऐसे मुद्दे हैं जिनका हम हर दिन उत्साह और दृढ़ संकल्प के साथ सामना करते हैं और जो हमारे ग्राहकों के साथ मिलकर हमें नए विकासवादी लक्ष्यों के प्रदान करते हैं। हमें पूरा यकीन है कि हम आपके उत्पाद के लिए हमारी "टेलर-मेड" अवधारणा को धारण कर सकते हैं, और हम अपनी देखभाल और प्रतिबद्धता के माध्यम से ऐसा करने के लिए पहले से ही प्रतिबद्ध हैं। हमारा लक्ष्य केवल आपकी कंपनी की आवश्यकताओं और संकल्पों के अनुरूप तकनीकी उत्कृष्टता प्राप्त करना है। आपकी कंपनी की सफलता के लिए उपयोगी और निर्णायक होने के लिए हमारा प्रस्ताव आपके साथ काम करना है। कौन हैं हम? हम हैं टेकनो पैक एस.पी.ए.





The largest and fastest growing food market in the region; predicted to grow at a rate of 6% over the next 5 years



More than 9,000 trade visitors from the Food & Drink sectors



200 gourmet specialist at Saudi Arabia's leading International chef competition



Saudi Arabia's

Leading International

Food & Drink Trade Exhibition 8th Edition



## BOOK YOUR STAND

**Mohamed Talaat Mohamed**

Show Manager

Mob: +966 55 5811 765

E: [mohamed.talaat@reedsunaidiexpo.com](mailto:mohamed.talaat@reedsunaidiexpo.com)

[www.foodexsaudi.com](http://www.foodexsaudi.com)

### FOLLOW US ON



#foodexsaudi

Organised by



Licensed by



Media Partner



# TUBITEX SOLUTIONS FOR FOOD FILM PRODUCERS

**T**ubitex is an Italian company specializing in the design and sale of industrial cardboard tubes. Established in 1976, Tubitex is among the leading European manufacturers of tubes, coils and cores in spiral and rectified cardboard for the producers of plastic food film, the paper and graphic industry, the textile sector and packaging. Its products are appreciated in Italy and throughout the world for their quality and the guarantee of high performances in the heavy and high speed windings of paper, plastic film or synthetic yarns.

## Products for the food packaging sector

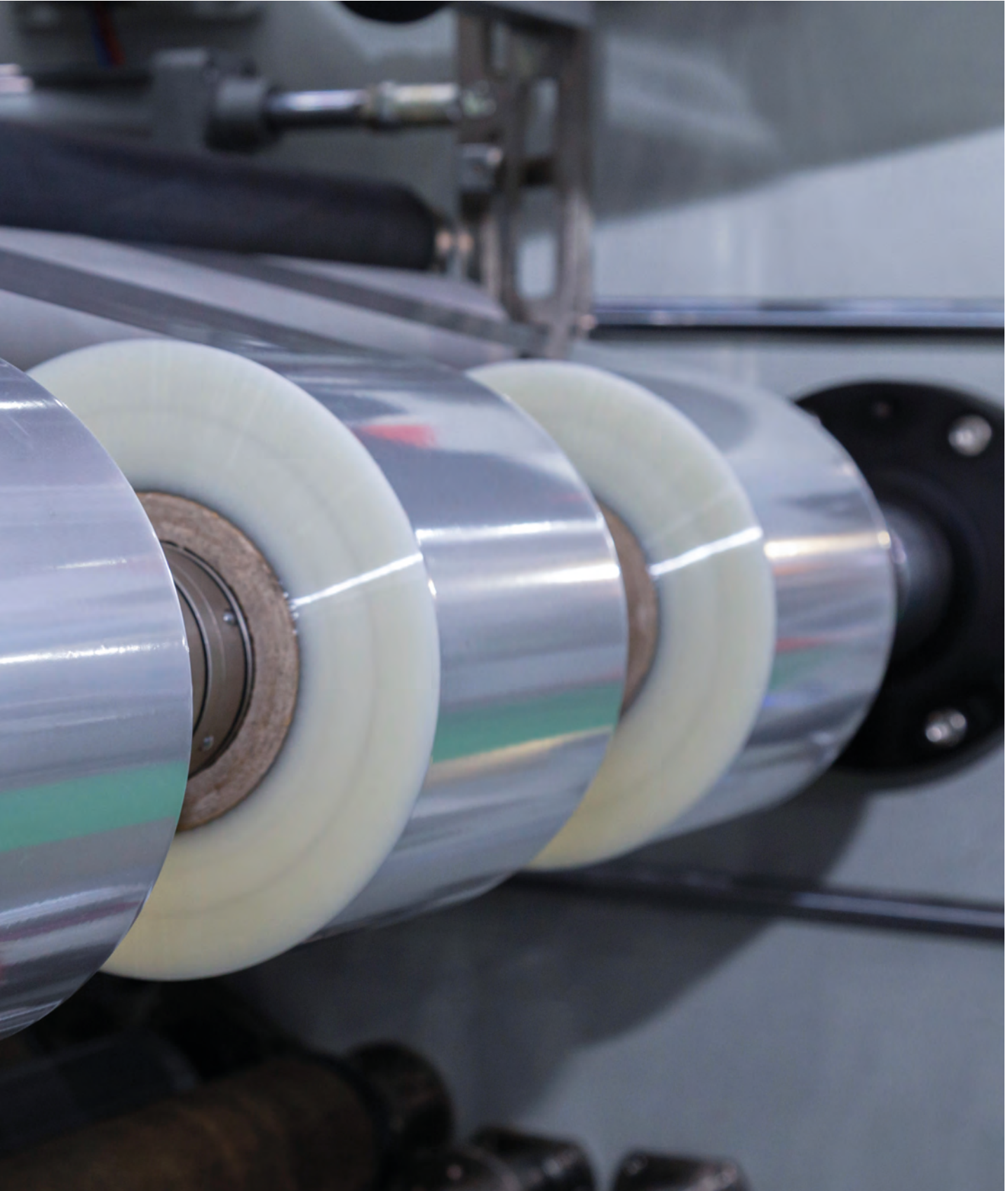
Tubitex addresses the food packaging sector with a wide range of plastic film tubes for fresh food packaging. The products are made of 100% recyclable cardboard and can be reused one or more times, depending on the type of use. The cardboard core material consists of 90-95% recycled fibers and 5-10% natural vegetable and inert substances, to allow their disposal together with the paper, in compliance with the optimization logic of industrial food packaging and the regulations in force concerning packaging. Tubitex cardboard cores for polypropylene, PVC, polythene and polyester films, coupled films and printed films are characterized by high wrapping speed and high mechanical resistance. These qualities make them suitable also for extreme processing. Tubitex cores are designed respecting the specific needs of the food and non-food industry, in full compliance with the sector's technical standards and the national and European health and hygiene standards.







 **TUBITEX**





**The commitment to environmental sustainability**

Over the years, Tubitex' constant commitment to technological innovation and attention to environmental sustainability have allowed it to achieve important goals in terms of energy efficiency. In 2016, the Tubitex production plant in Barbarano Vicentino (Vicenza) was equipped with a photovoltaic system capable of producing up to 785,000 kWh/year, equivalent to 68% of the company's energy needs. The use of the photovoltaic system prevents emitting 256,933 Kg of CO2 into the atmosphere every year, and represents a fundamental step in the environmental sustainability journey undertaken by the company.

Furthermore, Tubitex is now in the final stages of a journey that has taken it, over the last decade, to evolve its own production and management processes towards more ethical and environmentally friendly standards, which will be checked and certified in the coming months according to ISO 14001:2015, with a view to embracing an







increasingly eco-sustainable and informative philosophy. In addition to that, a Life Cycle Assessment process was launched, with the aim of quantifying the environmental impact of products throughout their entire lifecycle, from their use as raw material to their disposal. During this analysis, through the operational models defined by the International Organization for Standardization (ISO), the consumption of the entire life cycle of the product in terms of raw material, water and energy and of the waste generated in the environment in the form of emissions into the air, water and soil will be calculated. Based on the information collected, Tubitex will take all the necessary measures to reduce the environmental impact generated by business processes.

#### **A customer-focused approach**

From a qualitative survey conducted in 2017 by the Cerved research institute on behalf of Tubitex, it emerged that 95% of our client companies are fully satisfied with the product and service received and 72% of them would recommend our company to other people. Among the most appreciated aspects are the high performance of the products, the flexibility in managing order changes, compliance with technical specifications and speed of delivery times.

#### **Versatile products for different production sectors**

Tubitex cardboard tubes are suitable for many uses, from the wrapping of various types of paper for the paper industry to the spools for the spinning of chemical fibers for the textile sector, from the production of labels and adhesive tapes to that of cardboard containers for the packaging industry, the graphic and paper industry. In addition to the normal spiral tubes, Tubitex produces ground cores with a smooth surface, without the undulations resulting from the matching of the finishing papers. This type of product is suitable for films with limited thickness, or in all the applications that make it necessary to rewind quickly both plastic and special films. 🏢

**[www.tubitex.com](http://www.tubitex.com)**





# LASER: COMPLETE PLANTS FOR FOOD INDUSTRY AND BAKERY PRODUCTS

**L**aser has been specializing for years in the supply of complete plants for food industry and bakery products such as lines for the automatic production of biscuits, crackers, soft biscuits, cakes, plum cakes and tin bread.

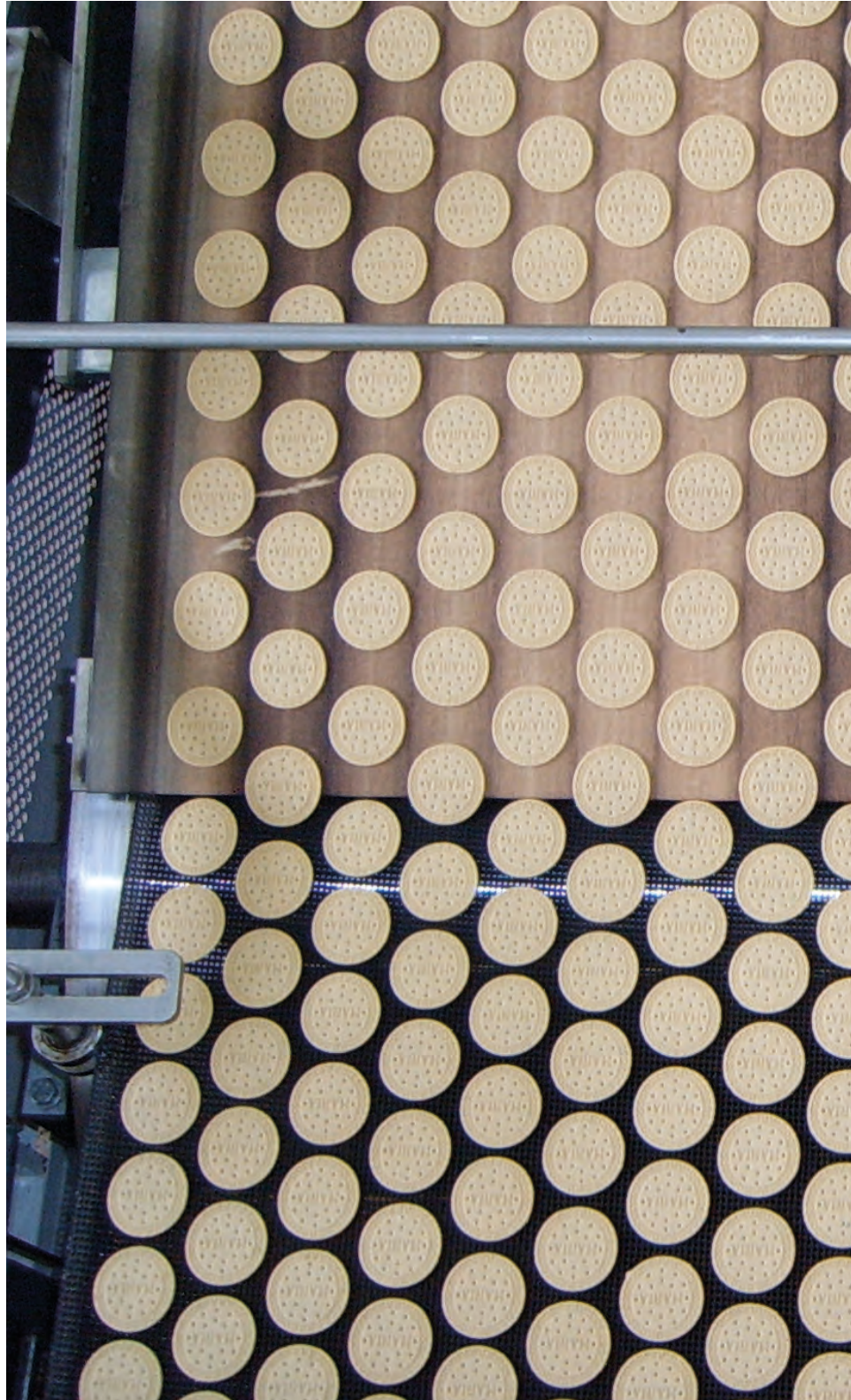
Thanks to its remarkable propensity for export and to the tailor-made, each line is taken care and customized in every single detail according to the requests of the customer and to the characteristics of the final product.

With more than 500 production lines installed in more than 200 countries worldwide with a strong presence in emerging markets even with local production units, the company aims to become a reference point for technological innovations in machinery for bakery products.

The range of products Laser can offer is the most complete in the market and actually can cover the full production of bakery products from mixing section, which can have bridge type planetary mixers, horizontal sigma mixers or turbomixers, to the forming section where several range of extruders, depositors, rotary moulding machines and lamination line for biscuits and crackers can be offered.

Special version of the machines for wash-down execution, Alergen free production, petfood productions are available upon request.

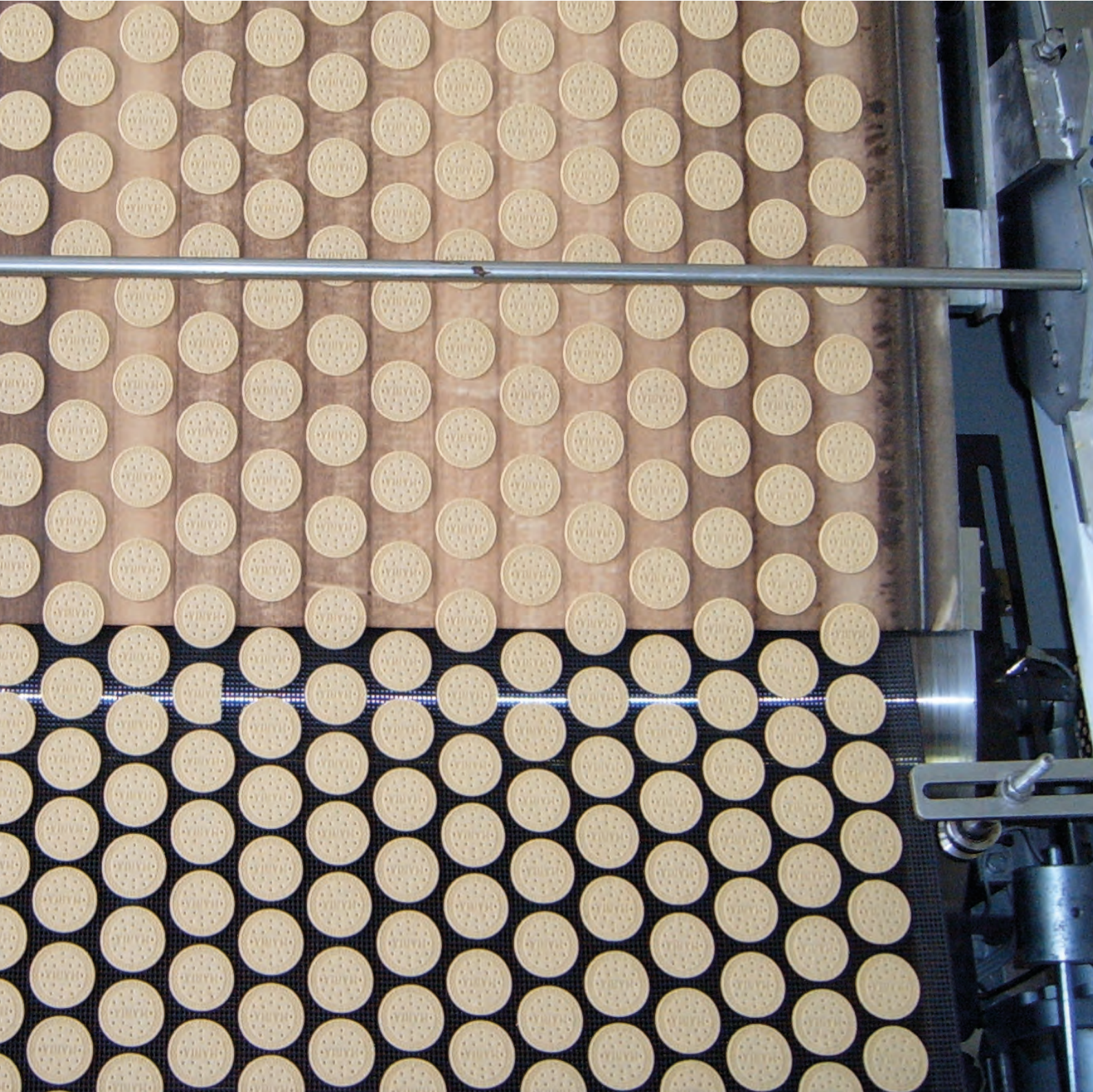
Tunnel ovens are a core product from Laser and each one is tailor







**LASER**  
BISCUIT LINES  
AND OVEN







The ovens can come barebone and assembled locally or in pre-assembled and pre-insulated modules of 2 mts for a quicker installation and minimize the downtime or commissioning. Systems at the end of the line include cooling conveyors, oil spray units, cooling tunnels, in line and off-line sandwich equipment, stacking devices and automatic handling system for elevate outputs are some of the ancillary stations Laser can supply thanks to its long expertise in the field.

Everything is integrated with the most recent software automation and can be guarantee of constant and consistent biscuit production with overall efficiency of the process only a single supplier can guarantee.

Laser is also able to offer you a 360° service for food technologist consultancy thanks to its Italian and foreign experts which usually collaborate in the projects already from the engineering phase, ensuring that all the details of the product are taken in consideration before the line is designed.

made accordingly to the technological requests: whether it would be direct gas fired, cyclothermic or forced convection, or a combination of these variants, the baking will be tuned to the requirement of the product, with simple and intuitive temperature and steam extraction controls.

This team will collaborate with the customer in order to improve, introduce new products, minimize downtime and running costs and train the customer team in order to improve the overall factory output and working conditions. 🏭





# a perfect cooking...always



**BAKERY AND PASTRY EQUIPMENT  
FORNI E ATTREZZATURE PER PANIFICI**



[realforni.com](http://realforni.com)





# BOSS, AN UNCOMPROMISING OVEN

Real Forni's new rotary oven Boss combines innovation and researches with the yearly experience and tradition

**F**or more than 50 years Real Forni has been working in the development of ovens and equipment for the baking sector supporting the professionals from all over the world in this important food sector. The new rotary oven Boss combines innovation and researches with the yearly experience and tradition of the company thus making Boss the reference model of its category.

Maximum efficiency, reduced overall dimensions and low consumption are the key features that allow the user to save energy and space, reduce the cost of maintenance and improve the result on the baked product.

A good ventilated baking for a rotary oven consists in the correct distribution of the heat and in the ability to bake the product with a gentle and abundant flow of air: this is the only way to equal the baking of a static oven. Another ultimate point is the ability of the oven to produce a great quantity of steam in a very short time and to regenerate it for the following baking. Thanks to the steamer positioned in the middle of the air flow, the oven Boss guarantees quickness and power to obtain crumbly products with a crisp crust.

In the planning stage we have worked hard on the consumption and the results are real, indeed the oven Boss 60.80 heats up very quickly and it needs only 50.000 installed kcal/h! This is possible thanks to a system of baking endowed with two powerful fans and an heat exchanger with triple turn of fumes and to a system of insulation consisting in three layers of rock wool compressed panels. As for the consumption, this system is extremely virtuous and with the addition of reduced overall dimensions it is possible to position the oven side by side on its three sides. These features give you the possibility to save a huge quantity of space inside your place in comparison to any other oven in commerce.

The range starts from the smallest 50.70 which is able to contain a trolley of 40x60, 40x80, 50x70 or



18"x26" of 16/18 trays, its reduced dimensions allow the transportation of the oven completely assembled. For trays 60x80 we can offer the classic Boss 60.80 with 18/20 trays or the "reduced" Boss with 16/18 trays (Boss 60.80 R) which is perfect for places not so high.

The range includes also the 60.100 model for trolleys 60x90, 60x100 and 80x80 and the largest Boss 80.100. All models are available with gas or gas-oil burner or electric power supply.

The ovens are provided with a lower platform for the rotative trolley in order to have an easy entry of the






trolley, a motorised flue valve and stainless steel side panels. You can choose, as an optional feature, the fume exhaust from the rear wall of the oven or an advanced LCD display programmer.

There is also the brand new innovative and spectacular "Panorama" version which has a glass on the back side that enable the direct view of the baking process inside the oven, which is realized with a double inside glass with a very high insulation and with an external curved and openable glass for maximum safety, cleaning and beauty.

This oven is perfect to separate the laboratory from the sale zone and it can be a great attraction both in shopping centers and in small bakeries because it guarantees a privileged view on the baking process, keeping a clear division between laboratory and commercial zone.

A LCD display inserted on the top, exposed to the public, is also available. This LCD display shows the state and the type of product which is baking (Baguette - ready in 11 minutes) with photos in high resolution. 



रियल फ़ॉर्नी कारखानों में हम ब्रेड, पेस्ट्री और पिज्जा की बेकिंग के लिए सभी प्रकार के उपकरण तैयार करते हैं लेकिन हम भोजन के उत्पादन के लिए अन्य क्षेत्रों में भी काम करते हैं।

आटे के मिश्रण को बनाने से लेके, तैयार उत्पाद की पैकिंग तक, अधिग्रहीत अनुभव और अन्य कंपनियों का सहयोग हमें पूर्ण व्यवस्था की आपूर्ति करने की अनुमति देता है। हमारी कंपनी 28.000 वर्ग मीटर के क्षेत्र में फैली हुई है। कवर सतह 15.000 वर्ग मीटर है और दुनिया भर में हम अपने उत्पादों का निर्यात करते हैं।

#### रूपरेखा

हमारे कारखाने ने बेकरी ओवन के क्षेत्र में वर्ष 50 के दशक से अपना ज्ञान विकसित किया है और फिर 70 के दशक में रियल फ़ॉर्नी ब्रांड की स्थापना की है। हस्तकला वास्तविकता से, जल्द ही कंपनी का उत्पादन वास्तविक साइट में स्थानांतरित हो गया और बाजार की बड़ी मांगों का सामना करने के लिए एक औद्योगिक तरीके से विकसित हुआ।

# A UNIQUE AND COMPLETE HIGH-TECH WORLD

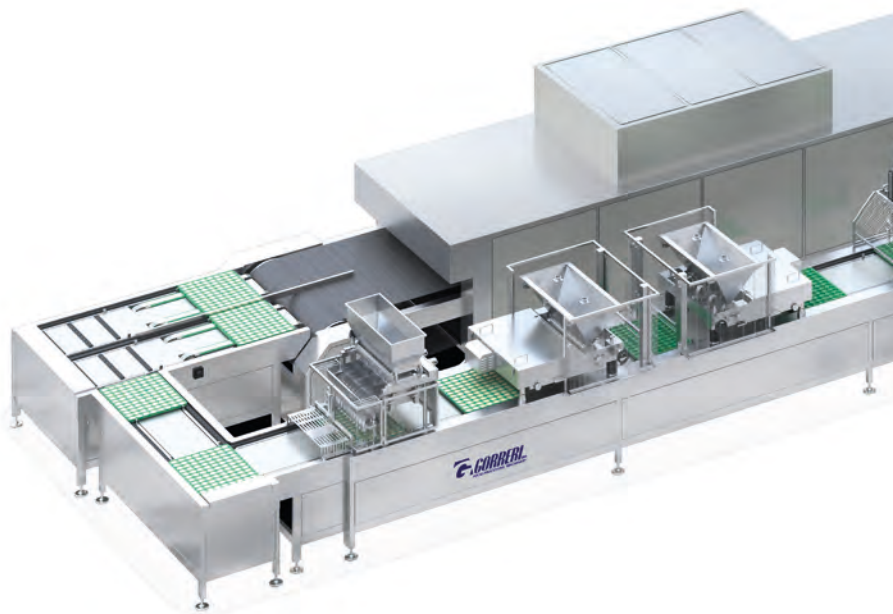
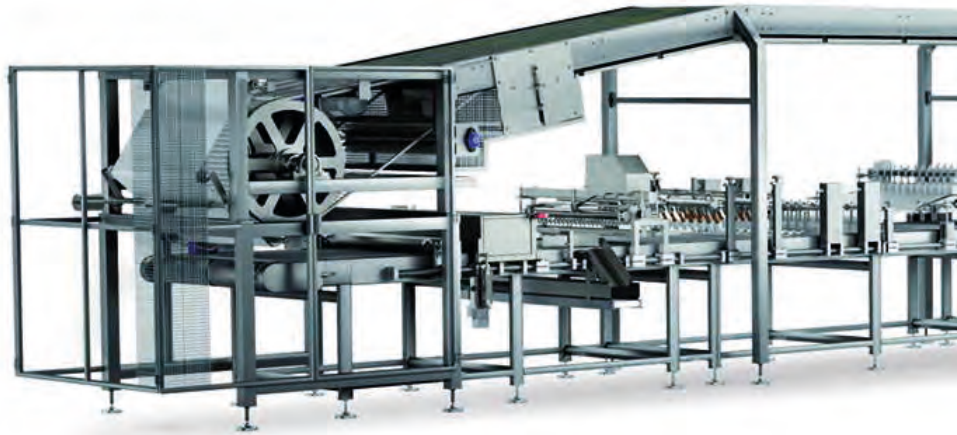
**G**ORRERI Food Processing Technology® is world-wide known for its ability to manufacture customized and designed turnkey solutions and to produce machineries and technologies unequalled for performance and results.

**GORRERI'S RANGE** is very wide and complete.

The company offers to its customers innovative and high performing solutions for many different applications like Compact and semi-automatic Lines for the production of Round And Rectangular Layer-Cakes and each kind of Dosed Products, Muffins, Eclairs and Shaped Cakes; both Vertical and Horizontal Injection Devices, Ultrasonic Cutting Systems for any need, Depositors, Enrobing and Decorating Devices, different solutions of Depanning Systems, Robotic arms to decorate and Printing Systems with edible inks as well as Customizable Machineries Made On Request.

**MATCHLESS MIXING SYSTEMS.** GORRERI TURBOMIXER®, the famous and unique turboemulsifier with vertical head is an innovative in-continuous mixing system, fruit of many years of experience that through a bright solution like VERTIMIX TECHNOLOGY® is able to emulsify, in few minutes, batters, cream, mousse, sponge-cake with a final density impossible to reach with any other mixing equipment on the market.

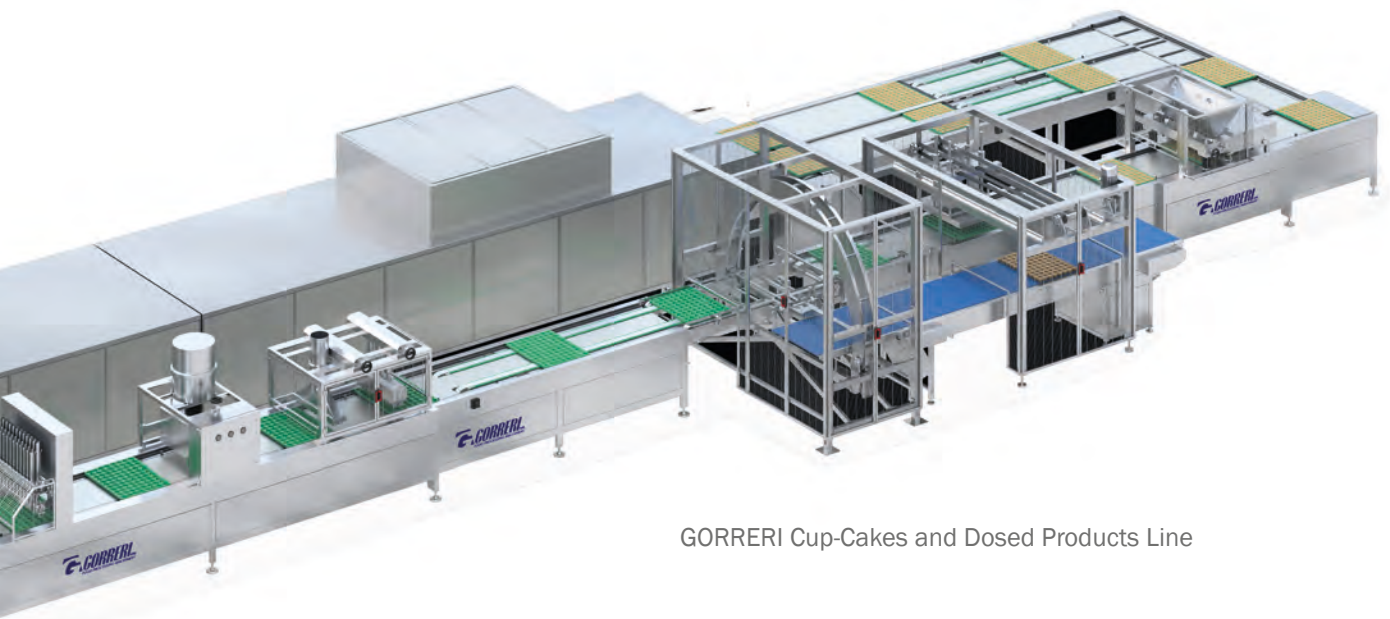
Thanks to VERTIMIX Technology® and to the great know-know, GORRERI® is able to





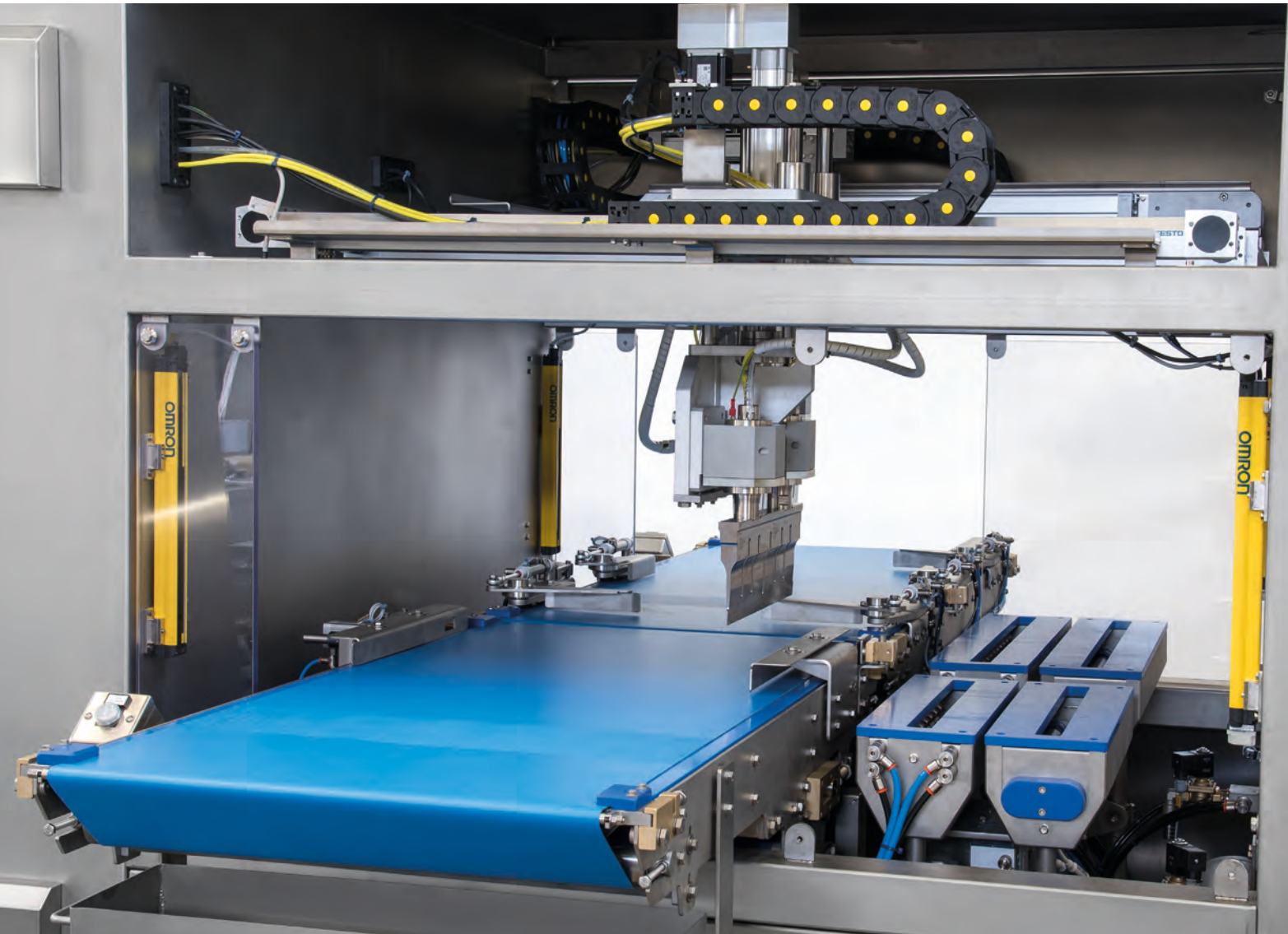


GORRERI Sponge-cake Line



GORRERI Cup-Cakes and Dosed Products Line





provide unique and innovative solutions to replicate complicated and craft processes, impossible to replicate with any other mixing device on the market all in continuous. This means space, time and money saving! Lady Fingers, Chiffon Cakes, Angel Cakes, Special creams, with or without inclusions, Chantilly, special batters without

emulsifiers or preservatives, egg-free batters and egg-free sponge cake, special products... It is incredible the number of products you can obtain with GORRERI TURBOMIXER TECHNOLOGY®. GORRERI® is also widely know for PLANETMIXER SERIES®, a range of indestructible pressurized planetary mixers, available in 6 different capabil-







Gorreri TURBOMIXER GMG Series

ity (from 120 to 800 lt ) with a complete range of optional and devices to satisfy each single production need.

A complete mixing solution with steam cooking device, cooling device, transferring pumps, bowl lifters, automatic uploading and downloading of the ingredients and much more.

**COMPLETE PRODUCTION LINES.** More than 50 years of experience in the confectionary sector process make Gorreri Company able to design turn-key and tailored solution for the production of Sponge Cake based products, Layer-cakes, Pies and Tarts, Muffins , Eclairs and each kind of Dosed Product. It is only when you know perfectly the production process and the technological characteristics of different batters and dough that you can govern every step of a production process, avoiding loss of production and guaranteeing the maximum of optimization.

**A PHILOSOPHY THAT MAKES GORRERI'S MACHINERIES UNMISTAKABLE.**

Gorreri's lines and machineries are all designed with a specific and unique philosophy that makes each product highly recognizable and optimized for the use for which it has been studied.

Simple and fast maintenance, assembly and dismount without using keys or tools, High-tech touch screen panels interconnectable with the business management, Installation of the best

components on the market, High flexibility, Entirely sanificable; High performance with reduction to minimum of the waste, Installation of the most recent and innovative technologies, Clean, simple and essential design to avoid contamination and dust.

**A complete and innovative world, where INNOVATION and RELIABILITY** are the main keywords. An historical Company that is still quickly growing and that in 2019 will inaugurate a new and innovative Company Site in the center of the Food Valley and of the Food Tech Valley, in the north of Italy where in 1987 it all began.

A brand new facility with a new and high-tech laboratory where customers will have the chance to test the most iconic technologies with their own ingredients and where they will have at their complete disposal all the 50 years-old Gorreri's know-how in the Confectionary process. 🏠

**Visit:**  
**[www.gorreri.com](http://www.gorreri.com)**

# PREXIMA. ALL OUR SKILLS. COMPRESSED

**N**o matter what the shape, dimensions or powdery substances, from soup cubes to milk tablets, sweeteners to instant drinks, the answer to your needs for reliability is Prexima, IMA Active's series of tablet press machines. Powered by IMA's knowledge of the sector, designed with unique Italian style, built to deliver top-level performance, the Prexima series will drive your productivity to a higher level of efficiency.

Prexima is the best solution to handle all production volumes: Prexima 80 is designed for small batch production and R&D; the single-sided Prexima 300 and Prexima 300T for medium production output; Prexima 800 and Prexima 800T for high output and double sided or double layer production.

Prexima ensures complete separation between the processing and the mechanical areas thanks to the use of purposely designed seals and protections. Along with this feature, the machine design also provides great accessibility.

The processing area is fully accessible once the external doors are opened, while access to the machine basement is required only for maintenance.

The Prexima's compression support is based on robust columns linked together by strong cast iron structures. The compression rollers are incorporated within these cast iron structures and supported on both sides.

This exceptionally sturdy structure – an essential requirement for high







IMA Active knows all there is to know about mixing, granulation, tableting, filling and coating. Today, we make that knowledge available to the food and dairy industry with a world of tailored solutions.

**IMA**  **ACTIVE**  
Solid Dose Solutions





quality tablets – guarantees both pre-compression and main compression forces up to 100 kN with maximum reliability.

The lubrication system in the basement of the machine is automated and works with only one type of oil. The lubricant oil does not go into the processing area, ensuring that the machine is clean, with no oil dripping from punches and no black spots on tablets.

Tests have been carried out at the anechoic chamber at the University of Ferrara (Italy) to select the best technical solutions and sound-proof materials. Prexima's low noise level and minimum propagation of vibration contribute to the operator's well-being.

The removal of the turret is quick and easy. The HMI guides the operator step by step during each phase of turret extraction. Prexima is fitted with MAX, the new corporate HMI. The synoptic plays a strategic role in improving operator efficiency, while ensuring prompt responsiveness, enhanced predictability and easy learning.

Prexima can be installed as a stand alone equipment or connected in-line for direct feeding to IMA Corazza wrappers or other packaging equipment. The conveyer system fitted inside the processing area allows all tablets to be carried to the same exit chute, making for an extremely compact footprint. 🏢

**[foodanddairy.ima-active.com](http://foodanddairy.ima-active.com)**



powered by



anufoodindia.com

Annapoorna



# All About Food

India's international exhibition  
on food & beverage trade and retail market

**November 26-28, 2020**

Bombay Exhibition Centre, Mumbai, India

Concurrent Event:



Organiser:

In cooperation with:

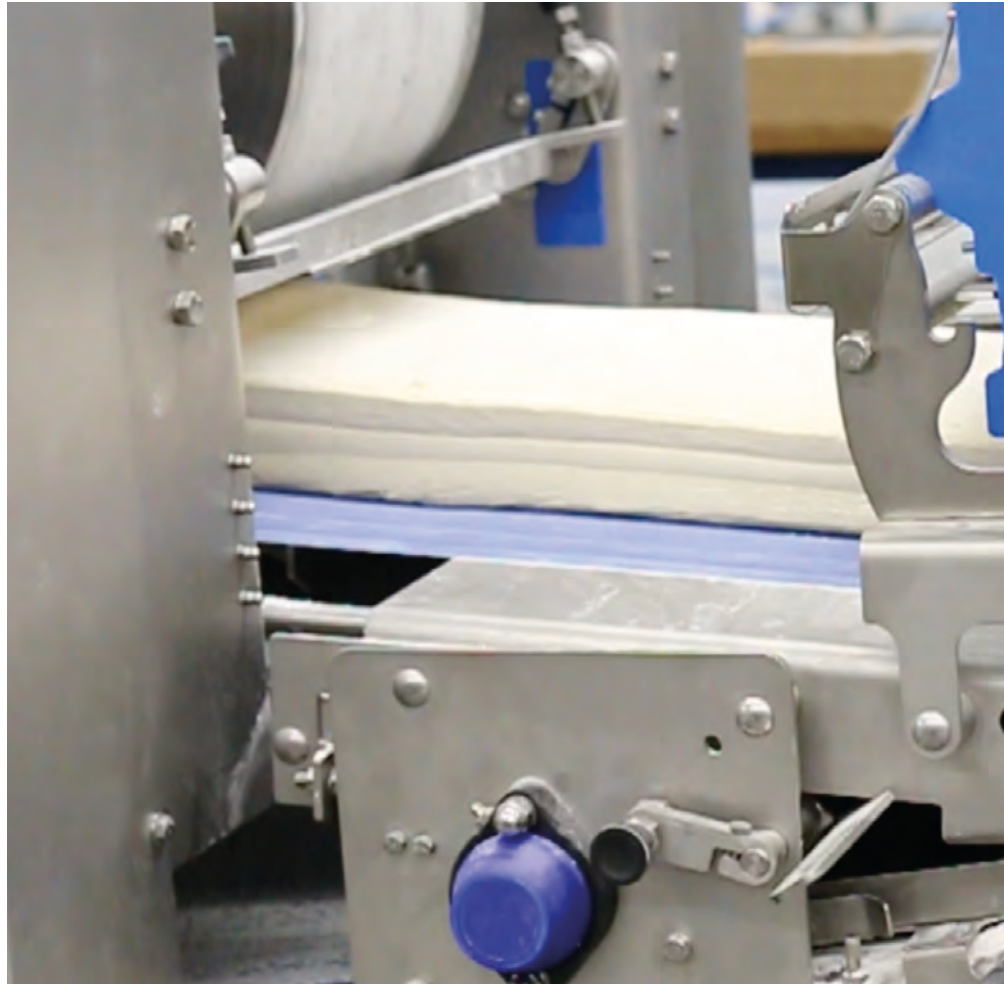


Supported by:



# THE SECRET OF RADEMAKER: CONTINUOUS INNOVATION IN THE RADEMAKER INDUSTRIAL BREAD LINE

**W**hat is the secret of the successful Rademaker Industrial Bread Line? It is not only the superb quality or the hygienic design of the line. Or its efficient operation, versatility or reliability and robustness. The real secret of Rademaker, a Dutch-based company that develops and provides solutions for the food processing industry all over the world, is that its technologists are continuously working on improving and optimizing the Rademaker Industrial Bread Line, so that customers always have state-of-the-art equipment. Recent innovations include a further improvement in the DSS pre-sheeter to accommodate a larger variety of doughs and an improved dough recycling system. And while the mechanical basis is solid and smart, the true line and process optimization originates in the software that controls the line. Rademaker introduced its first Crusto Bread Line in 2006, to meet customer demands and expand its portfolio of production lines for puff pastries, croissants, pizzas, pies and flatbread. In 2018, the new Rademaker Industrial Bread Line was introduced. Today's market requires an ever-increasing variety of breads, with different dough types, different crumb structures and different sizes. Bakeries, wanting to accommodate the market requirements, in turn ask for modular bread lines that allow for fast changeovers and offering the highest accuracy, while meeting the most stringent hygienic requirements.



## Four components

Contrary to other brands, Rademaker's Industrial Bread Line is based on sheeting technology. A conscious choice, as this gives bakeries the freedom to handle a wide variety of dough types, from 'green' to pre-fermented and strongly hydrated doughs. The line is capable of generating a wide range of high-quality products that can be produced at capacities from 500 kg up to 6.000 kg of dough per hour. It consists of four major components: pre-sheeting, sheeting, make-up & decorating and dough-recycling.

## Unique pre-sheeting system

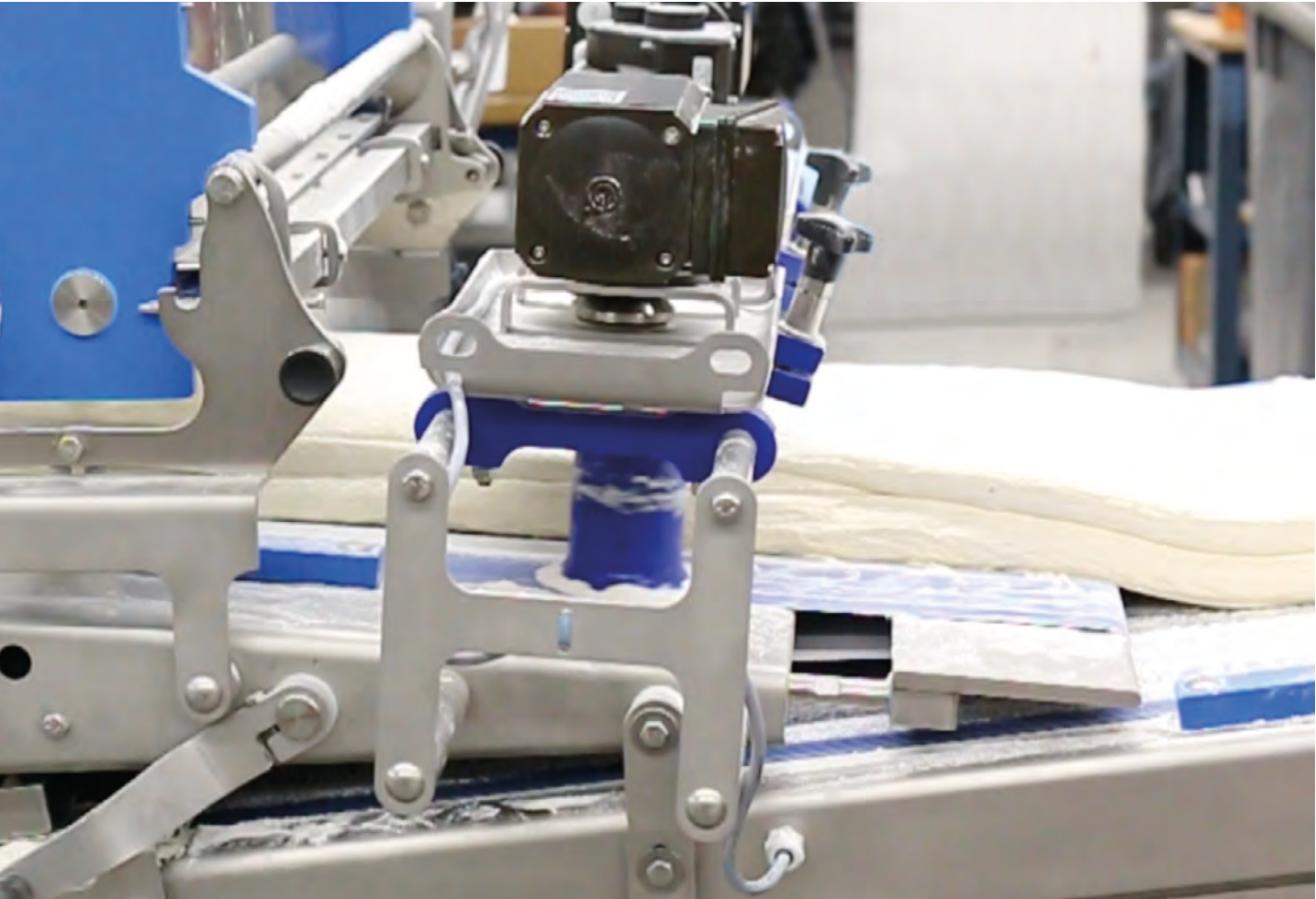
Sheeting the dough is essential for the final product. The dough is kneaded by the mixer and processed in the pre-sheeter. The pre-sheeter transforms dough batches into a continuous dough sheet. Rademaker sets itself apart from its competitors with its proven Double-chunking Sheeting system (DSS), which has been updated to meet the latest requirements. An innovative dynamic hopper transports the





# Rademaker

*Specialists in food processing equipment*



dough in a controlled manner, keeping the shape of the dough chunks linear and constant. Landscape sensors and separate belts carefully guide the chunks in the sheeter, ensuring size and weight accuracy. Chunk weight and length is exceptionally accurate, leading to a more stable and consistent dough sheet and eventually high-quality baked products.

### **Cost savings and better overall performance**

Many doughs, for instance Italian bread types like ciabatta or focaccia, tend to have a very high water percentage, making it liquid and sticky. In the previous DSS version, oil was used to prevent the dough from sticking to the DSS hopper. Effective as this is, cleaning the line is a time-consuming issue. Rademaker replaced oil by wax, reducing the

required amount by a factor four compared to oil. Cost-savings are considerable and return-on-investment for the wax distribution system is only 1 year. Cleanability is improved due to easily removable parts and because wax is used instead of oil. But maybe even more important, the wax-version of the DSS creates a more consistent chunk volume and a corresponding more consistent dough sheet. This results in a higher accuracy on the final product.

### **Superb dough homogeneity**

Thanks to the minimal transportation height difference in the pre-sheeting system, dough homogeneity and structure are maintained. The wider belts with advanced flour strewing and optimized waste bins, in combination with a design that meets the most stringent hygienic standards, allow for cleaner

working. Compared to the previous version the new system is easy to operate and better accessible for cleaning.

### **Sheeting process**

As part of the sheeting process, the continuous dough sheet created by the DSS is reduced to the required dough thickness. In some of the reduction stations, non-stick upper rollers reduce the dough thickness to the desired thickness, ensuring that dough characteristics remain intact. Depending on the specific customer demands, a further set of stress-free reduction stations and other sheeting options define the sheeting configuration.

### **Flexible cutting in make-up & decorating**

The final processing steps take place in the make-up & decorating section of the Rademaker Industrial Bread line. The design upgrade has resulted in a length reduction, a 400 mm wide rework conveyor and an increased hygiene level. The weighing conveyor was also reduced in length and fixed to the floor for greater stability and higher accuracy. Amongst the various product cutting solutions is a Box Motion Cutter. It offers different cutting processes in one machine and a unique dough sealing solution, sealing the softer dough products and avoiding products from cracking open during baking. Thanks to an ergonomic design, tools can easily be changed from the side, making it easy for the operator.

### **Fast products changeovers**

In the molding conveyor, the side guides are repositioned on the lower belt, yielding a better molding performance. A simple, single operator control that allows fast, fool-proof adjustment of the molding table in height and molding degree to ensure fast changeover and product flexibility. The molding conveyor's unique design offers optimal access from







both sides, allowing for fast product changeovers, cleaning and maintenance. As with other parts of the Rademaker Industrial Bread Line, the length has been reduced.

#### **Unparalleled dough recycling**

Traditionally, a part of the dough ends up as rework, especially when working with non-rectangular shapes like omega baguettes. With Rademaker's new, in-line dough recycling system, 10 to 40 % of the return dough may be re-used. Side trim and omega trim can be transported back to start of the DSS as small cuts of rework and efficiently re-entered in the process. Client-specific rework dough options can be catered on specific requirements. Thanks to the controlled distribution of rework dough, the recycling process is highly stable and reliable.

#### **Flexibility and line length**

The Rademaker Industrial Bread Line is characterized by its flexibility. There are multiple configuration options and modules which can be exchanged fast and easily. The Rademaker philosophy calls for building functional production lines, as short as possible. With that in mind, line length has been reduced more than two meters compared to the first-generation Bread Line, saving floor space and resulting in a higher output per square meter.

#### **Hygienic aspects**

The Rademaker Industrial Bread Line is designed according to Rademaker Sigma guidelines, directly derived from various high-end requirements from GMA and EHEDG. Standoffs and machine surface are tilted at an angle to allow water to drain easily, to avoid contamination of the product zone and to reduce drying time after cleaning. Food-contact parts are constructed only with approved materials. All surfaces are smooth to help reduce mi-

crobiological contamination development. In addition, all parts of the line are designed for wet cleaning.

#### **Work in progress**

The Rademaker Industrial Bread Line is a work in progress, as Rademaker is continuously working on further improving the line, meeting and anticipating new customer demands, market developments and legal requirements. Rademaker thus offers a solution for every industrial bakery, large or small. In addition to 'engineered to order' lines, Rademaker now increasingly focuses on 'configured to order' production lines, offering affordable standard solutions to most applications. With the flexible, reliable and robust Rademaker Industrial Bread Line, you are assured of the highest uptime, a long lifetime, and minimal spare parts consumption. Fast maintenance, cleaning and changeovers ensure efficient production. This, together with the excellent dough handling characteristics, results in a proven decreased cost of ownership. 🏠

**rademaker.com**







# THE ANUTEC- INTERNATIONAL FOODTEC INDIA CO- LOCATED WITH PACKEX INDIA, ANNAPOORNA

ANUFOOD India, ANUTEC - Ingredients India and Food Logistics India 2020 has been postponed



**T**he ANUTEC – International FoodTec India that was planned in Mumbai from September 23-25, 2020 has been postponed to a new date i.e. November 26-28, 2020.

This is how Koelnmesse India is responding to the increasingly acute global situation around the recent occurrence of the coronavirus. In addition to many states

in India already hit by the virus, Maharashtra has now become one of the leading Indian state affected by cases of infection.

The Ministry of Health are also convening to discuss the current situation and possible measures in response. Moreover, since last weekend, exhibitors from the food industry have reiterated their concerns for the health of



# International Ingredients & Nutraceuticals Show for the Food and Beverage Industry

**September  
23-25, 2020**

**Bombay Exhibition  
Centre,  
Mumbai, India**

## Why Exhibit at ANUTEC Ingredients India 2020

- Access to meet the who's who of food & drink industry to expand your business network
- Witness the top trends and developments in the food & drink industry
- Buyers delegations from nearby countries
- Business Matchmaking sessions
- Technical Seminars
- Live cooking session by celebrity chef using the ingredients showcased by exhibitors

<b>719</b> Exhibitors	<b>31</b> Countries	<b>40,000</b> Sqm Exhibition Area
<b>21,069</b> One-time Registration	<b>91%</b> Satisfied Exhibitors	<b>56%</b> Direct Decision Makers
<b>83%</b> Re-confirmed Participation	<b>92%</b> Met Relevant Customers	<b>6</b> Country Pavilion

\*Review 2018: ANUTEC Ingredients India, ANUTEC International FoodTec India, PackEx India, Food Logistics India

**info@koelnmesse-india.com | +91-22-28715200**

Concurrent Events:

**Annapoorna**







their employees and the possibility of their participation in social platforms. In view of these current developments at “ANUTECH - International FoodTec India” co-located with Pack-Ex India, Annapoorna - ANUFOOD India, ANUTECH - Ingredients India and Food Logistics India 2020, the management team at Koelnmesse India has reassessed the current situation and set the new date in consultation with the venue and the industry. Over 1000 exhibitors, including around 200 from overseas countries, are expected to attend the ANUTECH - International FoodTec India 2020, India’s leading innovation and business platform for the food industry that is held every two years in Mumbai. 🏛️

[www.koelnmesse-india.com](http://www.koelnmesse-india.com)





# HIGHLY FLEXIBLE MACHINES ENSURE INDIVIDUAL PACKING AND FILLING PROCESSES IN THE FOOD AND BEVERAGE SECTOR

**T**he machine manufacturers will show solutions for the ever-complex market demands that result from a wider variety of foodstuffs and individual packing formats under the theme flexibility at Anuga FoodTec 2021. From the supply and grouping of the products, to the filling, sealing and labelling of cartons, through to the palletising - the food producers can only attain maximum performance and the highest process stability through the complete digitalisation of the machines and robot functions. The modern packing machines that are on display at the fair grounds in Cologne, master the widest variety of primary and secondary packing tasks. From 23 to 26 March 2021, Anuga FoodTec, the international supplier trade fair for the food and beverage industry, will present solutions for all production steps and stages - from the harvest to the end product on the retail shelves or in the food service sector.

## Convenience food carefully packed

Short set-up times, simple product and format changes as well as concepts with the aid of which whole lines for convenience food can if necessary be newly combined or extended are in demand. In food retail, in particular soups, ready-made meals, sausage products and baby food are of great significance in this market segment. As are jams, smoothies and puréed fruit snacks. The centrepiece of the lines on display at Anuga FoodTec in the Filling & Packing section are integrated scales, slicers and compact tray sealers or thermoformers, which are suitable for a wide spectrum of products. They are aligned to process shells, trays and many other formats. Equipped with innovative gassing technologies, they can carefully pack sensitive foodstuffs or those that are filled while hot under a modified atmosphere (MAP).

## Automation of small batch sizes

But regardless of which foodstuff is being handled: Hightech is required for the fully-automated portioning and insertion into the packing. Producers, who have to accommodate high performance in limited space or who require more flexibility in the product handling, will



not get around specialised pick-and-place robots. The modern buckling arm, Scara and Delta kinematics that will be presented at Anuga FoodTec 2021 are capable of packing products at a high speed.

The robots can however not only retrieve the sausages or fish fingers from the conveyor belt and place them in trays. Parallel to this they also carry out quality control tasks that were until now reserved for the end-of-line systems. For instance they sort out damaged products without manual intervention. At the same time, they provide feedback to downstream sealing machines or labelling machines so that they can react directly to the identified deviations.



there cannot be a one-for-all solution here. The shape, alignment, the weight and the dimensions of the foodstuff to be handled influence the construction. For instance, if sensitive fruits are not to be squashed when gripped, vacuum technology and soft suction pieces come into play. Against the backdrop of these challenges, 3D printed tools offer totally new design freedom. Numerous packing machine builders and suppliers of robot technology will be focusing on this theme at Anuga FoodTec 2021. The advantage of additive manufacturing for the construction lies in the almost unlimited design possibilities. A further aspect: Robot tools made of high-performance plastics, which are approved for contact with foodstuffs, require no lubricants and are thus practically maintenance-free.

#### **Koelnmesse - Global Competence in Food and FoodTec:**

Koelnmesse is an international leader in organising food fairs and events regarding food and beverage processing. Trade fairs such as the Anuga, ISM and Anuga FoodTec are established world leaders. Koelnmesse not only organises food and food technology trade fairs in Cologne, Germany, but also in further growth markets around the globe, for example, in Brazil, China, Colombia, India, Italy, Japan, Thailand, the United States and the United Arab Emirates, which have different focuses and contents. These global activities enable us to offer our customers a network of events, which in turn grant access to different markets and thus create a basis for sustainable and stable international business. 

#### **Hand in hand with the robot**

The aim of the constructors is to extend the field of application of the robots in the food industry through to that of a true cobot. This term refers to collaborative lightweight robots that serve to help the employees with the palletisation and packing processes of small batch sizes. A typical task for instance is placing a pouch of juice in the chain of a cartoner. Via sensor technology they register the movement of the people in their environment and are thus sufficiently secured to assist with the work without injuring anyone. Doing away with constructional protective devices such as light grids, cages or barriers saves costs and ensures smoother work processes between the workers and robots. This results in medium-sized food producers also being able to implement a cobot in places where automation using a traditional robot is not economically viable for them.

#### **Grippers out of the 3D printer**

The grippers serve as the interface between robots and foodstuffs. It is in the nature of things that







# Cairo FoodAfrica

The 6<sup>th</sup> International Trade Exhibition for Food & Beverages



**Savor**  
GROWTH  
OPPORTUNITIES

**16 - 18  
DEC  
2020**

EGYPT  
INTERNATIONAL  
EXHIBITIONS  
CENTER •

[FOODAFRICA-EXPO.COM](http://FOODAFRICA-EXPO.COM)

STRATEGIC PARTNERS:

CONCURRENT WITH:



# EXHIBITIONS - EXHIBITIONS

## EXHIBITIONS

# 2020-2021

### SIGEP

18-22/01/2020

RIMINI

Fair for the artisan production of icecream, pastry, confectionery and bakery.



### PROSWEETS

02-05/02/2020

COLOGNE

Fair for the sweets and snacks industry.



### FRUIT LOGISTICA

05-07/02/2020

BERLIN

Fair for fruit and vegetables.



### MACFRUT

08-10/09/2020

RIMINI

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



### SUDBACK

17-20/10/2020

STUTTART

Fair for bakery and confectionery industry.



### POWTECH

29/09-01/10/2020

NUREMBERG

The trade fair for powder processing.



### SAVE

21-22/10/2020

VERONA

Fair for automation, instrumentation, sensors.



### MECSPE

29-31/10/2020

PARMA

Fair for innovations for the manufacturing industry



### mcT ALIMENTARE

date to be scheduled

BERGAMO

Fair on technology for the food&bev industry.



### mcTER

date to be scheduled

ROME

Exhibition on energy efficiency.



### mcT COGENERAZIONE

date to be scheduled

MILAN

Exhibition for applications of cogeneration.



### BRAU BEVIALE

10-12/11/2020

NUREMBERG

Fair of production of beer and soft drinks.



### ALL4PACK

23-26/11/2020

PARIS

Exhibition about packaging technology.



### SPS/IPC/DRIVES

28-30/11/2020

NUREMBERG

Fair for electric automation.



### SIGEP

16-20/01/2021

RIMINI

Fair of ice-cream, pastry, confectionery, bakery.



## MIDDLE EAST 2020/21

### DUBAI DRINK TECHNOLOGY EXPO

25-27/03/2020

DUBAI

Fair for the beverage industry.



### PROPAK VIETNAM

09-11/09/2020

SAIGON

Fair for packaging, bakery, pastry.



### PROPAK ASIA

17-20/06/2020

BANGKOK

Fair for packaging, bakery, pastry



### IRAN FOOD BEV TEC

04-07/10/2020

TEHRAN

Fair for food, beverage&packaging technology.



### GASTROPAN

21-23/06/2020

ARAD

Fair for the bakery and confectionery industry.



### HOSPITALITY QATAR

10-12/11/2020

DOHA

Fair of Hospitality and HORECA



### DJAZAGRO

21-24/09/2020

ALGERS

Fair for companies of the agro-food sector.



### ANUTEC

26-28/11/2020

MUMBAI

Fair for the food&beverage industry.



### GULFHOST

03-05/11/2020

DUBAI

Fair of hospitality.



### PACPROCESS- FOOD PEX

09-11/12/2020

MUMBAI

Fair for product from packaging.



### GULFOOD MANUFACTURING

03-05/11/2020

DUBAI

Fair for packaging and plants.



### GULFOOD

21-25/02/2021

DUBAI

Fair for food and hospitality.





# EXHIBITIONS - EXHIBITIONS

## EXHIBITIONS

# 2020-2021

## FRUIT LOGISTICA

05-07/02/2021

BERLIN

Fair for fruit and vegetables.



## PROSWEETS

31/01-03/02/2021

COLOGNE

Fair for the sweets and snacks industry.



## INTERSCOP

20-23/02/2021

MADRID

Fair for bakery, pastry, ice cream, coffee and equipment.



## ProWein 2020

21-23/03/2021

DUSSELDORF

International wine & spirits exhibition.



## INTERPACK

25/02-03/03/2021

DÜSSELDORF

Technology fair for packaging, packing, bakery, pastry.



## ANUGA FOODTEC

23-26/03/2021

COLOGNE

Fair on food and beverage technology.



## LATINPACK

14-16/04/2021

SANTIAGO CHILE

International packaging trade fair.



## VINITALY

15-18/04/2018

VERONA

International wine & spirits exhibition.



## CIBUS

04-07/05/2021

PARMA

International food exhibition.



## FISPAL

06/2021

SÃO PAULO

Fair for product from packaging.



## FACHPACK

28-30/09/2021

NUREMBERG

International packaging trade fair.



## DRINKTEC

04-08/10/2021

MONACO

Fair for the beverage and liquid food industry



## IBA

23-28/10/2021

MONACO

Fair for the bakery and confectionery industry.



## SIMEI

16-19/11/2021

MILANO

International exhibition for vine-growing, wine-producing and bottling industry.



## SPS/IPC DRIVES/ITALIA 2021

PARMA

Fair for manufacturers and suppliers in the industrial automation sector.



## IPACK-IMA

03-06/05/2022

MILANO

Exhibition for the packaging industry.



## SIAL

15-19/10/2022

PARIS

Fair on food products.



## RUSSIA-CHINA

### UPAKOVKA

28-31/01/2020

MOSCA

International packaging machinery exhibition.



### BAKERY CHINA

06-09/05/2020

SHANGHAI

Fair for the bakery and confectionery industry.



### MODERN BAKERY

30/06-03/07/2020

MOSCOW

Fair for bakery equipment and food ingredients.



### INPRODMASH

08-10/09/2020

KIEV

International packaging machinery exhibition.



### AGROPRODMASH

05-09/10/2020

MOSCOW

Fair of machinery and equipment for agroindustrial industry.



### UPAKOVKA

26-29/01/2021

MOSCA

International packaging machinery exhibition.



### BEVIALE MOSCOW

2021

MOSCOW

International trade fair for the beverage industry.



**ALTECH SRL**  
**47**

V.le A. De Gasperi, 72  
20010 Bareggio - MI - Italy

**BERRYPLANT DI GRISENTI  
MARIA MADDALENA &  
C. SOCIETÀ SEMPLICE  
AGRICOLA**  
**32/34**

Via Delle Meie, 15  
38042 Baselga Di Pinè - TN - Italy

**BERTUZZI FOOD  
PROCESSING SRL**  
**45-46**

Corso Sempione, 212Bis  
21052 Busto Arsizio - VA - Italy

**COSTACURTA SPA-VICO**  
**18-19**

Via Grazioli, 30  
20161 Milano - Italy

**FBF ITALIA SRL**  
**35/37**

Via Are, 2  
43038 Sala Baganza - PR  
Italy

**FBL FOOD MACHINERY SRL**  
**23-24**

Via Rosa Augusto, 4  
43038 Sala Baganza - PR - Italy

**GEA MECHANICAL  
EQUIPMENT ITALIA SPA**  
**41/44**

Via A. M. Da Erba Edoari, 29  
43123 Parma  
Italy

**GORRERI SRL**  
**78/81**

Via Cisa, 172  
42041 Sorbolo Levante  
Di Brescello - RE  
Italy

**ICI CALDAIE SPA**  
**7/11**

Via G. Pascoli, 38  
37059 Frazione Campagnola Di  
Zevio - VR  
Italy

**ILAPAK INTERNATIONAL SA**  
**48-49**

P.o. Box 756  
Ch-6916  
Grancia - Lugano  
Switzerland

**IMA SPA - IMA ACTIVE  
DIVISION**  
**82/84**

Via 1 Maggio, 14  
40064 Ozzano Dell'emilia - BO  
Italy

**KOELNMESSE GMBH**  
**93-94**

Messeplatz, 1  
50679 Koeln - Germany

**KOELNMESSE  
YA TRADEFAIR PVT LTD**  
**16-17-85-90/92**

Office # 1102,  
11Th Floor, Dlh Park,  
Opp. Mtnl Office, S. V. Road  
Goregaon (West), Mumbai  
India

**LASER SRL**  
**72/74**

Via Saturno, 36  
37059 Santa Maria Di Zevio - VR  
Italy

**NVC - NEDERLANDS  
PACKAGING CENTRE**  
**54-55**

Stationsplein 9K - Po Box  
164  
2801 Ad - Gouda  
The Netherland

**OMAG SRL**  
**58-59**

Via Santi, 42/A  
Zona Artigianale Massignano  
61012 Gradara - PU  
Italy

**OMS OFFICINA MECCANICA  
SESTESE SPA**  
**56-57**

Via Borgomanero, 44  
28040 Panizzaro - NO  
Italy

**PETRONCINI IMPIANTI SPA**  
**25-26**

Via Del Fantino 2/A  
44047 Sant'agostino - FE - Italy

**PIGO SRL**  
**27/29**

Via Dell'edilizia, 142  
36100 Vicenza - VI - Italy

**PND SRL**  
**30-31**

Via Brancaccio, 11  
84018 Scafati - SA - Italy

**RADEMAKER**  
**86/89**

Plantijnweg 23 - P.o. Box 416  
4100 Ak Culemborg - The Netherlands

**REAL FORNI SRL**  
**75/77**

Via Casalveghe, 34  
37040 Gazzolo D' Arcole - VR - Italy

**ROCKWELL AUTOMATION SRL**  
**60/63**

Via Ludovico Di Breme 13°  
20156 Milano - Italy

**SAP ITALIA SRL**  
**12/15**

Via S. Allende, 1  
20077 Melegnano - MI - Italy

**SMI SPA - SMI GROUP**  
**1-4/6**

Via Carlo Ceresa, 10  
24015 San Giovanni Bianco - BG  
Italy

**TECNO PACK SPA**  
**64/66**

Via Lago Di Albano, 76  
36015 Schio - VI - Italy

**TROPICAL FOOD MACHINERY SRL**  
**38/40**

Via Stradivari, 17  
43011 Busseto - PR - Italy

**TUBITEX SPA**

**68/71** Viale Del Lavoro, 31  
36021 Barbarano Vicentino - VI  
Italy



# BE PART OF THE REVOLUTION

PARIS NORD  
VILLEPINTE  
FRANCE

23-26 NOV  
2020



**all4pack**  
EMBALLAGE PARIS

PACKAGING PROCESSING PRINTING LOGISTICS

THIS AUTUMN, A UNIQUE OPPORTUNITY  
FOR **MEETINGS** AND **BUSINESS**  
FOR **FOOD INDUSTRIES**

- 1,000+ French and international exhibitors presenting a comprehensive processing, packaging and intralogistics offering for the food industry
- 600 machines in operation
- An exceptional feature area highlighting packaging innovation from all over the world
- Food & Packaging Innovation talks and round tables every day
- Objective Zero Impact: meet the actors of change and discover the responsible practices of the circular economy



**ORDER  
YOUR FREE PASS**  
on [www.all4pack.com](http://www.all4pack.com)

**Invitation code: A4PITAP**



[www.editricezeus.com](http://www.editricezeus.com)

Via C. Cantù, 16 - 20831 - Seregno (MB) - Italy  
Tel. +39 0362 244182 - 0362 244186

