

it. MAGAZINE **FOOD** processing

ड।बिम्भ।त्पूँज्हा क ।न्वडा।क्का + फठ।स।ळळ क ।सुहम्लज + ठम्ट।छक





alimentec

08-11
JUNE 2021

The international food, beverage
and hospitality trade fair

Come, visit us!

Bogotá, Colombia
International Business
& Exhibition Center
www.feriaalimentec.com

**PROFIT FROM
THE NO. 1!**

The leading trade fair for the food,
beverage and hospitality industry in
Latin America and the Caribbean

Contact for more information:

— Daniel Leal Caicedo
d.leal@koelnmesse.co

Powered by



Organisers





Progetto grafico: ZEUS

frigate Hermione



ELECTRIC MOTORS

To travel **“FULL SPEED AHEAD”**



ACM ENGINEERING SPA
Via Don A. Camera, 25 - 21020 Bardello (VA) - Italy
Phone +39.0332.731088/731064 - Fax +39.0332.730380
www.acmengineering.it
info@acmengineering.it

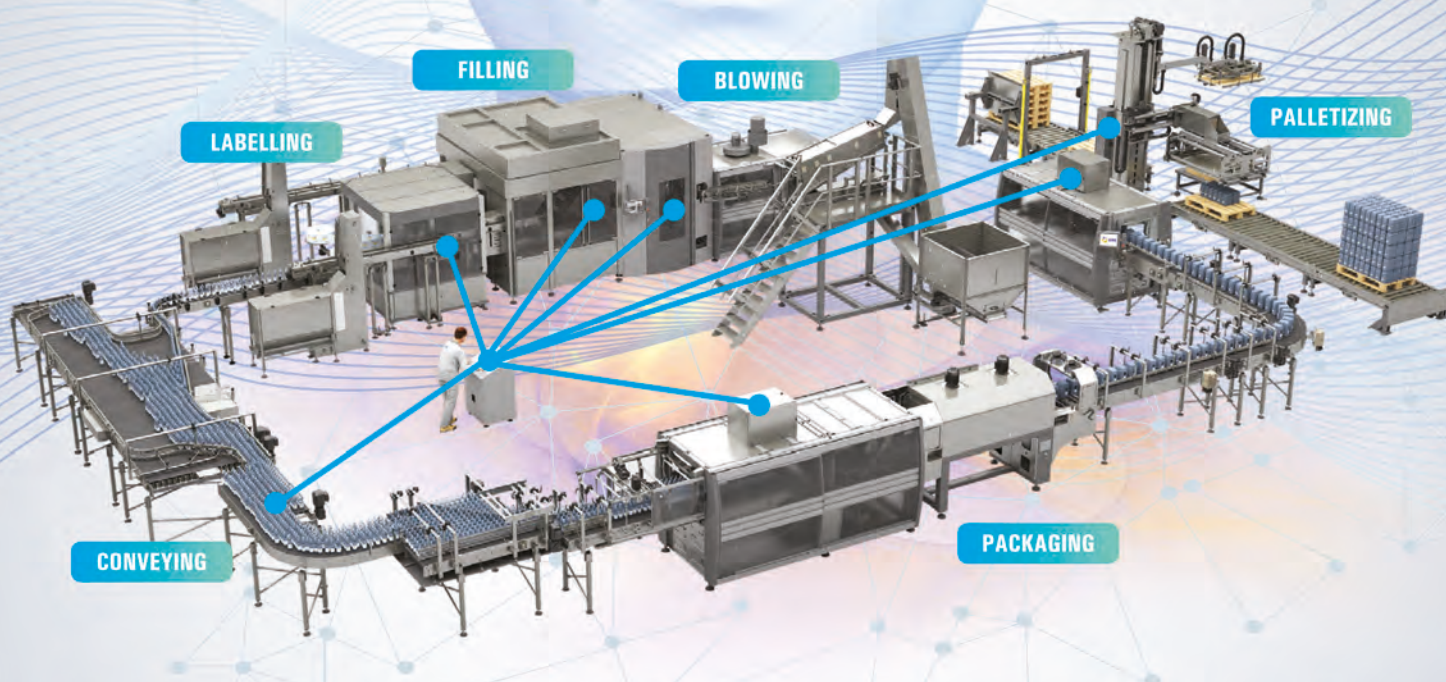


IMMERSE
YOURSELF
IN
GENERATION 4.0

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



01-24

NEWS

25-48

PRESERVING

49-73

PACKAGING

74-91

PASTA

92-97

HANDLING



NEWS

**ACM ENGINEERING SRL: HIGH-QUALITY
MOTORS AND GENERATORS**
PG. 8



PRESERVING

**INTERPUMP GROUP SPA: YOU DESERVE
THE BEST! CHOSE BERTOLI-INTERPUMP HIGH
PRESSURE HOMOGENIZERS**
PG. 30-31



PACKAGING

**CAMA GROUP: DELICACY, SPEED & PRECISION.
FANCY TREATS GET FANCY TREATMENT**
PG. 70/72



PASTA

RADEMAKER BV: THE SECRET OF RADEMAKER:
CONTINUOUS INNOVATION IN THE RADEMAKER
INDUSTRIAL BREAD LINE
PG. 88/91



HANDLING

M.H. MATERIAL HANDLING SPA:
THE PRODUCTION OF CHOCOLATE
PG. 94-95

FOOD processing

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
e-mail: redazione@editricezeus.com
portal: www.itfoodonline.com
e-mail: marketing@itfoodonline.com
skype™: editricezeus

Machineries, plants and equipment for food and beverage industry

year II

managing editor

Enrico Maffizzoni
direzione@editricezeus.com

editorial manager

S.V. Maffizzoni
redazione@editricezeus.com

editorial production

Sonia Bennati
bennati@editricezeus.com

account dep. manager

Elena Costanzo
amministrazione@editricezeus.com

project and layout design

ZEUS Agency
grafica@editricezeus.com

creative dep.

ZEUS Agency
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 SPA INNOVATION AND SUSTAINABILITY IN CIRCULAR ECONOMY



The latest developments and the considerable and continuous investments in plants up to 36.800 bottles/hour.

The environment has become a collective asset that everyone must take care of and this aim can be achieved by investing in industrial plants equipped with “green” technology, which save energy and reduce the environmental impact of production.

In SMI, environment and sustainability are combined with innovation. The increasing attention to the market needs requires the development of technical solutions of the latest generation that help boost continuous change and take into account typical elements of the companies operating in the context

of the circular economy: cost reduction, energy saving, increasing competitiveness and improvement of the market positioning.

The solution for bottling includes different models of ECOBLOC® ERGON integrated system for manufacturing, filling and capping of PET and rPET bottles, while the end of line solution for packing includes a wide range of fully automated machines as the new ACP ERGON case packer for American cases.

Innovation, reliability and sustainability

The ECOBLOC® ERGON integrated system is a compact, efficient and eco-friendly solution for manufacturing, filling and capping PET and r-PET (recycled PET) containers. Recent studies have shown the

benefits of the use of plastic bottles, since this solution is unbreakable, safe, with great barrier properties, light and especially recyclable.

Compared to other packaging materials, such as glass or aluminum, PET has a good environmental profile, mainly thanks to its lightness that results in less material produced, less waste, less energy to manufacture it and less fuel to transport packed goods. Thanks to its recyclability and its great capacity/weight ratio, many manufacturers of mineral water and soft drinks have promoted and reevaluated PET and r-PET as convenient and win-win solutions in terms of environmental sustainability.

Another strategy that helps safeguard the environment is based



on the study of even lighter PET containers that allow to considerably save on plastics and that therefore fully comply with the environmental policy of the largest beverage producers.

End of line connected to the market

SMI end of line solution includes a wide range of fully automated secondary and tertiary packaging machines that are inspired by the concepts of Industry 4.0 and Internet of Things (IoT) and that are even more efficient, flexible, eco-friendly, ergonomic, easy to use and control.

The manufacturers of beverages, food, detergents and chemical and pharmaceutical products need to be increasingly competitive to face a demanding market that is constantly changing. From

today you can choose between a wrap-around box and an "American" cardboard box (RSC); in fact, the most recent investments in R&D made by SMI in the secondary packaging in cardboard boxes have led to the birth of the new range of case packers, called ACP (American Carton Packer) suitable for American cardboard case (RSC) with a "pick & place" system for inserting the bulk product into the package.

Choosing between the wrap-around box or the American cardboard box, as well as choosing between a completely closed box or an open tray, remains a subjective aspect of each SMI customer, largely dependent on a series of other factors closely related to the product to be packaged, the commercial strategies of the manufacturing company, logistics and dis-

tribution needs, etc. Packaging in wrap-around boxes or in American cardboard boxes, depends on crucial aspects of the production activity such as material, weight and shape of the container, palletising schemes, speed of the production line. But it also depends on a series of other factors such as the company's marketing objectives, the budget available, the way consumers buy (whole package or single products), the need or not to display the package on the shelves at the retail point, etc. 🏭

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।

एगन 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।



ACM ENGINEERING: HIGH-QUALITY MOTORS AND GENERATORS

ACM Engineering is an Italian company based in Bardello (Varese), Lombardy. It is a leading company in the engineering manufacturing of the following products:


- 1) Compact brushless servomotors.
- 2) Hollow-shaft servomotors.
- 3) Direct drive servomotors.
- 4) Torque servomotors.
- 5) Roller table motors.
- 6) Generators for wind turbines.
- 7) Permanent-magnet synchronous motors and generators for naval applications.
- 8) Motors and generators for automotive applications.

Features:

In addition to its standard production, ACM Engineering is able to produce customized products for any customer demand, also in limited series. The Company is ISO 9001-2000 and UL certified. ACM products can be used in the following sectors:

- Industrial automation.
- Machines tools.
- Textile and clothing machinery.
- Wood working machinery.
- Sewing machines.
- Packaging machinery.
- Glass machinery.
- Printing machinery.
- Flexographic printing machinery.
- Roller brushless motors for conveyor systems.
- Jewellery machinery.
- Agricultural and food machinery.
- Plastic machinery.
- Marble processing machinery.

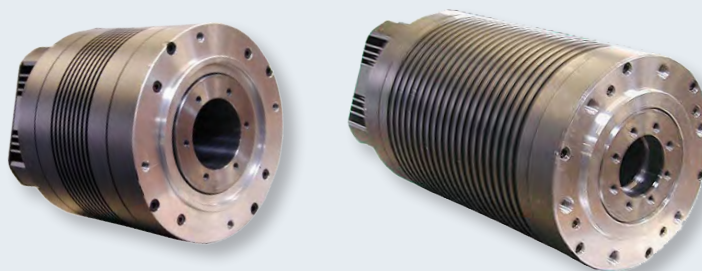
- Serigraph printing machinery.
- Sheet metal processing machinery.
- Wind turbine plants.

- Automotive applications.
- Naval applications. 

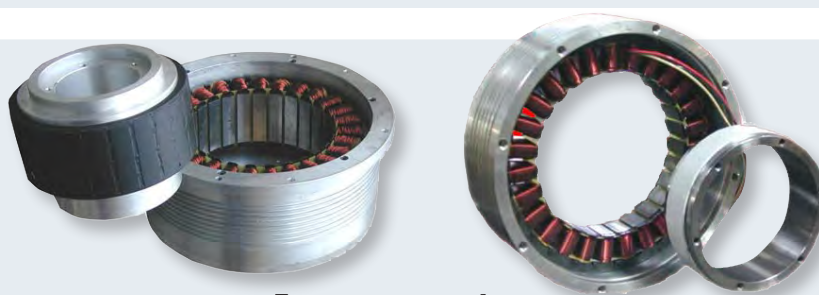
www.acmengengineering.it



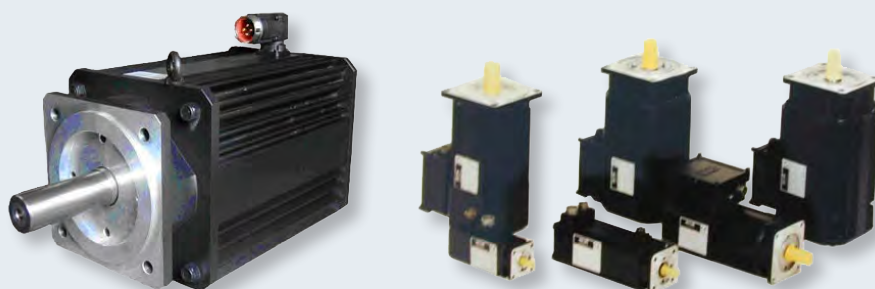
Direct drive servomotors



Hollow-shaft servomotors



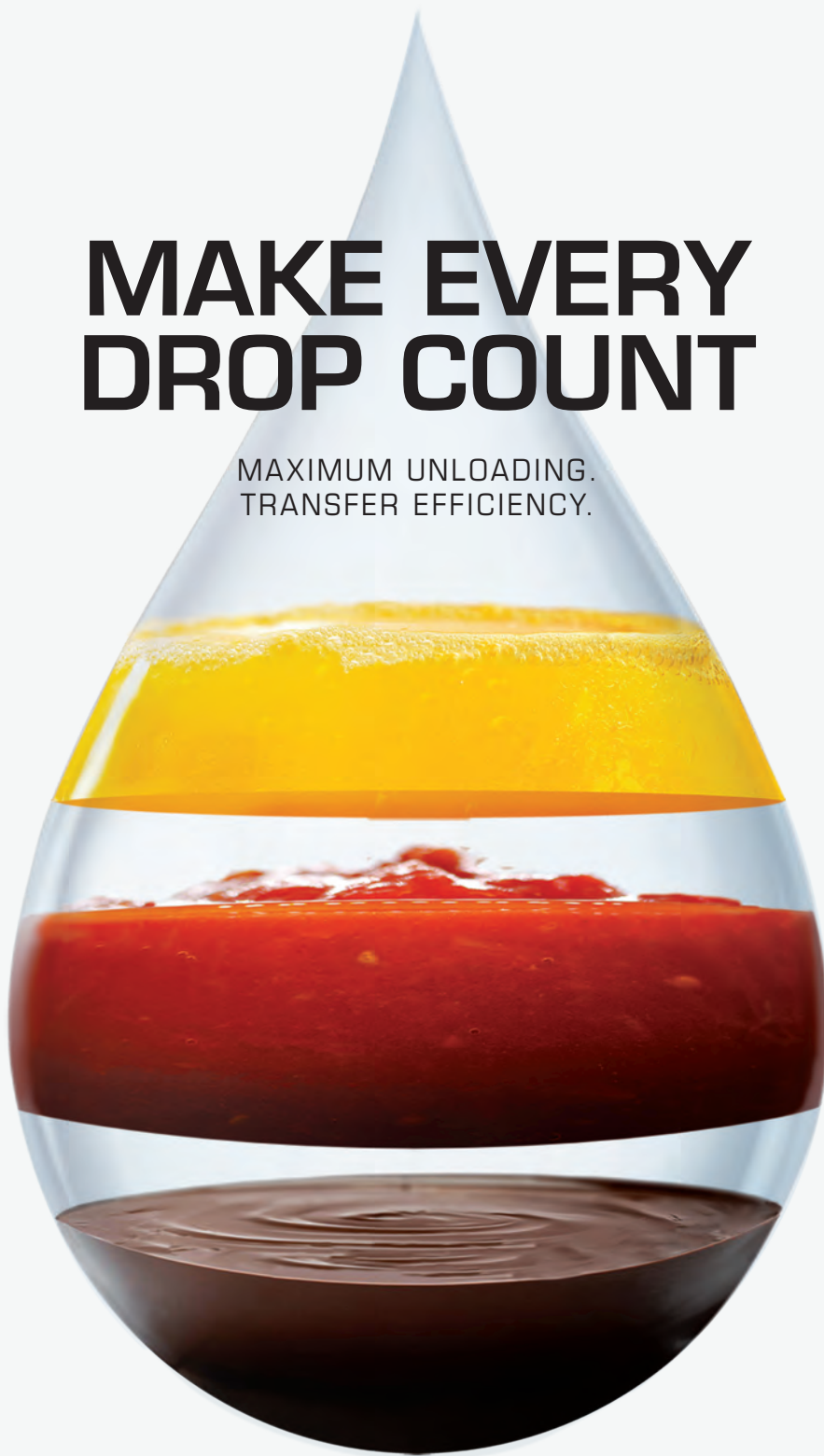
Torque servomotor



Brushless servomotor

MAKE EVERY DROP COUNT

MAXIMUM UNLOADING.
TRANSFER EFFICIENCY.



SANIFORCE® 2.0

A COMPLETE SANITARY PUMP LINE
TO HELP YOU SAVE MONEY

- SPEED UP YOUR PROCESS
- REDUCE WASTE
- IMPROVE SAFETY AND HYGIENE



DISCOVER ALL ADVANTAGES

WWW.GRACO.COM/SANIFORCELINE

CÉRÉCO IMPROVES THE UNLOADING OF ITS FILLINGS

Céréco has been producing bio breakfast cereals at its Domagné site (Ille-et-Vilaine, France) since 1991. Backed by the Triballat Noyal group since 2017, the company is seeing double-digit growth and is continuing to develop within various sub-segments. The most recent of these, co-extruded children's cereals, has regularly grown in volume. So much so that the annual volume of fillings used (principally chocolate) has increased eightfold between 2010 and 2018.

"The fillings were delivered in 10 to 25 kg buckets then manually emptied into a buffer hopper next to the extruder. The operators could no longer keep up with the higher production rates. What is more, we also wished to limit our use of plastics. It is for that reason that we switched to 250 kg metal drums," explains Eric Bruncher, Industrial Production Manager. For emptying the new drums, Céréco called upon its partner Immequip, a

process conveying and extrusion peripheral equipment specialist.

Graco: A full range of sanitary pumps and unloading equipment

Immequip is a Graco distributor, and under the brand name SaniForce®2.0, Graco offers a complete portfolio of sanitary pumps and unloading equipment for the food, beverage and personal care industries.

The range is designed to handle the most difficult materials quickly and safely. It includes air- and electric-operated double diaphragm pumps, electric-operated drum pumps, and piston transfer pumps. Beside these stand-alone pumps, it also includes drum and bin unloaders.

The SaniForce®2.0 line is ideal for a multitude of applications in various industries such as:

- Food: Low to high viscosity ingredients including juices and flavored drinks, salad dressings & condi-

ments, sauces, edible oils, snack food flavorings, frostings, beer & wine, caramels & chocolate syrups, jams & fruit fillings, tomato paste, peanut butter, and more.

- Personal care: Lotions & creams, cosmetics, and high care food.
- Dairy: Yogurt, cottage cheese, ice cream ingredients.
- Meat and poultry.
- Pharma: Medical creams & lotions, organic reagents, blood products, bio pharmaceuticals, alcohol and solvent transfer.

Air-operated for easy serviceability

Immequip decided that the most appropriate product for the Céréco application was a Graco SaniForce Drum Unloader which includes a SaniForce 5:1 piston pump with a follower plate and an inflatable wiper seal on a stainless steel 4-wheel cart. Mounted on the cart, the drum feeds a buffer hopper. The pump guarantees a 99% evacuation rate.





The specialist producer of co-extruded organic breakfast cereal ranges for children has changed to a larger drum packaging format for its fillings



At the end of the emptying process, the plastic bag lining the inside of the drum is pressed to ensure maximum filling product recovery. Three flexible hoses carry the product from the hopper to the extrusion head. "After three

months of operation, this system is proving to be reliable and simple to operate. It presents the advantage of being air-operated, which avoids many washing restrictions due to the absence of electricity," observes Eric Bruncher.

A company committed to organic products and sustainability

Far from being trivial, the switch from plastic buckets to metal drums is yet another illustration of the environmental strategy implemented by Céréco since its creation.

For example, in June 2015 Céréco obtained the Bioentreprisedurable (organic sustainable company) label. This is a Corporate Social Responsibility initiative supported by SYNABIO, the national association of organic food companies, processors and distributors. It has more than 210 members, mainly SMEs, and supports its members on regulatory, quality, sector structuring and CSR issues. Céréco's latest initia-


When emptying is completed, less than 1% of the filling product remains in the drum. The plastic liner bag is pressed to recover any product remaining.

tive is to recycle all its waste. "This has led to the setting-up of a specific processing stream for the metal drums," adds Eric Bruncher.

The approach is also reflected in the ecological design of the latest extension built on the production site at Domagné. The building is constructed using ecological materials such as wood for the cladding or hemp for the thermal insulation. It supports 1,360 m² of photovoltaic panels, and a rain-water harvesting system has also been installed.

"Céréco has a mission to promote the enjoyment of sustainable organic products. In 2017, the company forged closer links with the Triballat Noyal group which promotes similar values and a very similar vision for organic production and for the regions. Ecological building design, the limitation of waste, renewable energy production and the development of high added social value sectors are shared areas of expertise and development," concludes Eric Bruncher.

More information

If you would like further information on Graco's portfolio of sanitary pumps and unloading equipment for the food, beverage and personal care industries, check out the relevant product webpage: www.graco.com/saniforceline or contact Bart Clerx at bart.clerx@graco.com who will be delighted to discuss your specific requirements. 

www.graco.com/saniforceline



VLS TECHNOLOGIES, AN INNOVATIVE APPROACH TO LIQUID TREATMENT

VLS Technologies represents worldwide a single reference point for the client for both the aspect of filtration and more complex needs that involve the whole process of liquid treatment: that is made possible by the production plant in San Zenone degli Ezzelini in the Province of Treviso, northeast Italy, as well as by an established worldwide network of agents, authorized reselling and assistance. In addition to traditional applications, the focus of VLS Technologies is also the development of innovative solutions such as cross-flow filtration systems and reverse osmosis.

VLS technologies for soft drinks, juices and sugar solutions

Thanks to its great experience, VLS Technologies can offer the consultancy and the design of technologies for the filtration and treatment of food liquids also for the sector of fruit-based drinks, soft drinks and sugar solutions.

In these areas, the most innovative technologies by VLS are designed to meet the particular production needs. Among the different solutions suitable for the treatment of soft drinks and juices we can find TLS cross-flow filter, SFT sheet filter and reverse osmosis plant, while for sugar solutions the best technologies are FRS rotary drum vacuum filter, FVV D.E. vertical filter and FOC D.E. horizontal filter.

Two rotary vacuum filters for the Indian market of fruit juices

For the sector of fruit-based drinks, VLS Technologies has signed a part-





VLS
Technologies



nership with one of the main Indian producers of fruit juices, that has purchased two rotary vacuum filters with a surface of 25 sq.m to filter apple juice. The global market for juice is expanding and VLS solutions, like FRS filters, support a fast-growing sector, since fruit and vegetable juices have been gaining more popularity as health and dietary concerns are also growing. FRS filters have been designed for the filtration of products with high content in solids through the usage of filtering adjuvant substances as kieselguhr.

Customized FRS filters for sugar syrup: a special solution for Coca Cola

Coca Cola Thailand, partner company of the international manufacturer of drinks for the Thai market, deals with the production, bottling and distribution of drinks, following the entire production process. For the innovative plant, VLS Technologies has recently supplied two special 25

sq.m FRS rotary drum vacuum filters, used by Coca Cola Thailand to filter the sugar syrup, which is then used to process sugary-based drinks. The particular filters have been designed for the specific needs of the customer and made specifically for use in high temperature filtration processes. VLS Technologies is always focus-

ing on the customer's needs and, through a process of analysis of the production characteristics and identification of the best possible solutions, designs and manufactures tailored technologies, ensuring the best performance. 🏢

www.vlstechologies.it





SOFT DRINKS

TECHNOLOGIES FOR THE FILTRATION OF SYRUPS AND SUGAR SOLUTIONS.

For the filtration of syrups and sugar solutions, VLS Technologies offers three types of plants: vertical and horizontal pressure leaf filters, and rotary vacuum drum filters. The design of each solution is developed on the basis of the specific needs of the client.

Find out more: www.vlstechologies.it



Follow us:



Velo Acciai S.r.l. - Via San Lorenzo, 42, 31020 San Zenone degli Ezzelini (TV) - Italy
T. +39 0423 968966 - info@veloacciai.com - www.vlstechologies.it

VLS
Technologies

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

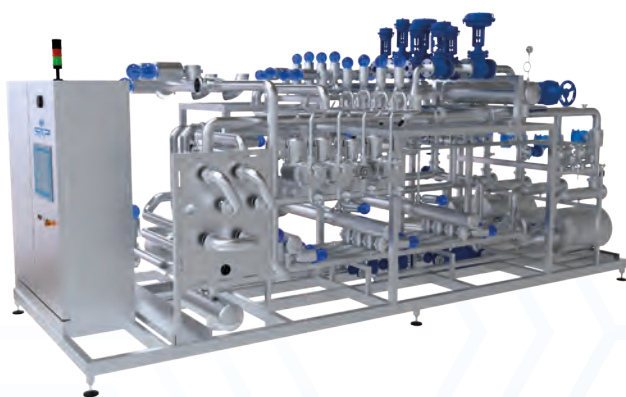
Mixing and Carbonating Units



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

IDEAS, SOLUTIONS AND PLANTS FOR THE FOOD AND BEVERAGE INDUSTRY

Thanks 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



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

VITAMIN K2 FOR DAIRY PRODUCTS

Vitamin k2 greatly improves both bone and heart health via regulation of Calcium balance in the body. It aids Calcium in reaching the bone mass and incorporating Calcium then into the bone, where it is needed for bone building and strengthening. Furthermore, it ensures Calcium is not deposited in the arteries, where it can build up and cause serious cardiovascular risk. Vitamin K2 also helps preventing osteoporosis, as completes the action of Calcium and Vitamin D. It has a higher bioavailability than vitamin K; it also remains in circulation for a few days, while the K1 tends to disappear within a few hours.

Already a very strong market trend in nutraceuticals, Vitamin K2 is gradually conquering the food sector, particularly dairy, where it can find application in yoghurt (high resistance to acid pH) and in UHT milk. In several countries it is used to fortify milk for kids. A promising application could be vegetable drinks alternative to milk, already normally fortified with Calcium and Vit D.

The recommended daily dosage is 75 µg (5.625 µg of VK2 per serving satisfies 7.5% of RDA and 11.25 µg per serving 15% of RDA). In addition to nutritional claims, labels of products containing K2 can use the health claim: “It contributes to maintaining the normal state of bone health”. Kappa Bioscience produces synthetic vitamin K2 in trans form, the most active (cis is only 60% active). Production takes place in Denmark, using raw materials of vegetable origin.

Recommended Kappa Bioscience products for dairy applications:

- K2VITAL®DELTA 1.0% - 1% microencapsulated vitamin K2 (ideal for powder applications)
- K2VITAL®MCT 1.0% - in oil form (ideal for liquid applications)

All products are allergen free. Kappa Bioscience vitamin K2 is distributed in Italy by Faravelli.

For technical and commercial information, please contact Faravelli Food Division:

food@faravelli.it 





WOULD YOU LIKE A SIDE OF MOLD, SIR?

When 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. 🏠





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

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

How homogenization enriches food products?

The benefit of high pressure homogenization is well known in dairy, food & beverage industries for subdividing particles or droplets present in fluids, and reduce them to the smallest possible size, down to nanometer range. Enhanced stability, shelf life, viscosity, color and taste are the essential characteristics that the emulsion gains through this process. Homogenization contribute in increasing digestibleness and, as consequence, facilitating assimilation of the nutritional principles as well. The use of high dynamic pressure and homogenizing valves specifically designed by GEA experts for different applications, allow to subdivided particles at the required size and efficiently mix ingredients at the lowest possible pressure, ensuring energy and cost savings.

What makes GEA your ideal partner?

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



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।



MICHELANGELO SERIES
YOU DESERVE THE BEST

Bertoli – Interpump High Pressure Homogenizers a technology tailor made for you !

The right solutions for your business
in food and beverage applications



www.bertoli-homogenizers.com

Reggio Emilia - ITALY



YOU DESERVE THE BEST! CHOOSE BERTOLI-INTERPUMP HIGH PRESSURE HOMOGENIZERS

Bertoli – a Brand of Interpump Group- is a technological leader in manufacturing high-pressure homogenizers and plunger pumps with over 40 years of experience.

HOMOGENIZATION: HOW BERTOLI ADD VALUE TO YOUR PRODUCT?

Probably not everyone knows that the homogenization process is a fundamental step for most common liquid products.

The homogenization grants a longer shelf life to the products improving the qualities in the taste, colour, smoothness and aroma. With Bertoli know-how, you can improve your product and reach the desired success thanks to the best solution design for your needs and let you have the high added-value products. Bertoli is specialized in Food & Beverage, Dairy, Pharma, Chemical and Cosmetics applications offering high pressure laboratory as well as industrial homogenizers and plunger pumps.

THE MISSION: BECOME YOUR TRUSTED PARTNER!

Bertoli brings you in the homogenization's technology through a whole experience where you are the protagonist.

You can rely on the entire Bertoli's Staff:

- Dedicated Area Manager
- Very efficient R&D Team with an innovative laboratory
- Careful Customer Care
- Technical Support on site
- Worldwide Network

From the study of the product to the definition and manufacturing of the right solution, Bertoli grants you the best support and reliability to achieve your desired results.





INTERPUMP GROUP




THE NEW GREEN EVOLUTION SERIES: A TECHNOLOGY TAILOR MADE FOR YOU AND THE PLANET

Bertoli in synergy with Interpump Group – the world's largest producer of professional high-pressure plunger pumps - develop a new range of homogenizers and plunger pumps ECO-FIRENDLY.

What does GREEN EVOLUTION SERIES stand for?!

Bertoli goal was starting from a premium line product improving them in a smart way respects the environment. All Bertoli models – with a capacity up to 50.000 l/h- are powered by Interpump Group with internal gear unit. This plus provides not only the reduction of water and energy consumption but also the reduction in terms of cost of maintenance and CO2 impact.

SAFETY AND QUALITY

Bertoli machines meet the most important hygienic requirements and quality control system in compliance with the international standards. 

HOMOGENIZERS/PLUNGER PUMPS MICHELANGELO GREEN EVO- SERIES

Treat yourself the best and join Bertoli!

www.bertoli-homogenizers.com



“बर्तोली एक इटैलियन ब्रांड है, जो इंटरपम्प ग्रुप का हिस्सा है। इंटरपम्प ग्रुप एस.पी. ए. उच्च दबाव वाले पिस्टन पंपों का सबसे बड़ा निर्माता है, जिसका कारोबार 2019 में 1.3 बिलियन यूरो का था और जिसके दुनिया भर में 6.500 से अधिक कर्मचारी हैं। पिछले पांच वर्षों के दौरान, इंटरपम्प ग्रुप ने अपने खाद्य प्रौद्योगिकी उपकरणों के पोर्टफोलियो में इनोक्सपा, मारीओटी और पेकिनी और फ्लिनॉक्स जैसे ब्रांडों के साथ वृद्धि की है, जो सभी खाद्य और फार्मा अनुप्रयोगों में विशेषीकृत हैं।”

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.)



The future of the conservation is in the possibility to conserve the product in the easiest way possible. That is why the future is now. The perfect complicity of the high technology, simplicity for the user and economical advantage are all concentrated in 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



IQF Freezers - EASY Freeze



Spiral Freezers - EASY Freeze



PiGo®

Food Processing Machinery

EFD Freeze Dryers - Lyophilizers



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



Stone Fruit and Berries Processing

www.pigo.it



MADE IN ITALY

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

PIGO srl, Via dell'Edilizia 142, 36100 Vicenza, Italia, Tel: +39 0444 905709, e-mail: info@pigo.it



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 or simply send an e-mail to info@pigo.it. There are also some short video clips of our machines in operation on 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 डिज़ाइन 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।



Machines and complete plants for fruit processing

Multifruit NFC and chilled juice processing line with the CitroEvolution³ and the Pinetronic 1SS for the extraction of high quality orange and pineapple juice

YOUR ITALIAN PARTNER SINCE
1936





EQUIPMENT FOR TROPICAL FOOD PROCESSING


The 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



बेर्तुज़ी फ़ूड 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, अमरुद, लीची, रामबूटन, नारियल, आदि फलों के रस के लिए कई विशिष्ट, समर्पित मशीनों और तकनीकों का विकास किया है।



PLANNING AND REALIZATION OF MACHINERIES FOR OENOLOGICAL SECTOR

Enomet Impianti S.r.l. it's in the oenological sector from 1996 operating in planning and realization of machineries for oenological sector. Our Firm is formed from a team of 15 people with 2 Oenologists and different qualified Technicians. We operate in Italy and to the foreign countries, we develop projects of complete wine cellars and we occupy there both of the architectural part and technological, proposing innovative fittingses using ourselves of different brevets and of personnel that has matured an experience of 40 years in the sector. In particular, our activity concentrates on the project and development of new technologies, on the design of machines and processing lines, on the manufacturing and marketing of oenological plants, such as:

- Destemmer-crushers and selection lines.
- Membrane pneumatic presses.
- Must clarification machines.
- Vacuum rotary filters.
- Kieselguhr filters.
- Plate filters.
- Cross-flow filters.
- Reverse osmosis.
- Tartaric stabilization machines.
- Cooling units.
- Heat exchangers.
- Control boards to control the fermentation temperatures.
- Cooling plates.
- Classic and Charmat method machines.
- Machines for production of the beer.
- Nitrogen generators and plants.
- Machines for the recovery of CO2.
- Automatic machine for Batonnage.
- Bottling plants, automatic and semi-automatic.
- Pumps of several types.
- Stainless steel reservoirs.
- Barriques, barrels and relevant fittings.
- Plant engineering and stainless steel pipe fittings.



ENOMET
IMPIANTI ENOLOGICI



The various phases of our activity, from the planning to the realization, they are mainly managed from our Technical Office that uses in case of necessity qualified external Consultations. The installation of the fittingses, also when she is managed by external Enterprises, it is directly followed always by our Technicians. Furthermore, we inform You that we are able to give external technical assistance and repair also other machines not of our production, after having inspected them. 🏢

www.enomet.it

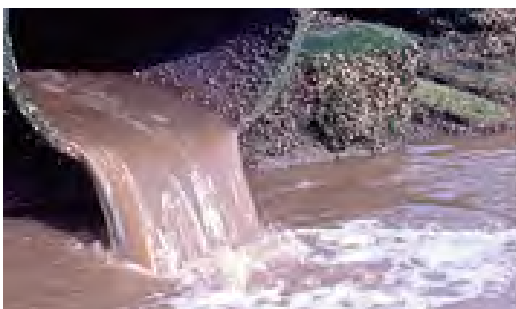


C&G, PLANTS FOR THE TREATMENT OF INDUSTRIAL WASTEWATER



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

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






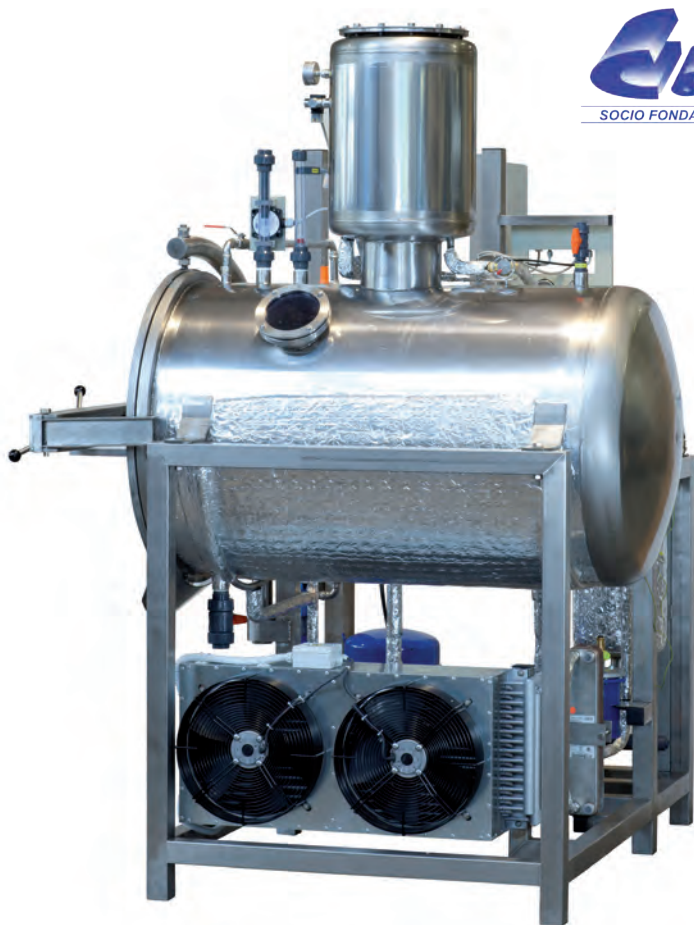
technologies to a wide variety of production sectors with one common objective: to treat and improve the quality of a particular liquid.

The main sectors where our products are applied include galvanic industries, where it is possible to recover Chrome VI, Nickel, Brass, Copper and precious metals, while treating the wastewater produced by these industries.

Other fields of application include graphic arts, mechanical, chemical and petrochemical industries, pharmaceutical, cosmetic and food industries.

C&G is a pioneer in vacuum evaporation technology, and offers a wide range of evaporator models all of which are characterised by low electrical consumption, the use of electricity or alternative energy sources, automatic 24 hour functioning, compact, robust design, constancy and quality in the results obtained, and absence of smell or vapours.

The principal objectives of the C&G are: to reduce the disposal costs and water consumption costs of a company up to 90%, to recycle the water used in an industrial line; to recover precious metals, to eliminate any possible risk of sanctions by environmental control authorities, to modernise production and to improve the image of a company. 



C&G DEPURAZIONE INDUSTRIALE SRL

Via I° Maggio, 53 - 50067 Rignano S.Arno - Firenze - Toscana - Italia

Info@cgdepur.it - www.cgdepur.it - tel. +39 0558303450 - +39 0558303454 - Fax +39 0558303368

BERRYPLANT: FOCUS ON BREEDING AND QUALITY

Berryplant'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





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

Now 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.

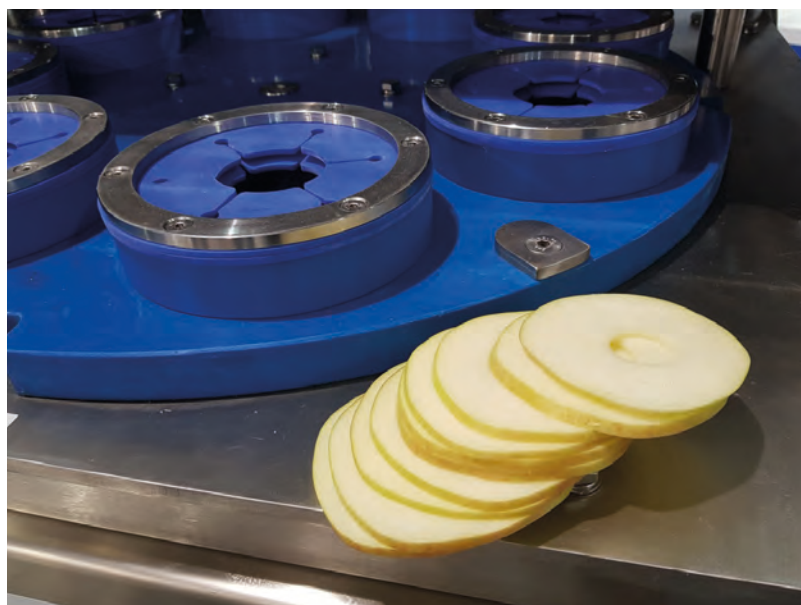
These events will provide an opportunity to personally evaluate the advanced solutions for Fresh-Cut (fruit ready-to-eat) companies, as well as for the canned, frozen and dehydrated food industries, but also to present its new machinery.

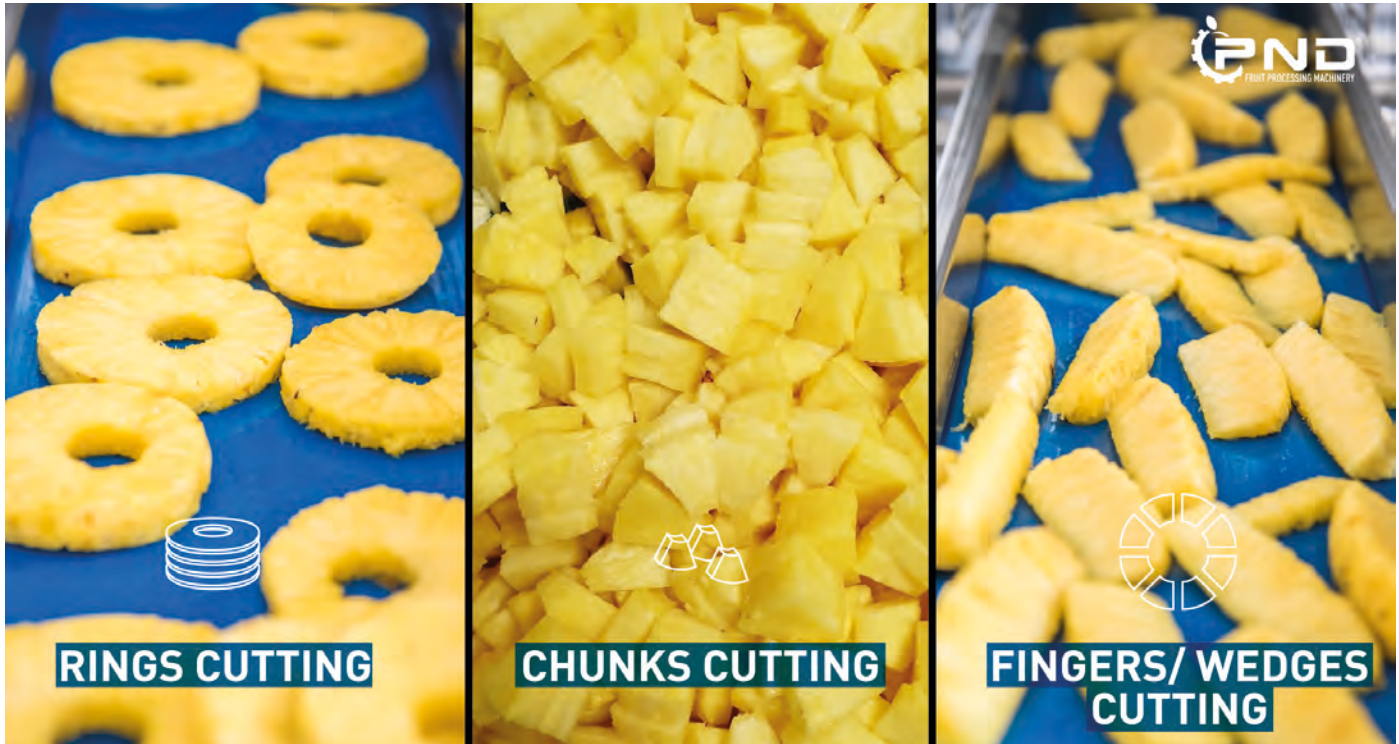
The latest addition to the PND family is the pineapple cylinder machine mod. PINCYL8. It is a highly versatile machine able to perform different cuts for pineapple processing: cylinders, fingers, chunks and rings. With its innovative design and compact shape, it is an ideal partner for this processing. 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.

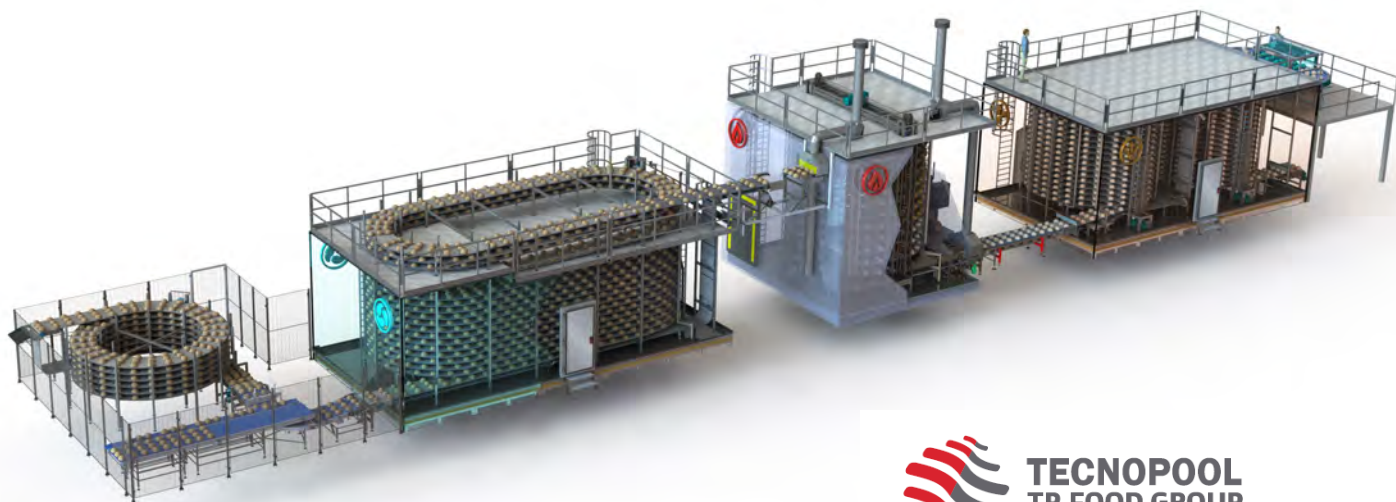
Visit our website to be always updated on latest news or write to us at info@pndsrl.it 



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 कैननिंग, 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 आड़ू 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।

THE STORY OF TECNOPOOL IS ONE BORN OUT FROM A BIG IDEA:

design, manufacture and installation of machinery for the treatment and processing of food products



TECNOPOOL
TP FOOD GROUP
TOTAL PROCESSING

A story that began in 1980 with the patenting of Anaconda: the first conveyor belt conceived by the company's founder, Leopoldo Lago. Now company has a worldwide growth with the T-Worth conveyor, suitable for food transport and processing at any temperature: From deep-freezing to cooling, from pasteurizing to proofing, from product handling all the way to baking and frying, the term flexibility goes hand in hand with all TecnoPool solutions.

The conveyor belt features uniform sliding, transport speed, easy and low maintenance.

The spiral is one of the distinctive features of the company, which is, however, always open to new and different solutions to offer the best response to customers' food production needs.

At the top of the company there is Michela Lago, CEO, who strategy growth bigger and founded last year a new group with other 6 companies where TECNOPOOL is the leader.

TECNOPOOL TP FOOD GROUP offer a total processing for the food industry: TECNOFRYER (Spain), GOSTOL GROUP D.O.O. (Slovenia), LOGIUDICE FORNI, MIMAC ITALIA SRL, MECATECK (Italy).

www.tpfoodgroup.com

The spiral system is the cornerstone of our integration: flexible and modular, it is suitable for transport, cooking and cooling, up to the freezing phase of food products. It adapts to all the processing stages, thus allowing the Group to offer total support to its customers.

Freezing

The know-how TecnoPool has ac-

quired allows it to guarantee a method that is absolutely avant-garde for the treatment of packaged or bulk food products, which are conveyed on belt and deep-frozen in cabinets that have insulated walls with variable thickness.

Cooling

A system designed for two types of cooling: Ambient and with forced air in room.

It is precisely this flexibility that makes it suitable for any manufacturing line and any kind of packaged or bulk food product.

Proofing

Such a delicate process deserves all attention. This is why TecnoPool has always developed plants that are perfectly calibrated that do not alter the properties of the food products and which therefore respect both the end product and the consumer



Pasteurizing

To make the treated products reach the right temperature within the required time, it is essential to carefully cover every detail: it is no coincidence Tecnopool designs complex plants that use insulated rooms to treat the food products in accordance with parameters that are constantly monitored.

Diathermic Oil Spiral Oven

Tecnopool, faithful to its philosophy of simplifying production lines for mechanical and economic reasons, has completed its range of plants with a spiral cooking system which, thanks to its configuration, allows for space saving and a smooth production process. Tecnopool spiral oven makes it possible to save space, simplify the flow of the production line and save energy.

Thermal Oil Fryer

Tecnopool increases its product range with another processing machine that allows it to complete new production lines that meet customer requirements in the areas of meat,

fish, bread and sweets, snacks, peanuts and even pet food: Tecnopool fryer. We resume that the strengths of TECNOPOL are: Custom designed and built systems; Test room available to our customers; Energy efficiency with savings up to 20%;

24/7 post-sales assistance; Fast and worldwide maintenance operations; Internal planning, design and production; Punctuality with delivery time reduced up to -50% compared to the average. 🏢

www.tecnopool.it



हम हीट ट्रीटमेंट और खाद्य उत्पादों के प्रसंस्करण के लिए -40°C से $+300^{\circ}\text{C}$ तक के उत्पाद डिजाइन, निर्माण और स्थापित करते हैं। उत्पाद मेक-अप, प्रूफिंग, पाश्चराइजिंग, बेकिंग, कूलिंग, डीप-फ्रीजिंग के साथ-साथ समग्र हैंडलिंग को कवर करते हैं। हमारे लंबे समय के अनुभव से हमने हमेशा अपने ग्राहकों को समाधान और सेवाओं के साथ प्रदान किया है। एक स्टॉप शॉप के रूप में कार्य करके, हमने सभी ग्राहकों की विशिष्ट आवश्यकताओं को पूरा करा है। अत्याधुनिक तकनीक की गारंटी, बेहतर डिजाइन कौशल और हमारा लचीलेपन हमेशा हमारी ताकत और बाजार में हमारी सफलता के लिए हमेशा महत्वपूर्ण रहा है, जो हमें दुनिया भर में ग्राहक आधार के लिए "मेड इन इटली" समाधान प्रदान करने की अनुमति देती है।

COMPLETE ROASTING COFFEE PLANTS



Petroncini, 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 sys-

tems, from the green coffee intake up to the feeding the packaging machines with beans and ground coffee, thereby providing superior 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 work-



ing 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

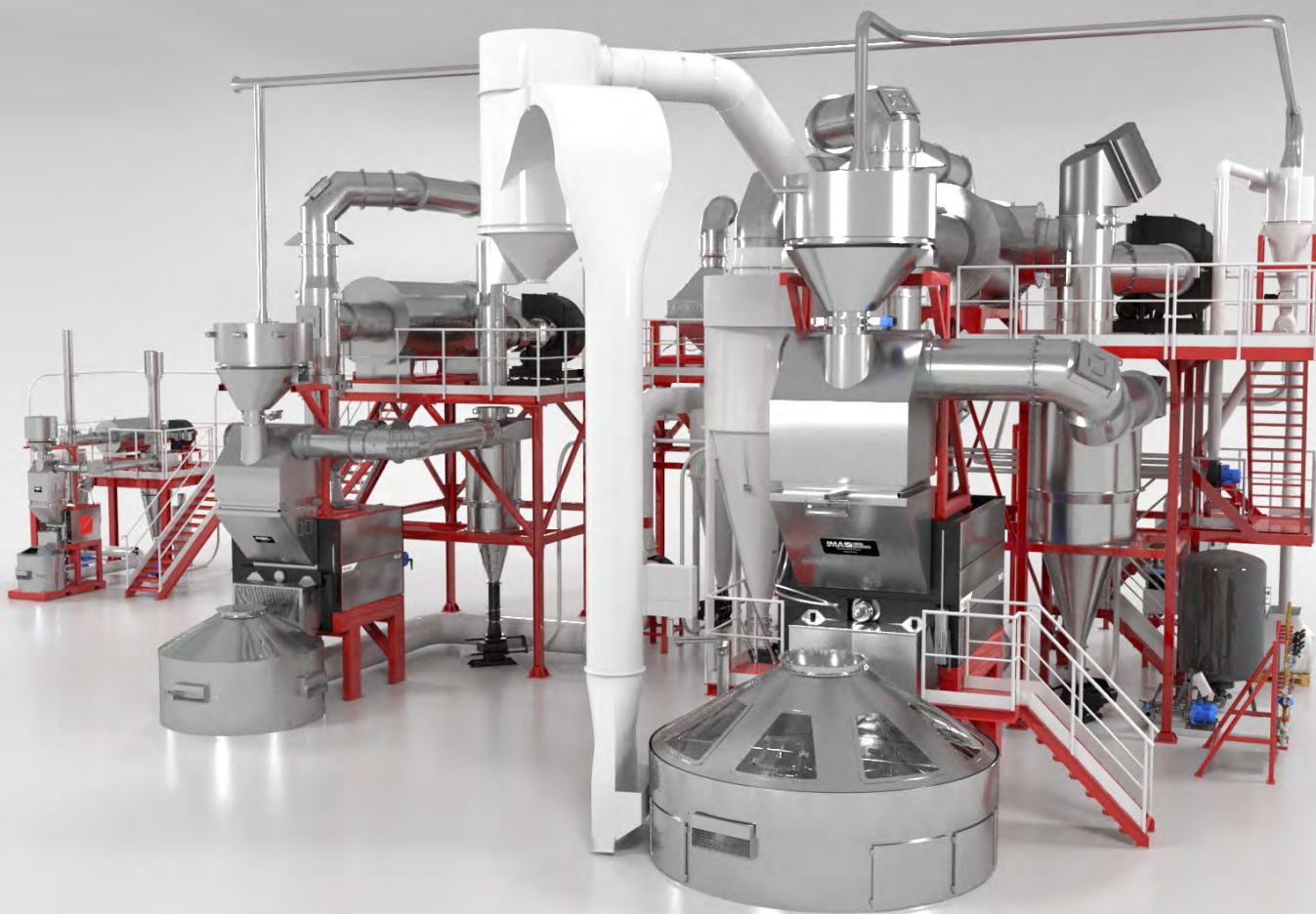
signal to connect external data loggers. R&D Lab Roaster counts on the same technical features of the industrial Modular Roasters and it can roast up to 25 kg/cycle, thus minimizing the waste of energy and good quality coffees.

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

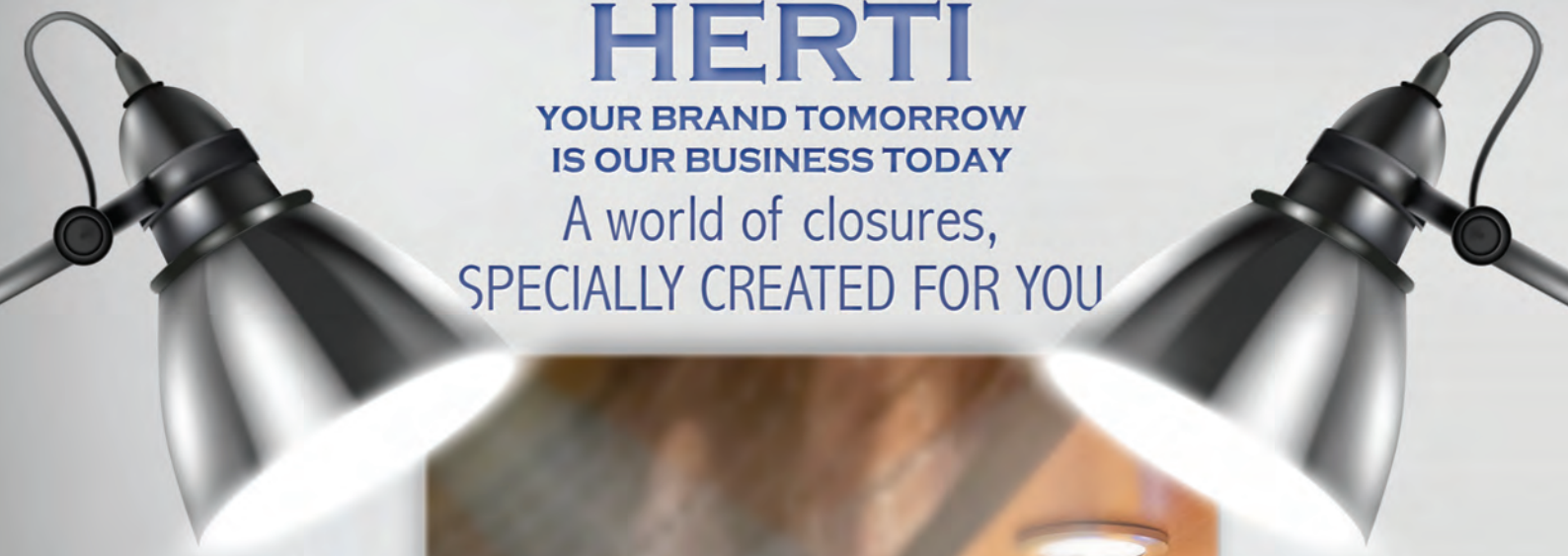




HERTI

YOUR BRAND TOMORROW
IS OUR BUSINESS TODAY

A world of closures,
SPECIALLY CREATED FOR YOU



+359 54 818 114 | sales@herti.bg | office@herti.bg

www.herti.bg www.herti.co.uk www.herti.fr www.hertigermany.de www.hertius.com

HERTI: YOUR BRAND TOMORROW IS OUR BUSINESS TODAY

Herti provides aluminum screw caps, and composite closures for different industries such as spirits, wine, non alcoholic beverages, mineral waters and olive oil. Herti can offer a suitable

cap for almost any size of bottle. The production plant is located in Pliska, Bulgaria. It is situated on 22 acres own land and 15 000 sq.m. production halls and facilities. Herti constantly invests in new technolo-

gies that boost energy efficiency and participates in the collective scheme of Ecopack for recycling. It collects separately the waste from the production cycle and give it to companies specialized in recycling





HL HERTI

YOUR BRAND TOMORROW IS OUR BUSINESS TODAY



and reports to Ecopack for all quantities.

Each year Ecopack issues the certificate that shows the whole quantity of the recycled waste, the energy and water saved through the collective scheme and the reduced CO₂ emissions.

This year Herti invested in a new cooling system in the production

sites with a minimum energy usage and started a project for optimization of the compressed air system. Investment drives company's progress and growth.

The last 3 years Herti followed a major investment program and different projects for increasing capacity and improving the health and working conditions in the factory. A new warehouse was put into operation

at the production site. The building, covering 2 500 sq.m., has four loading platforms. It is equipped with two wrapping machines, a reach truck and forklift trucks.

The bar code readers and the software allow easy navigation and quick service. Herti installed new equipment for increasing capacity of 30x60 aluminum screw caps, which gives the company more flexibility



to meet customers' needs for wine closures in terms of quantity and delivery time.

Last year Herti introduced two more lines to boost capacity and give more decorating options.

Our R&D team works closely with the customers in the development of their products and their brands, creating unique and innovative products.

The R&D and quality assurance department puts efforts to organize and to improve all processes connected with developing new products, explore new materials and technologies and implement them in production.

Recently we developed a new olive oil pourer for smooth pouring of the liquid and improved the equipment to increase the capacity for producing olive oil closures.

This year we launched two new sizes for the spirit sector- 20x12 mm standard closure and 36x52 mm extra long closure. These are aluminum screw caps that enlarge our portfolio. Our R&D department has good traditions and develops very well. The budget has been gradually increased and it will still go up in the next years.

Herti follows the new trends in the industry by continuous investing in new machines and technologies, upgrading the production facilities and improving the production process. Herti has benefited the technological innovations and has achieved lower energy costs and increased capacity.

The vision controls secure highest quality of the end product.

The design became a very important part of the package vision. Clients turn to design options such as hot foil top and side printing and top embossing.

Our findings show that clients look for unique and extraordinary individual design of their closures to attract consumers at the shelves. May be this is the biggest trend in the screw cap sector.

The innovations in the printing and decorating machines follow the market requirements for unique and extraordinary design, which can distinguish any screw cap.

Herti plans to invest in new machines for lacquering and printing and to use the latest technologies in this field.

This will not only improve the speed and increase capacity but also reduce energy, which is our strategic goal.

We also think of increasing our capacity for screw caps that go for mineral waters as this is going to be one of the big challenges for the mineral water industry. 🏢



THE **PUMA** MANIFESTO

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





THE PUMA MANIFESTO

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 20th 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.

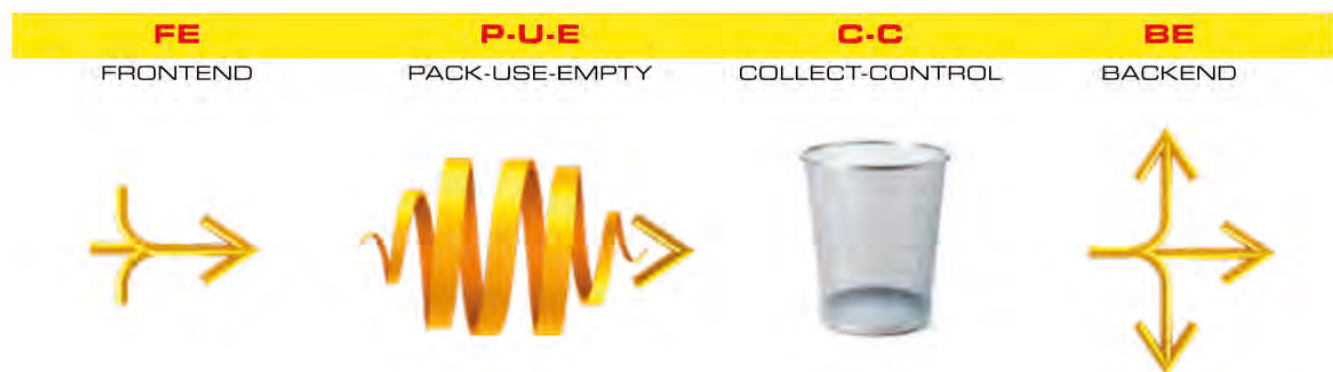


Holistic innovation is needed as we are all interconnected in packaging



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, CO₂, 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.



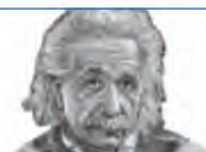
	FE	P-U-E	C-C	BE
Litter			✓	
CO ₂	✓			✓
Inadequate pack optimisation Product Packaging material + Total environmental impact				
Future issues	✓	✓	✓	✓



SUPPORTING PUMA



Success comes from deeper understanding and supplementing earlier insights



I SUPPORT THE PUMA MANIFESTO AND HEREBY PLEDGE TO:

- ✓ Reference the PUMA Model as an insightful source to address the activity of packaging worldwide
- ✓ Apply the vocabulary as used in the PUMA Model and positively contribute to possible improvements
- ✓ Contribute to the PUMA annual plenary meetings to the best of my capabilities
- ✓ Make my decisions and base my opinions on the state-of-the-art in packaging (i.e. on reliable, verifiable and up-to-date information) and using all information and knowledge that is brought to my attention
- ✓ Stimulate continuous education and training of those with a responsibility within the activity of packaging
- ✓ Contribute to helping facilitate all phases of PUMA (FE, P-U-E, C-C, BE)



*Everything flows and so does the activity of packaging;
we can put a clock back, but not the time*



MY DETAILS:

Company name

Initials and surname

Date of birth

Address

Phone

E-mail

For an overview of recent references and background information worldwide please visit www.nvc.nl/puma



NVC NETHERLANDS PACKAGING CENTRE

Sharing the future in packaging

☎ +31-(0)182-512411

✉ info@nvc.nl



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





"CIP" cleaning in place system



Hot filling system



Ink-jet or laser coding system



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 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** to see our packaging machines and to be always update with the latest news and events. 🏢

TOYOICHEM ACHIEVES NEW ADHESIVE WITH UP TO 80% BIOMASS CONTENT

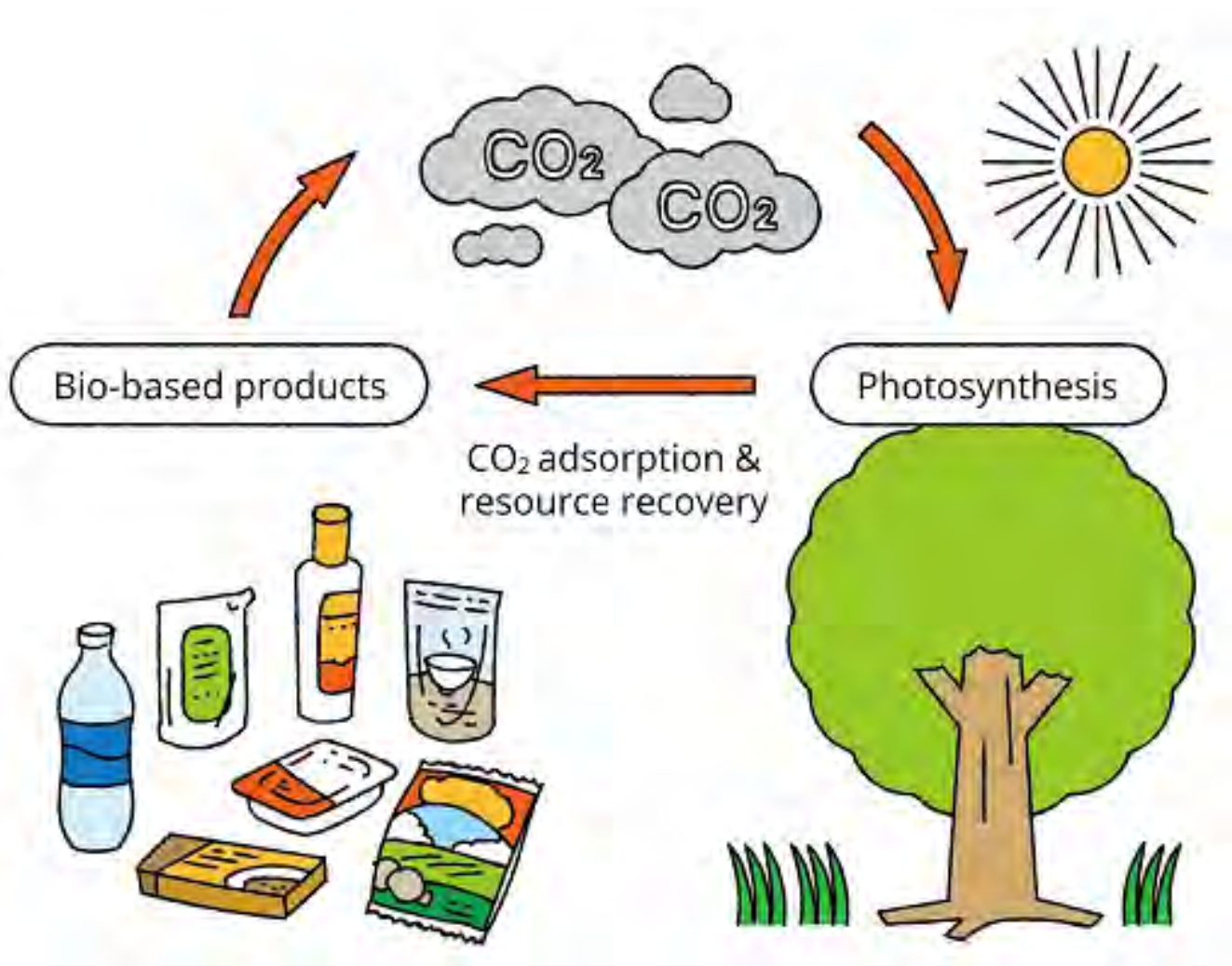
Biomass content dramatically increased by synthesizing polymers from bio-based raw materials

Toyochem Co., Ltd., a member company of the Toyo Ink Group, has developed a new pressure-sensitive adhesive (PSA) with a high bio-based content for use in packaging, labels and tapes. The bio-based content for the company's Cyabine™ series of polyurethane adhesives recorded values up to 80%, while the Oribain™ series for acrylic

adhesives up to 75%. Both series also include a removable PSA composition with 10% bio-based content, a feat that had been considered difficult to accomplish by using conventional bio-based adhesives.

As countries around the globe work to transition to a circular economy, materials produced from biomass

are expected to play a key role. Given the tremendous focus on mitigating climate change and its impact, urgent research and investment is being devoted to moving away from today's petroleum-based economy to a more sustainable one based on recycling and renewable resources. As such, bio-based materials are attracting increasing attention across



a diverse range of fields, due to the ecological advantages that come with their use.

In response to these trends, Toyochem has recently developed an advanced pressure-sensitive adhesive composition with biomass content up to 80%. Building on its 2018 release of the industry's first adhesives with 20% bio-based content, Toyochem is pleased to launch another adhesive innovation with a substantially higher content level. Researchers in Japan achieved this breakthrough by synthesizing the polymer from raw materials derived from biomass. As a result, the new adhesive gives packaging converters who are looking to incorporate biomass into their packaging structures a more eco-friendly alternative without compromising on performance.


The new Cyabine and Oribain adhesives announced today are currently available in Japan with a worldwide release to follow in the next few

years. With its ever-growing portfolios of biodegradable, bio-based, ultra-high solids and water-based adhesive products, Toyochem will continually work to create innovative solutions that help reduce the environmental load on society.

About Toyochem Co., Ltd.

Toyochem, a wholly owned subsidiary of the Toyo Ink Group, oversees the Group's Polymers and Coatings-related business segment as a core operating company. Headquartered in Tokyo, the company operates three production facilities in Japan. Using the Group's polymer design technologies that have been cultivated for over a century, Toyochem manufactures polymers, adhesive

tapes, marking films and coatings for a wide array of industrial applications. The company's slogan "Something New, Close to You" embodies its commitment to continuously bring new value to everyday lives by delivering new solutions that use Toyochem polymers as their core material.

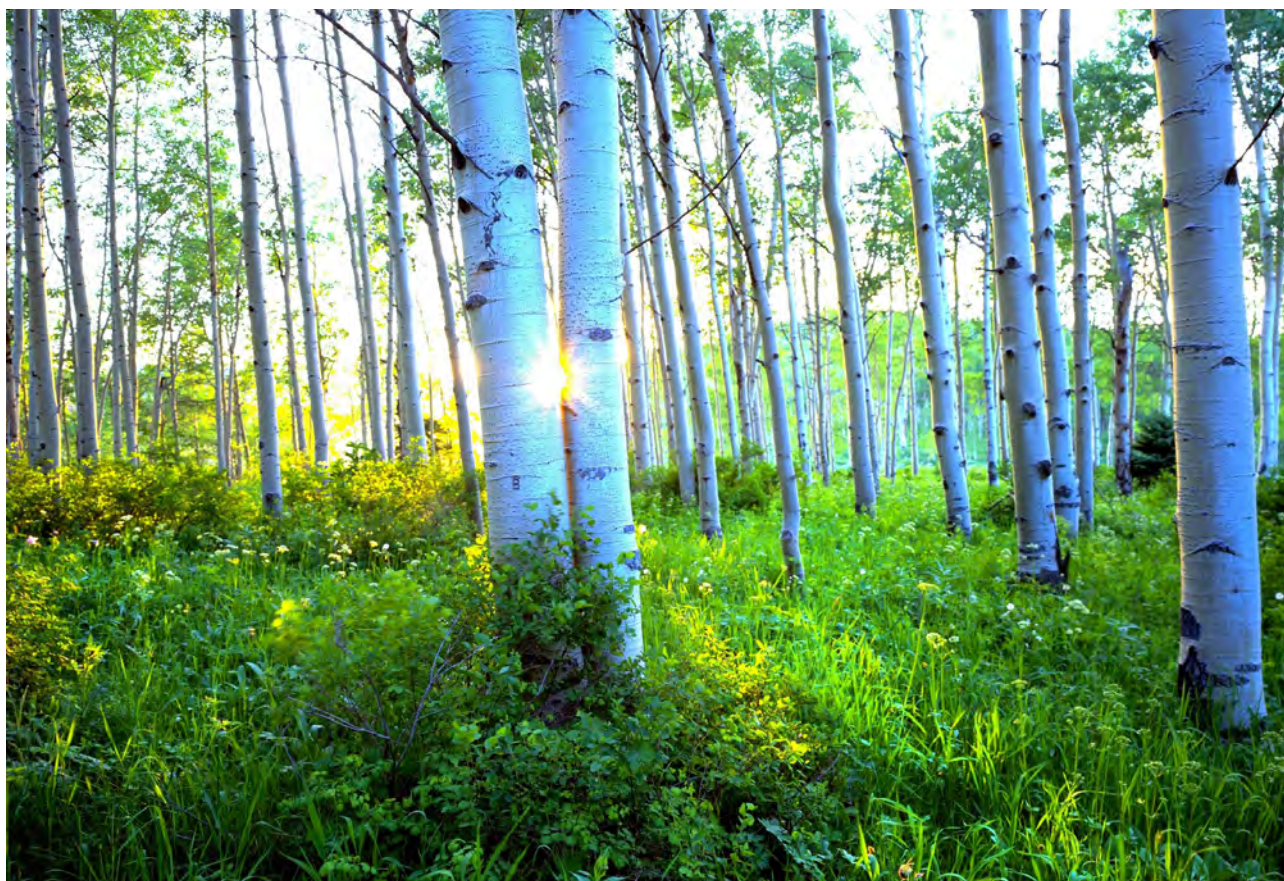
Toyochem, the Toyochem logo, Oribain and Cyabine are trademarks or registered trademarks of Toyo Ink SC Holdings Co., Ltd. 

www.toyo-chem.com/en/

For more information about the Toyo Ink Group
schd.toyoinkgroup.com/en/



TOYO CHEM
Something New, Close to You





COMPLETE PACKING SOLUTION FOR DRIED FRUIT SNACKS



This 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." 🏛️

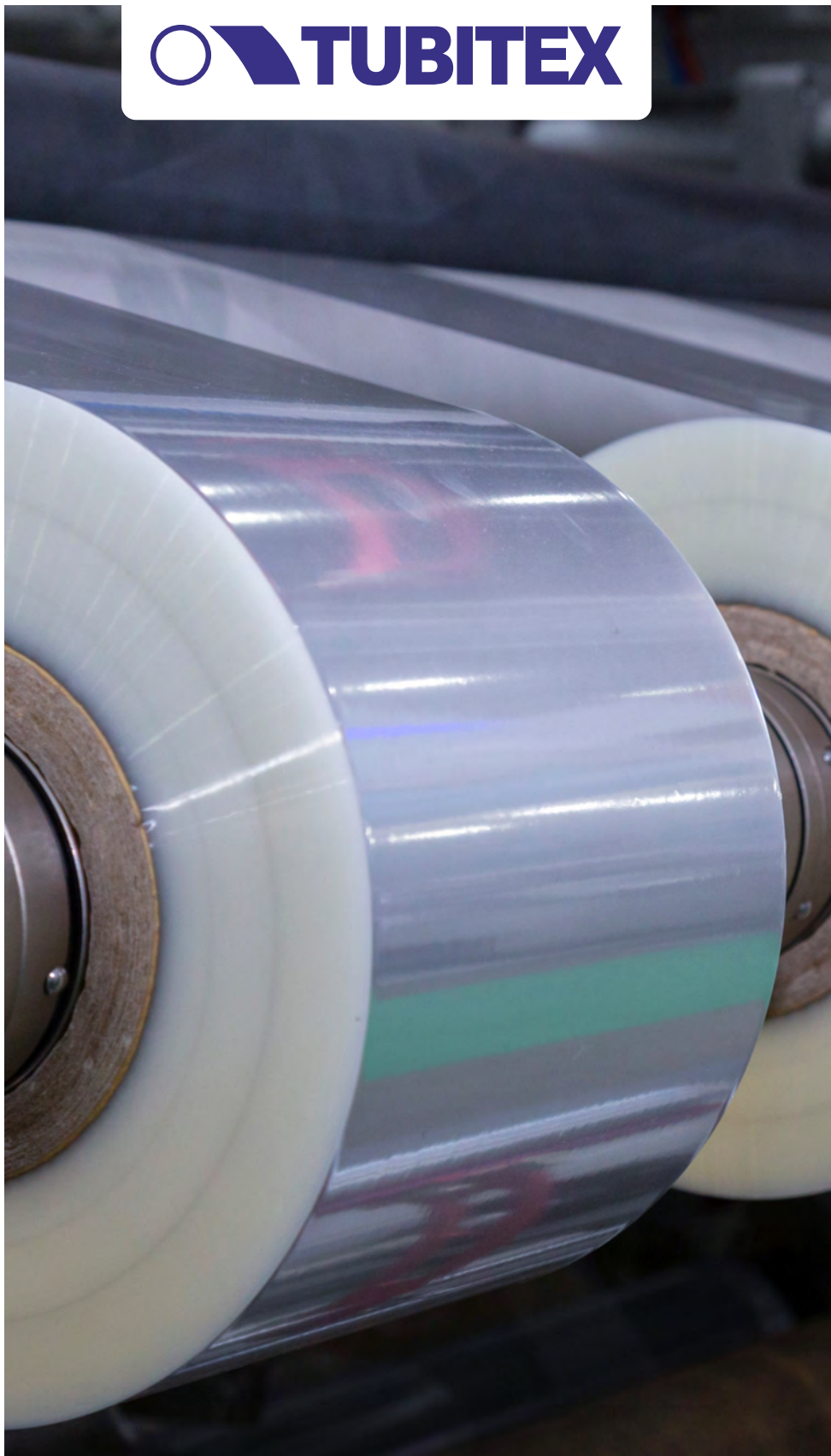
www.ishidaeurope.com

TUBITEX SOLUTIONS FOR FOOD FILM PRODUCERS

Tubitex 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.

The Tubitex logo features a stylized circular icon to the left of the word "TUBITEX" in a bold, sans-serif font.



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 (Venezia) 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.

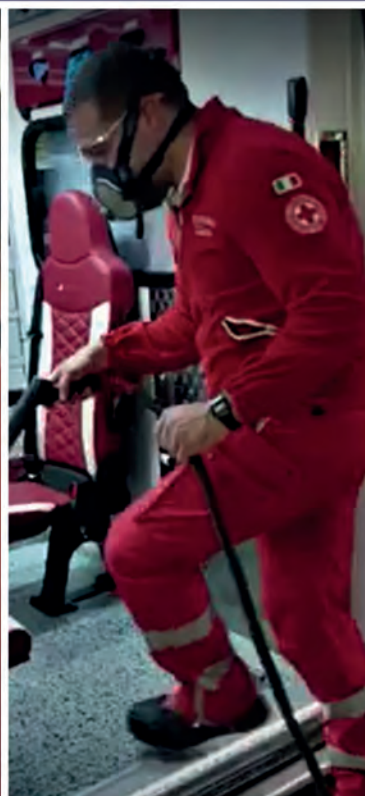
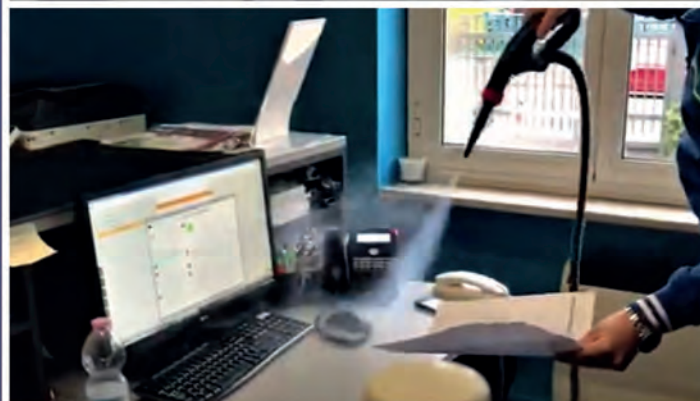
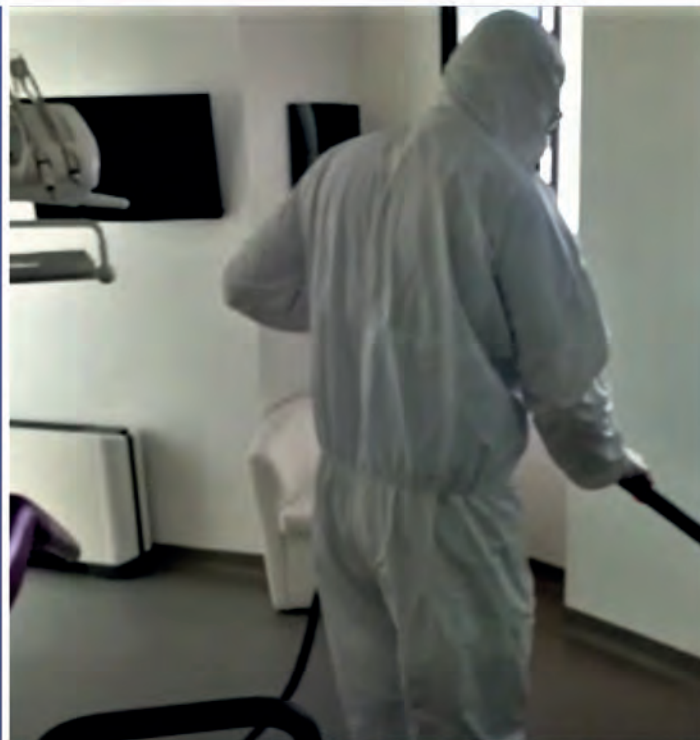
Among the most appreciated aspects are the high performance of the products, the flexibility in managing order changes, compliance with technical specifications and speed of delivery times.

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



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

Livetech 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 (cuvette) from a cardboard die-cut. The line includes three robots that place the packed products on the tray.

As Federico Scornaienchi,
Area Manager at





Livetech, 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 Livetech 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

DELICACY, SPEED & PRECISION. FANCY TREATS GET FANCY TREATMENT

Chocolate-coated marshmallow treats, or tea cakes as they are more commonly known, are subject to a lot of conjecture in terms of where they were invented; but what is certainly true is that these delicate snacks are enjoyed in a variety of guises the world over. Indeed, their popularity is reflected by their Wikipedia entry... which is over 5,000 words long!

With their thin delicate skin of chocolate, they present an interesting challenge from a packaging perspective... a challenge which is compounded by the speed and volume by which they are normally manufactured. So, rather than throttling production to match the capabilities of the packaging machines, the packaging machines instead have to keep up with production... while still handling the products very gently and packing them correctly.

Cama Group was given just such a challenge for a packaging line at a plant in Peru that belonged to one of the world's biggest confectionary and snack companies. In addition to the aforementioned product and volume challenges, Cama was unable to deploy a counterflow system (often preferred in these types of applications) and instead had to develop and modify one of its co-flow solutions.

According to Alessandro Rocca, Sales Engineer Director at Cama Group: "Due to the layout constraints at the plant, the only option was deploy a co-flow layout that was tailored to precisely fit the limited real estate. Counterflow is normally preferred in these fast-moving applications, as there is less chance of un-picked products exiting off the end of the conveyor. Indeed, the order criteria actually included a maximum figure for unpicked products. We were up against



other machine suppliers. Those with co-flow solutions were unwilling to take the risk and the others only offered counterflow.

"The existing plant has several very established production lines," Rocca adds, "but most of the secondary packaging operations are manual. This new line is one of the customer's first automatic secondary lines and will actually undertake the work of 40 people, freeing them up to work on other lines."

The reason behind Cama's confidence in its machines' capabilities, is its in-house developed robotic solutions. "Our robotic technology has been developed in-house specifically to undertake secondary packaging," Rocca explains. "These are not universal robots; these are robots with one single purpose – secondary packaging in a Cama machine – it's perfect machine/robot synergy. There is no trade-off of capabilities that you may see with general-purpose robotic solutions, and by removing third-party robotic controllers, we can sidestep any potential communication conflicts that can affect output. And, when closely allied to the advanced vision systems we





Peru's supply of tea cakes is in good hands, thanks to Cama Group's BTG secondary packaging solutions. High speed, high accuracy and gentle handling combine on advanced robot-based packaging machine



use, the combination is second to none, and more than up to the challenge of applications like this. In fact, by enhancing the common working envelope of the robots we have actually minimised the chances of products being missed – even at these throughput speeds. If one robot does not catch it, the next one will.”

The advanced robotic solution is just one part of the full Industry 4.0 control architecture Cama has developed for its Breakthrough Generation (BTG) machines, which are setting the standard in secondary packaging. They comprise contemporary automation solutions, including advanced rotary and linear servo technology, tightly coupled to in-house-developed robotics, to deliver the all-important speed, flexibility and adaptability required by modern packaging operations. All of this advanced technology is housed in modular, scalable frameworks that offer easy entry and access, coupled to a hygienic machine design.


This fully interconnected digital control architecture delivers significant advantages when it comes to the operational performance of the machines, but the recent COVID-19 pandemic has also highlighted another major benefit and that is remote access and simulation. “Due to the lockdown in both Italy and Peru, we were unable to visit the customer site for acceptance testing,” Rocca explains. “But due to the control solution on board, we were able to offer a Virtual factory acceptance test (FAT) which comprised testing, simulation and eventual acceptance – all within a virtual environment. The Virtual FAT was very long, but proved beyond doubt that smart digital technology is the way to go.”

The co-flow line, where products and cartons move at the same speed and direction, comprises two primary interconnected modules – FA series two head box-forming machines and IG Series multi-Delta, vision-guided robotic loading units. In



operation the teacakes exit a cooling tunnel at a rate of 400 products per minute, in multiple rows on a main transport conveyor. Upon entry to the IG series packaging machine, a vision system ascertains the individual product's positions on the belt and this data is fed to the central PLC for disbursement to the eight robots along the 10 m long packaging area. The products, which are still at 20 °C, are gently picked and placed into cartons (pre-assembled by the FA Series machines) running on a track parallel to the main conveyor. A subsequent vision system is used to ascertain optimum filling, before two more robots are used to close and seal the cartons in multiples based on the format count. After weighing and metal detection the filled cartons are transported to a tertiary packer.

"The entire run is visible and controllable using a single Allen-Bradley HMI from Rockwell Automation," Rocca explains. "What is more, this machine has been developed to allow the addition of two more robots, meaning that the production and packaging speeds could go up by as much as 20%. As these machines are designed to package 'nude' products, hygiene was a primary requirement too. As a result, we equipped them with features that prevent contamination and all components are designed specifically for food industry applications, based not only on global standards, but local Peruvian standards too."

"With such a demanding production environment, you might think that changeover times could be an issue," Rocca adds, "especially seeing as the customer packages in three different product counts – 2, 9 and 20. 20 makes up 60% of production with 2 at just 5%. The products are still the same, only the box size changes. Using change guides and phasing units, where the feed is automatically controlled by servo motors, switchover is straightforward, with all the instructions being delivered from the HMI. The closing unit needs changing too. From first forming unit to second closing robot, with two operators, the whole process takes just 30 minutes, which is impressive for such an entire line, especially when you consider that a standard case packer takes 20 minutes to change!" 

www.camagroup.com



पैकेजिंग मशीनों और रोबोटों की अपनी अनूठी श्रृंखला के साथ 1981 में स्थापित कामा समूह, उन्नत प्रौद्योगिकी अंतःपंक्ति पैकेजिंग सिस्टम का तेजी से बढ़ता अग्रणी आपूर्तिकर्ता है, जो लगातार नवीन समाधानों में निवेश कर रहा है। हम प्राथमिक पैकेजों से पैलेटाइजिंग और फूड (बेकरी, कन्फेक्शनरी, कॉफी, आइसक्रीम, डेयरी, रेडी मील, किराना), नॉन फूड (पर्सनल, हेल्थ एंड होम केयर) और पेट फूड उद्योगों की सेवा के लिए तैयार किए गए प्राइमरी पैकेज तक पूरी तरह से एकीकृत पैकेजिंग लाइनों की पेशकश करते हैं। हमारा वैल्यू पैक - पैकेजिंग कंसल्टिंग, प्रोजेक्ट मैनेजमेंट, सस्टेनेबल एफिशिएंसी, आपटर सेल्स सर्विस और सपोर्ट पर आधारित है।

कामा पैकेजिंग विभाग पैकेजिंग पेपरबोर्ड और कार्डबोर्ड के डिजाइन और परीक्षण में तीस से अधिक वर्षों का अनुभव प्रदान करता है।

हम उत्पाद की विशेषताओं, पैकेजिंग सामग्री और अंतिम उपयोगकर्ता की आवश्यकताओं के संबंध में सर्वोत्तम संभव पैकेजिंग समाधान का अध्ययन करते हैं, जिसमें स्थिरता और सामग्री लागत दोनों को कम करना शामिल है।

दुनिया भर में 6 सहायक (अमेरिका, चीन, ऑस्ट्रेलिया, फ्रांस, ब्रिटेन और उत्तरी यूरोप) और वार्षिक अनुसंधान और विकास निवेश (वार्षिक कारोबार का 5% से अधिक) 4.0 उद्योग में, जिस में प्रक्रिया वर्चुअलाइजेशन, इंजीनियरिंग, मशीन कमीशन, तकनीकी समाधान, अल्ट्रा-कॉम्पैक्ट रैप-अराउंड केस पैकिंग मशीनों की एक नई श्रृंखला और रोबोटिक्स में नवाचार शामिल हैं।



2 models available:

600 mm stroke
180 kN clamping force

800 mm stroke
250 kN clamping force

The new Alphamac extrusion blow molding machine

Full electric

Greater production
flexibility

Easy tooling
changeover

Easy process
features

Predictive
maintenance

Compact footprint

4.0 Industry inside

www.alphamac.it



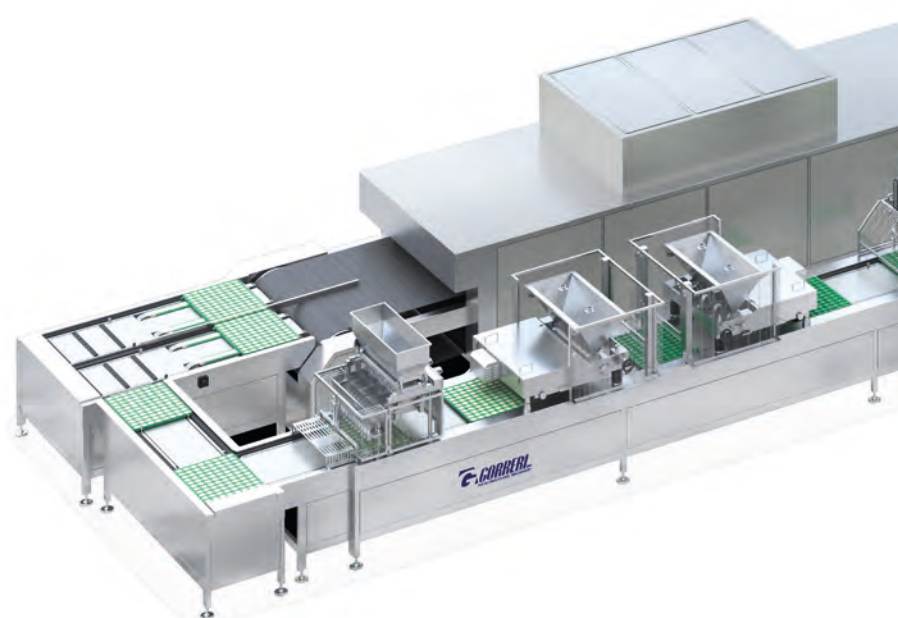
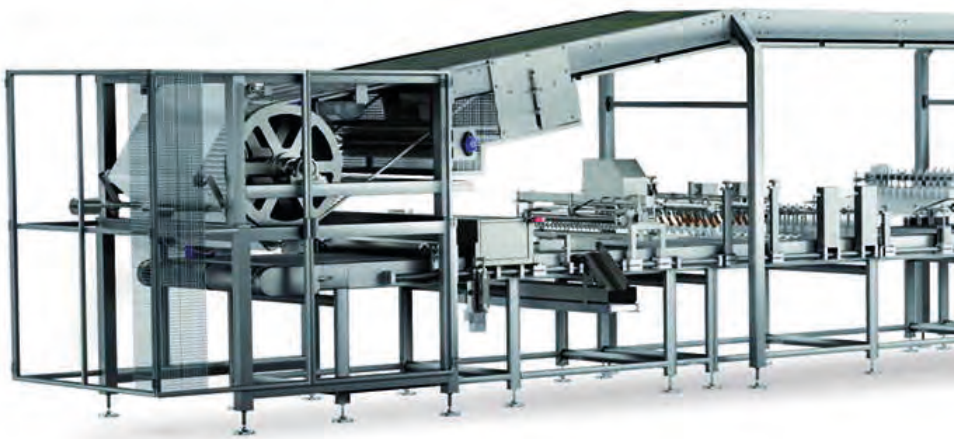
A UNIQUE AND COMPLETE HIGH-TECH WORLD

GORRERI Food Processing Technology® is world-wide known for its ability to manufacture customized and designed turnkey solutions and to produce machineries and technologies unequaled 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.

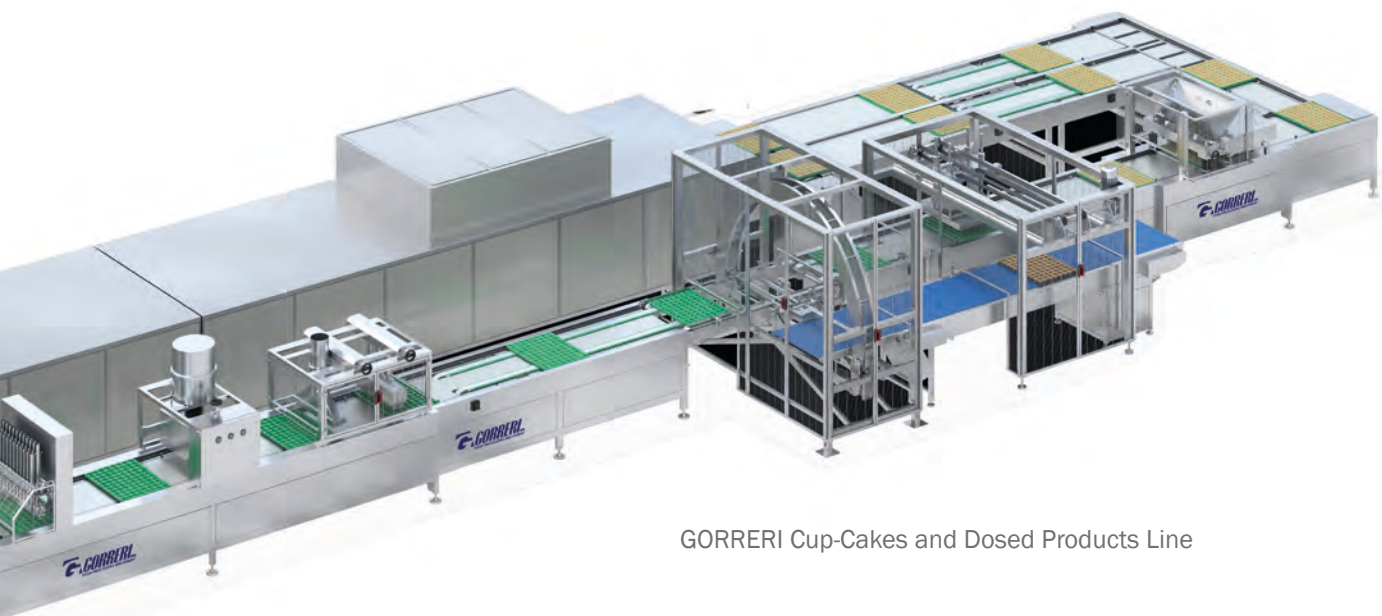
MATCHLESS MIXING SYSTEMS. GORRERI TURBOMIXER®, the famous and unique turboemulsifier with vertical head is an innovative in-continuous mixing system, fruit of many years of experience that through a bright solution like VERTIMIX TECHNOLOGY® is able to emulsify, in few minutes, batters, cream, mousse, 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



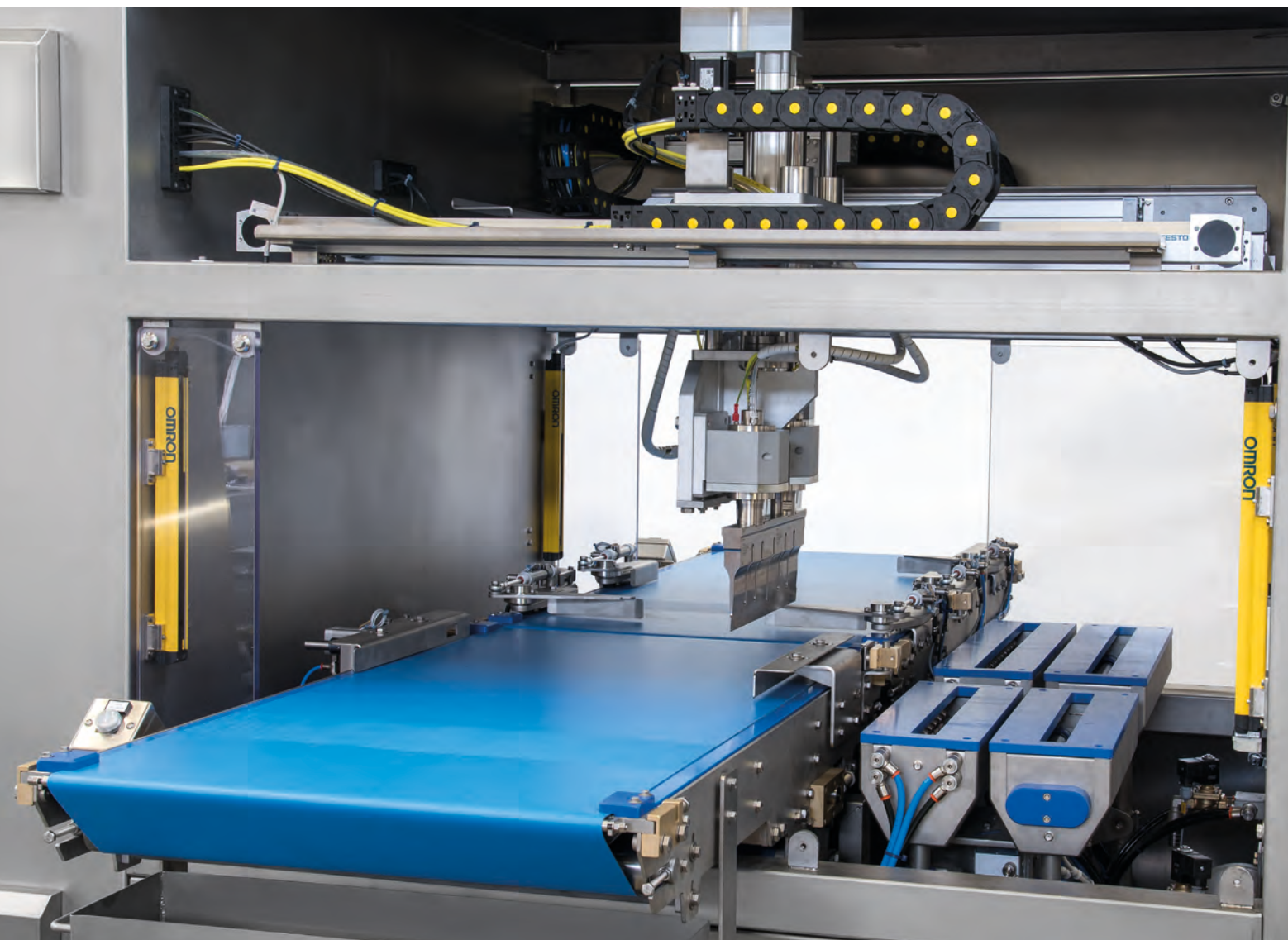


GORRERI Sponge-cake Line



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 known for PLANETMIXER SERIES®, a range of indestructible pressurized planetary mixers, available in 6 different capabil-





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



Gorreri TURBOMIXER GMG Series

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

BOSS, AN UNCOMPROMISING OVEN

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

For 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

a perfect cooking...always



BAKERY AND PASTRY EQUIPMENT
FORNI E ATTREZZATURE PER PANIFICI




realforni.com



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।



COLUSSI ERMES

Advanced Washing Systems

Designed specifically for the confectionery sector, the Colussi Ermes pan washing systems are constructed according to extremely high quality protocols and can be customized based on the technical-production requirements of the customer.

Equipped with high pressures to ensure complete removal of any residue, they ensure the perfect integrity of the product even after numerous washing cycles. These pan washing systems ensure maximum hygiene, eliminating any bacteria, even the most aggressive, according to pharmaceutical/hospital hygiene standards.

Continuously innovating to improve your safety

COLUSSI ERMES is a worldwide leader in the design and manufacture of tailor made washing systems in various food sectors, such as the bakery, confectionery, chocolate, meat and dairy, and also in logistics, pharmaceutical, hospital and automotive Industry.

Every project is extensively studied, customized and developed by Colussi Ermes specialists in order to ensure the absolute hygiene fully satisfying the most severe and rigorous international standards HACCP.



Colussi Ermes - Via Valcunsat 9
33072 Casarsa della Delizia (PN) Italy
Tel: +39 0434 86309
www.colussiermes.com

COLUSSI ERMES TAKES CARE OF YOU AND YOUR LOVED ONES!



In this difficult moment for the entire world, the Colussi Ermes team joins its clients, suppliers and partners in this great battle. The company highest priorities are scrupulous care, safety and the well-being of its Clients, employees and partners as well as food-safety.

In the production and distribution of food and in the pharmaceutical-hospital sector, ensuring hygiene is an essential requirement to guarantee and protect the health and safety of consumers.

This is one of the reasons why leading companies world-wide trust Co-

lussi Ermes' systems. Now, more than ever, it's important for Colussi Ermes to ensure the highest hygiene levels on all products washed by its incomparable washing systems.

Colussi Ermes is a global leader in the design and production of tailor-made washing machines: innovative design, rounded shapes, accurate details, high-efficiency and ongoing pursuit of perfection allow the achievement of absolute hygiene. Thanks to experience, research and know-how – with over 5000 machines supplied worldwide – Colussi Ermes has become over the years the best choice that

this sector's demanding clients can make to be completely certain of their equipment and food safety level.

Colussi Ermes is a modern and dynamic brand with an exceptional capability of addressing an ever-changing market and any need of the world current situation. Values such as innovation and organization guarantee competitiveness, flexibility and the best quality to protect every product that needs to be washed along with everyone's safety.

New technologies in the service of hygiene.



COLUSSI ERMES Advanced Washing Systems

For the benefit of hygiene, the systems manufactured by Colussi Ermes have innovative Clean In Place (CIP) self-wash programs that preserve and clean the production lines by removing organic and inorganic contaminants.

CIP is a self-washing automatic system for all circuits, walls and key points of the machine which does not require disassembly.

This is carried out through the spraying of detergent fluids at a

specific pre-set and constantly monitored concentration, pressure and temperature, followed by careful washing and sanitization phases.

The specialized Colussi Ermes systems fully satisfy the most severe and rigorous international HACCP hygiene standards.

Colussi Ermes is continuously innovating to improve your safety

www.colussiermes.com 



LASER: COMPLETE PLANTS FOR FOOD INDUSTRY AND BAKERY PRODUCTS

Laser 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.

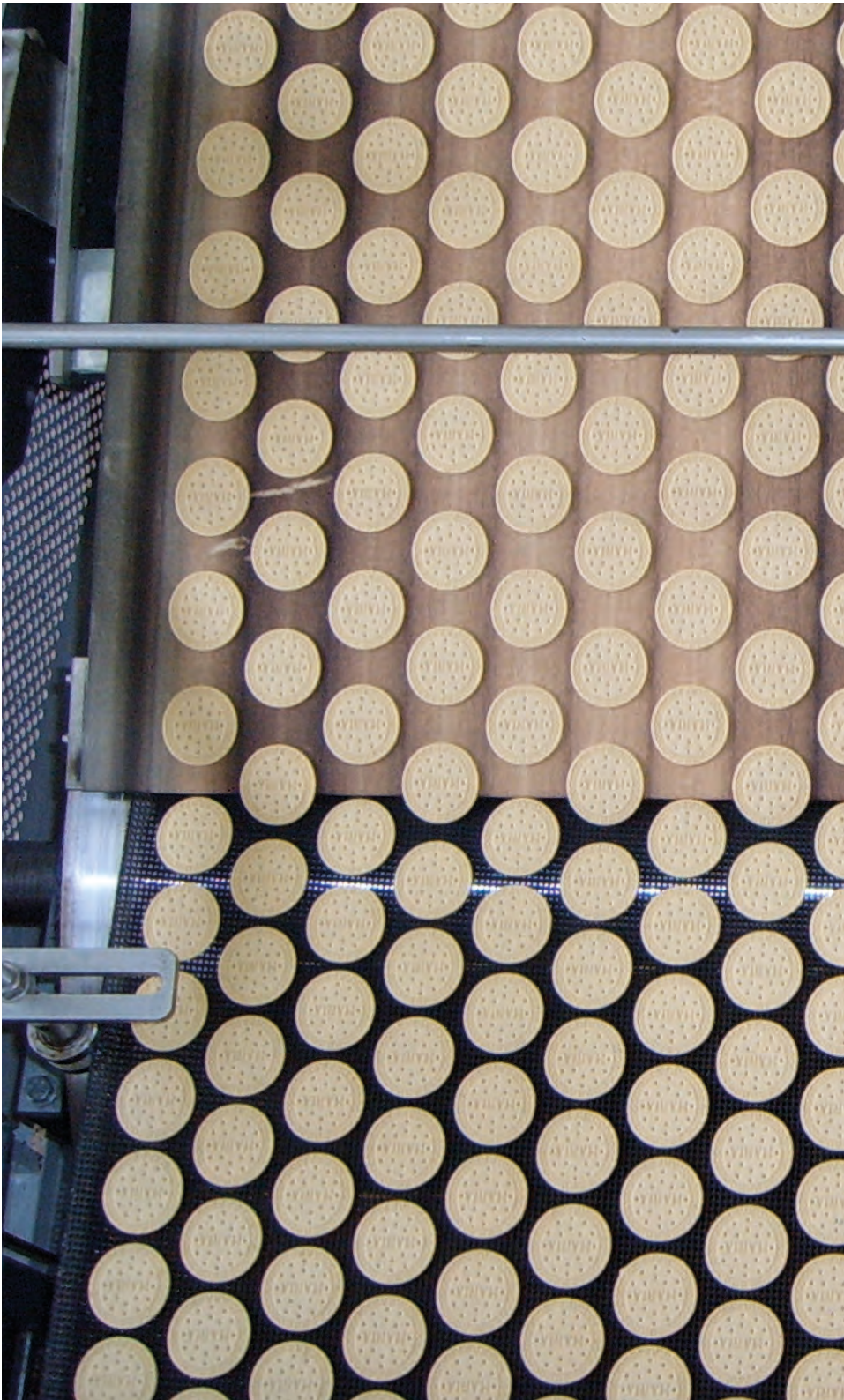
Thanks to its remarkable propensity for export and to the tailor-made, each line is taken care and customized in every single detail according to the requests of the customer and to the characteristics of the final product.

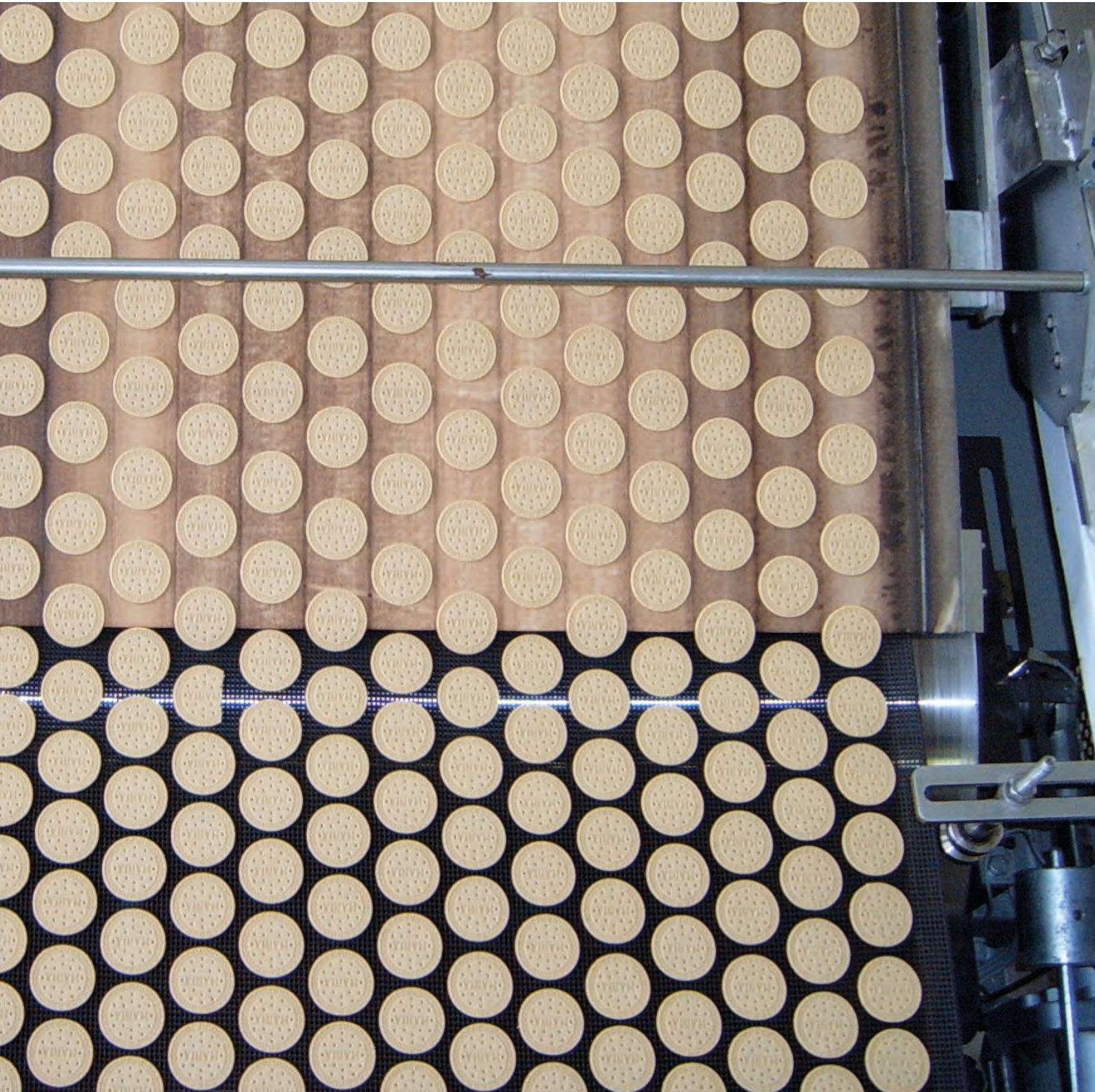
With more than 500 production lines installed in more than 200 countries worldwide with a strong presence in emerging markets even with local production units, the company aims to become a reference point for technological innovations in machinery for bakery products.

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







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. 🏭





Supplying Mixing Solutions



MAS

The new automatic Carousel, that can be made of various personalized stationings, has been projected to face high productivity needs. Thanks to its versatility, it can include: a station of ingredients loading, one or more dough stationings with a mixer (with one or double spiral) and a resting bowls exit and a discharging stationing with a lifter.

**GOLD LINE
BOTTOM DISCHARGE
SPIRAL MIXERS**



The new Removable Bowl Industrial Mixers double or single spiral of VE TAURO series machines are suitable for high production lines, for applications which demand high performance and great professionalism. Able to perform **4-5 doughs/hr with a single spiral or 8-10 doughs/hr with the double spiral are ideal for baking doughs**. They provide significant increase in development process, due to the excellent refining and oxygenation of the dough. The engines ranging from 25kw to 50kw, depending on the models, provide a large power reserve and ensure the torque required in the most demanding situations.

>>> >>> >>>

The Automatic Systems for the Management of Dough Rest Process in the Tank allows the integration of all the Automated Mixing Solutions produced by SIGMA with a System where a six-axis robot manages the dough rest process of the dough in the tank, placing the tanks on one or more shelving that can be located even in a pre-rising prover and/or proofing chamber. The project can be in various configurations being different in size, capacity and hourly production capacity, having the possibility to integrate all SIGMA standards machines, in different types and sizes.

<<< <<<



CAROSSELLO



>>>

The spiral mixers with bottom bowl discharge enable the dough discharge directly on a conveyor belt or into removable bowl. This device makes them very versatile and enables them to be used in all the dough processes. In this way any problems of handling and of the lay-out of the production processes can be solved.

<<< <<<



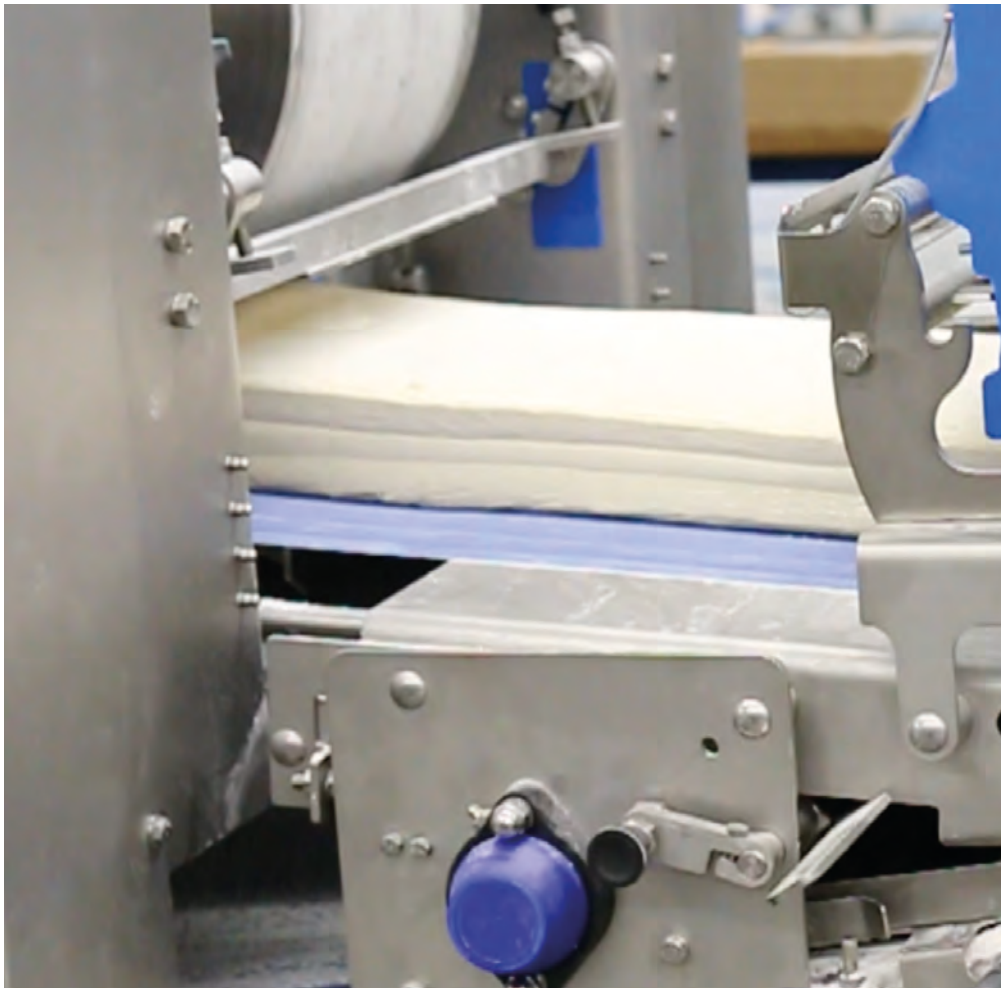
TAURO

www.sigmasrl.com

Sigma Srl - Via Artigianato, 85 - 25030 Torbole Casaglia (BS) - Italy
Tel. +39 030 2650488/479 - Fax +39 030 2650143 - info@sigmasrl.com

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

What 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.

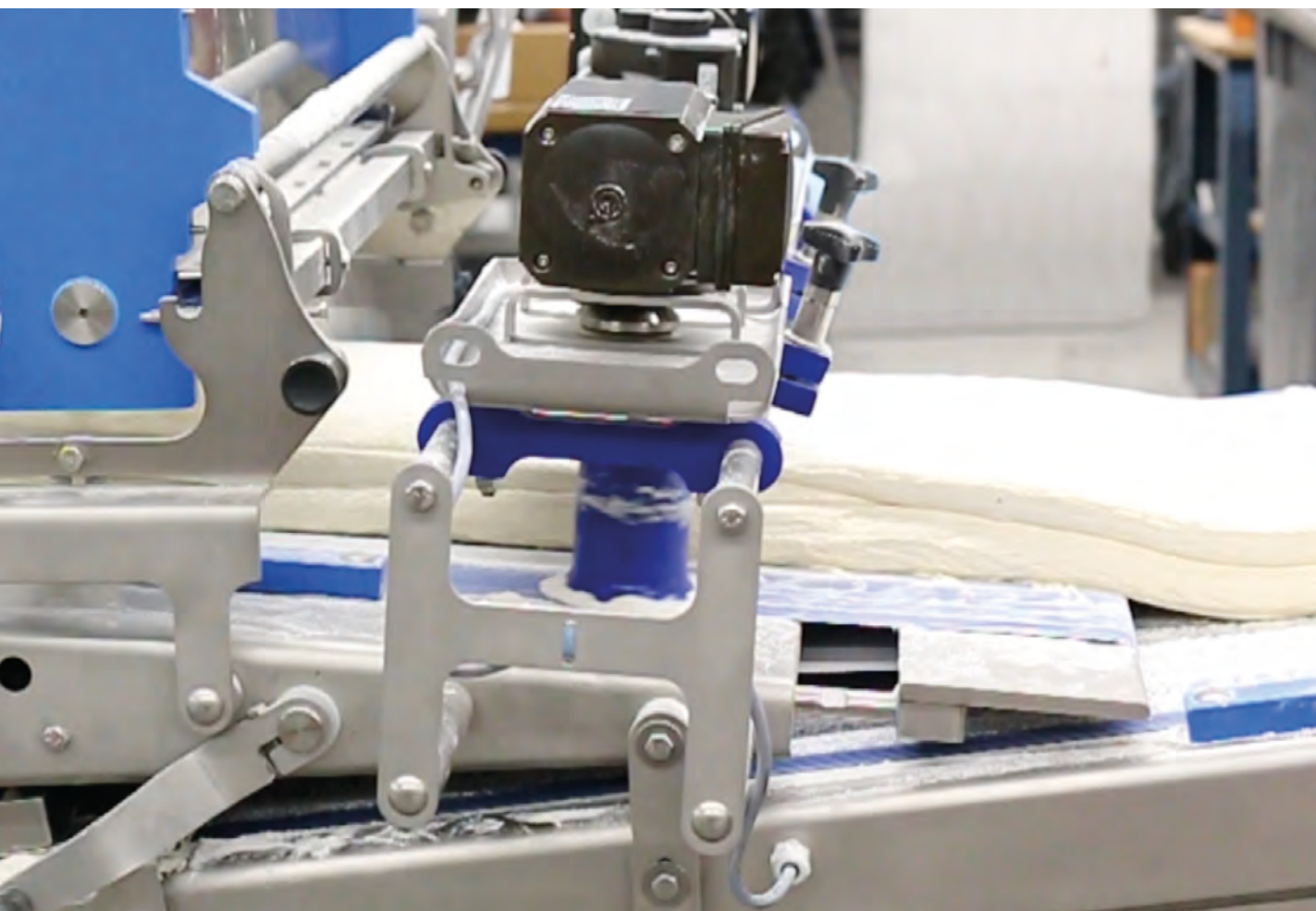
Unique pre-sheeting system

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



INTERPORTO TOSCANO AMERIGO VESPUCCI: SERVING THE BUSINESS COMMUNITY OF TUSCANY AND CENTRAL ITALY

Located beside the historic port of Livorno between Europe and the Mediterranean, and centrally placed in an infrastructure system that links Tuscany to the rest of Europe, Interporto Toscano Amerigo Vespucci covers an area of 3 million square metres, serving the business community of Tuscany and Central Italy.

A strategic position for logistics, the hub includes a 130,000 sq.m. railway terminal, designed and built to provide highly rationalised services for the transport of containers and trailers.

Along with the Port of Livorno, the site is a strategic hub for major sea routes and an important point for shipping in the Mediterranean, thus rationalising and limiting goods transport by road.

Interporto Toscano Amerigo Vespucci is fully operational and has attractive development potential, being a genuine nerve centre for Tuscany's logistics platform.

The goal of Interporto Toscano Amerigo Vespucci is to create an increasingly open intermodal area, guaranteeing growth and high-quality services. The main areas for strategic development are as follows:

- Increase railway links with the major national hubs, in particular the Collesalveti-Florence connection, a candidate for CEF funding
- Build new opportunities for industry by creating favourable conditions to attract business and increase employment
- In collaboration with the Piombino-Livorno Port Authorities, develop the central role of Interporto as a

vital zone behind the port, serving the Tuscan Port Authority

- Construct buildings fitted with systems that use renewable energy
- Prioritise environmental impact and landscape equilibrium.

One of the ten largest ports in Italy, Interporto is embarking on a programme to transform energy consumption by means of regeneration and photovoltaic systems, to become a site powered by green energy. In addition to the environmental benefits, this will result in savings and new business, while safeguarding the environment; excess production can be sold, as the new systems will produce more than enough energy for the interport depot. 2,000 square metres of photovoltaic panels will be installed on the roof of the refrigerated sections, and regeneration systems will make the solar panel system more reliable, stable and safe by the introduction of a minimum basic load; it will also provide electricity to

the office buildings and other structures.

Benefitting from 20% funding by the CEF, the Truck Village project near the Fi Pi Li motorway exit will cover an area of 40,000 square metres and include 276 spaces for trucks and facilities for their drivers 24 hours a day, with accommodation, bar, restaurant and controlled access.

This project is Interporto's response to the demand for secure service areas, known as SSTPA (safe and secure parking places for trucks); there is currently just one certified site in Italy.

In Livorno, the primary hub for RORO traffic and the major sea routes, the lack of secure parking places for trucks often results in confusion and disorder not only within the port areas, but also in the urban surroundings. The planning phase for this project is fully complete. 🏢

www.mhmaterialhandling.com





CONVEYORS

MH is an Italian Company with 30 years of experience in engineering and building conveyor lines for food packaging. It's product portfolio goes from conveyors for machine connection, elevators, mergers and whatever accessory may be needed to realize a turnkey plant.



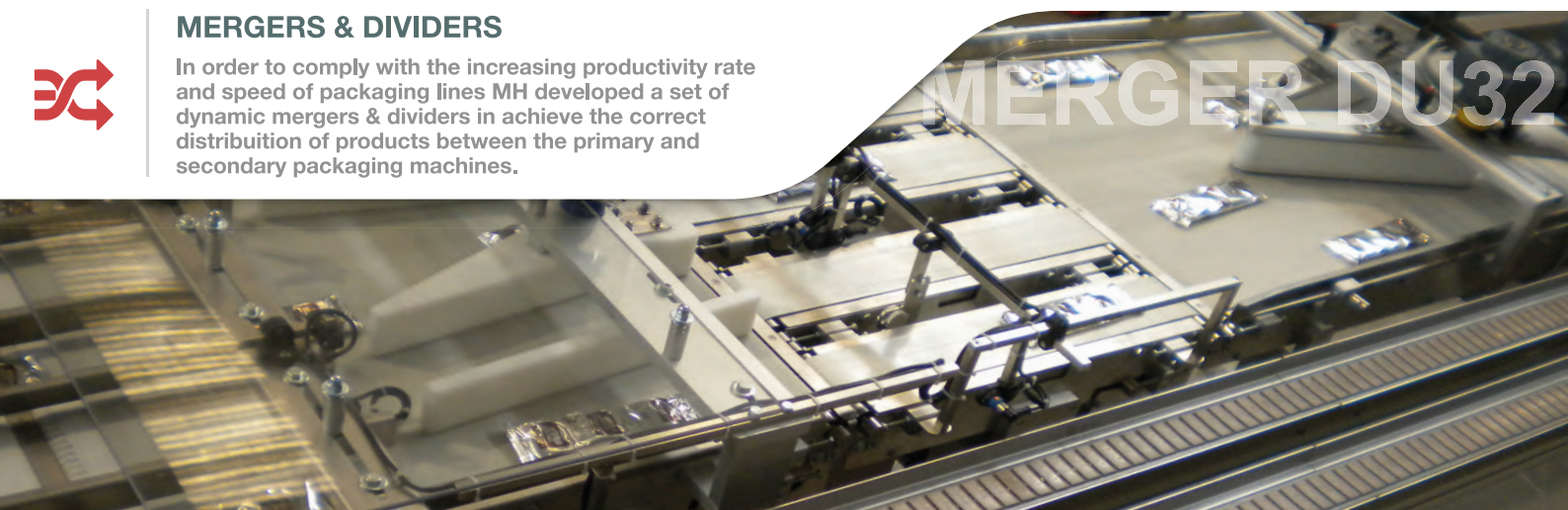
BUFFERING SYSTEMS

MH is specialized in buffering solutions LIFO zero pressure both with single or double spiral for packaged product or FIFO with multiple belt for the naked one.



MERGERS & DIVIDERS

In order to comply with the increasing productivity rate and speed of packaging lines MH developed a set of dynamic mergers & dividers in achieve the correct distribution of products between the primary and secondary packaging machines.



MH HANDLING THE PRODUCTION OF CHOCOLATE

The production of chocolate presents an initial phase of the process common to practically all types of end product, from the classic tablets, passing through the so-called hollow figures (eggs and Easter bunnies for example) up to the more elaborate pralines. The modelling phase is probably the most fascinating, in which the industrialization of processes shows the most creative solutions, necessary to replicate the best chocolatier products. Modelling is characterized by products that travel in particular moulds and trays, therefore there are no particular differences between one product and another in handling technology.

Things change radically when you move on to the packaging phase, in which the chocolate is removed from the moulds, an activity called depanning. Here, depending on the type of product and packaging, it can be transferred directly onto conveyor belts or onto trays called counter-plates or counter-moulds, to feed the primary packaging machines.

There are basically four types of power systems and MH is capable to make them all:

- For small and full eggs, balls and candies, bulk feeding systems are used with belt conveyors that carry the product in bulk up to the centrifugal or vibrating orientation systems that load the wrapping machine
- For hollow eggs or elaborate or delicate pralines the product remains on the counter-plates until it is loaded on the packaging machine, usually with a pick and place
- For small flat-bottomed chocolates, conveyor belts with a chicane system are the go to option, which align and distributes the products to the various wrapping machines
- For chocolate bars and bars in general the classic line feeding system is used which can load both wrapping machines and flowpacks

For all these systems it is possible to create **Buffers or Storage Systems**. In the case of the bulk feeding system, it is only a question of having enough space available in terms of conveyor belts to keep the volume of products required in circulation. The counter-mould feeding sys-

tems use the classic **Pater Noster Buffer**, which is also the simplest in terms of management and the least cumbersome in the factory.

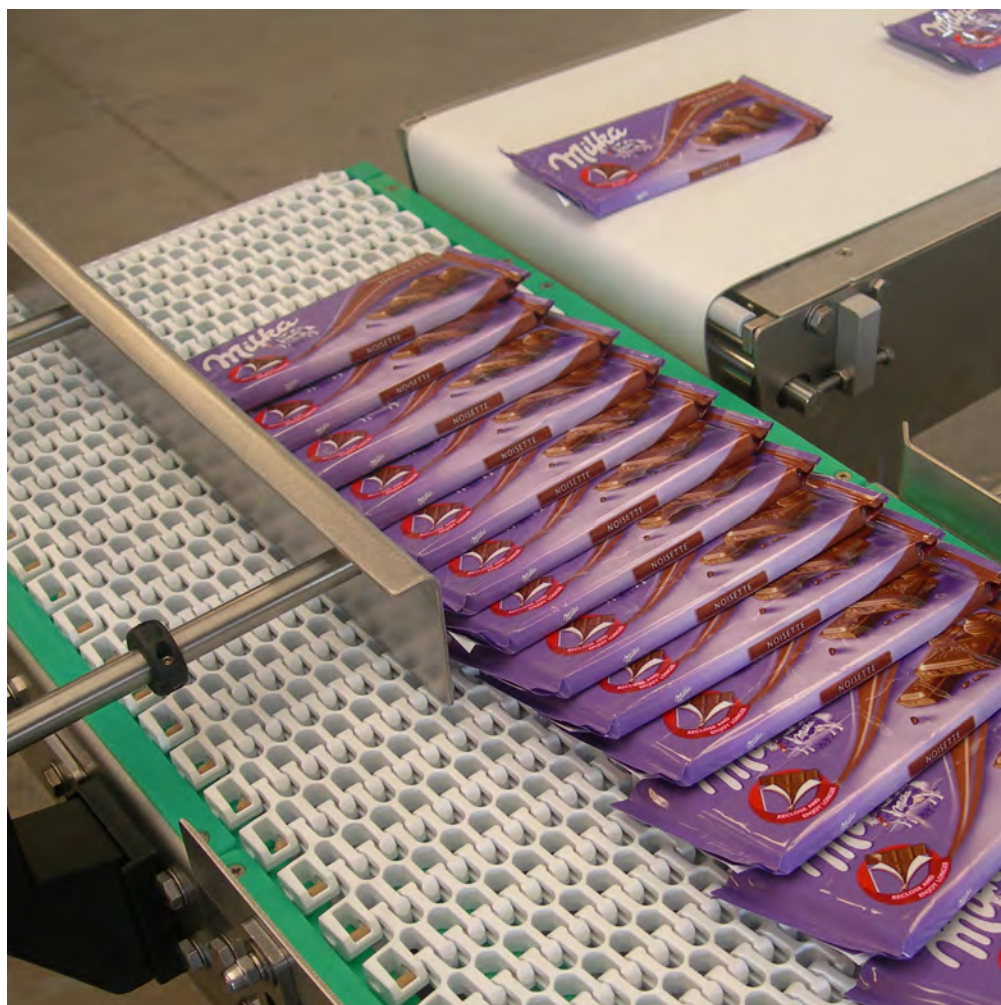
In the other two cases you can use the so-called Gondola Buffer, which has the advantage of being a FIFO and having a relatively small footprint, but the cost of one of these devices makes it justifiable to have an extra packer to keep on standby. MH prefers to opt for a **Multi-Layer Belt Buffer**, which remains a FIFO, but has a much less onerous economic impact than a Gondola. On the other hand, to use this type of





system takes away much more footprint inside the plant.

Once out of primary packaging, as always happens for other markets, the type of secondary drives the choice of the following accessories and transport systems: eggs and pralines are often packed in vertical flow-packs and require **simple clamps elevators**, other types of chocolates are placed in a tray, in a box or in a box and require pick and place systems, possibly with robotic vision, in this case there are often **divider**



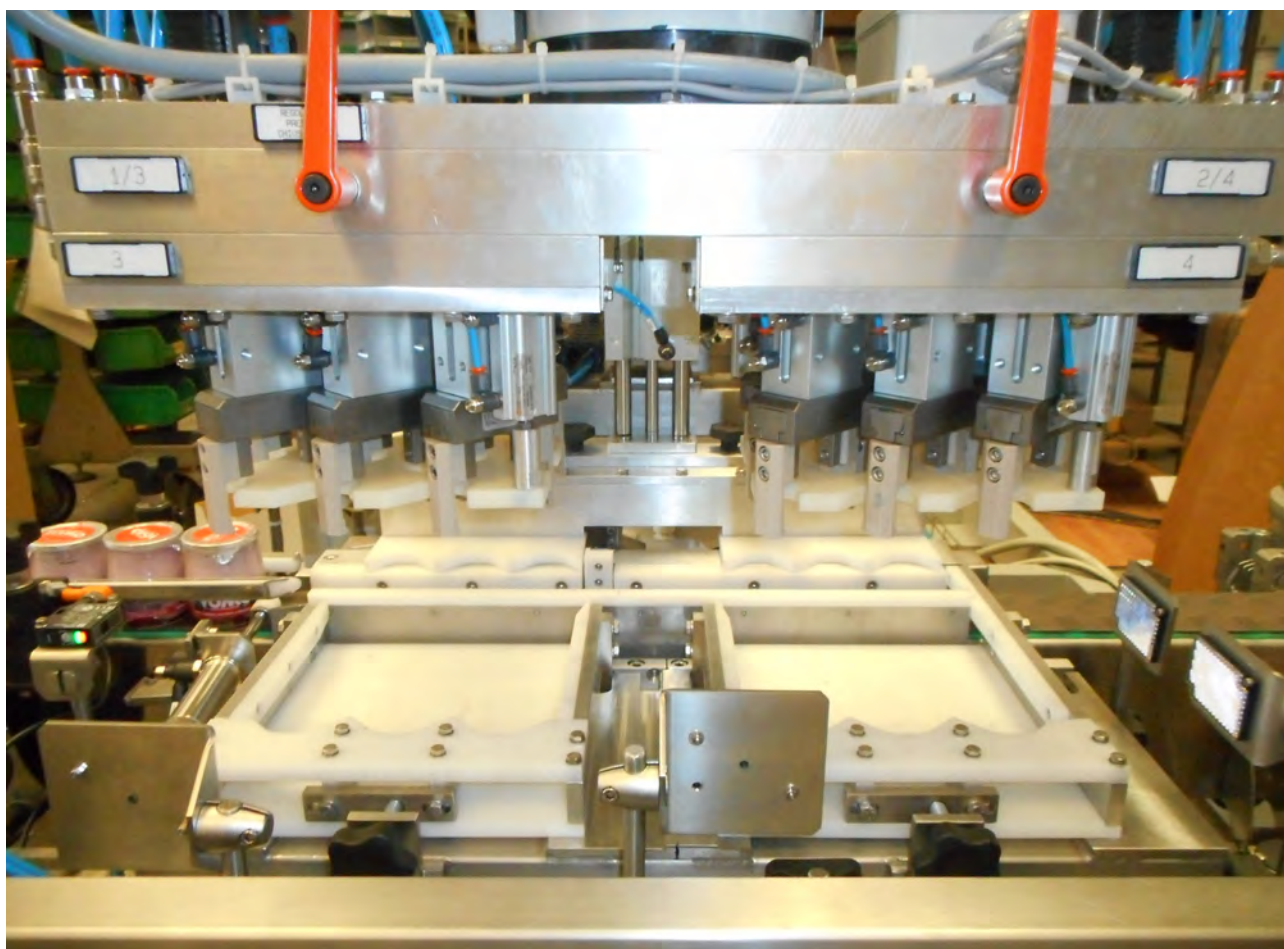
systems. Eggs and cables in general are placed in light moulded plastic trays, which then go into an outer carton envelope, called displays, which end up directly in the shops. The conveyor belts that MH uses for this type of packaging is typically of **modular chain**, with the same precautions that are found for boxes at the end of the line. Finally, the tablets go in a box or cardboard display, the secondary machine is typically a system with an ordering system (or race track) and is accompanied at the entrance with a **fast merger system**.

Going towards the end of the line it is possible to meet again Buffers, but given the level of investment it is more likely that the machines used for the naked product also compensate the idle stops from the secondary packaging forward. Finally, the boxes transport and feeding belts to the palletizer see the usual technologies applied, from the **roller belts or friction roller conveyors** for the accumulation sections to the **activated roller belts** for sorting and layer formation. 🏢

www.mhmaterialhandling.com

BONDANI SRL: THE CUSTOMER AND HIS NEEDS AT THE CENTRE

Thanks to its long experience and great flexibility, Bondani Srl is able to analyse the customer's needs and create tailor-made solutions to meet any type of production requirement



There are plenty of solutions that a company operating in the handling, cartoning and end-of-line industry can offer to its customers.

However, to identify and develop the most suitable option, it is essential to put into practice an appropriate process of analysis and study.

It takes a high degree of technical expertise to do that as well as analytical skills and the relevant know-how to transform the project into reality: working in close collaboration with the customer, Bondani has been able to respond to the most complex handling requirements.

"One of the most difficult yet most rewarding projects we have carried out

so far - says the owner Alessio Bondani - was the one we realized for an important food company that decided to automatize a line of yoghurt in glass jars, which up to that moment was mostly manual, making a significant investment".

The automation of the line had to take into consideration some critical



aspects, such as the lack of space and limited floor loading capacity.

“We have done an amazing job of technical analysis together with the customer - underlines the owner of Bondani S.r.l - to figure out where to place the machines and distribute the weight in the best way but always trying to optimise the company's production flow”.

We have developed a system that provides for the mechanization of the entire workflow: the automatic palletizer for empty jars, the conveyor belts to the filling machines, the cardboard boxes forming machine, the “pick and place” system with anthropomorphic robot for filling the boxes and the automatic palletizing island. It was a major

investment, a multifaceted project of great impact, which has led the company to significantly increase its production capacity.

“We managed to achieve this result thanks to the commitment and constant interaction between customer and supplier - Alessio Bondani points out - because, on the one hand, we have had helpful suggestions from the people who have been running the line for years; on the other hand, our experience and expertise have made it possible to find the right solu-

tion and solve the various problems”. Today the automated line is fully functional and the customer manages it autonomously.

“However, the job is not finished: - concludes Bondani - we are always ready to improve the line according to the customer's needs.

This is the way we work and it is the way we manage to achieve the best results, for us and our customers”. 🏢

www.bondani.it

BONDANI
PACKING SYSTEMS

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.



MECSPE

29-31/10/2020

PARMA

Fair for innovations for the manufacturing industry



BRAU BEVIALE

10-12/11/2020

NUREMBERG

Fair of production of beer and soft drinks.



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.



INTER SICOP

20-23/02/2021

MADRID

Fair for bakery, pastry, ice cream, coffee.



ProWein 2020

21-23/03/2021

DUSSELDORF

International wine & spirits exhibition.



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.



PROSWEETS

31/01-03/02/2021

COLOGNE

Fair for the sweets and snacks industry.



INTERPACK

25/02-03/03/2021

DÜSSELDORF

Fair for packaging, bakery, pastry.



BEER&FOOD ATTRACTION

11-13/04/2021

RIMINI

Fair for beers, drinks, food and trends for the out of home.



LATINPACK

14-16/04/2021

SANTIAGO CHILE

International packaging trade fair.



MIDDLE EAST 2020/21

DUBAI DRINK TECHNOLOGY EXPO

25-27/03/2020

DUBAI

Fair for the beverage industry.



PROPAK ASIA

17-20/06/2020

BANGKOK

Fair for packaging, bakery, pastry



GASTROPAN

21-23/06/2020

ARAD

Fair for the bakery and confectionery industry.

DJAZAGRO

21-24/09/2020

ALGERS

Fair for companies of the agro-food sector.



PROPAK VIETNAM

09-11/09/2020

SAIGON

Fair for packaging, bakery, pastry.



IRAN FOOD BEV TEC

04-07/10/2020

TEHRAN

Fair for food, beverage&packaging technology.



HOSPITALITY QATAR

10-12/11/2020

DOHA

Fair of Hospitality and HORECA



GULFOOD

21-25/02/2021

DUBAI

Fair for food and hospitality.



ANUTEC

15-17/09/2021

NEW DELHI

Fair for the food&beverage industry.



WOP DUBAI

11/2021

DUBAI

Fair for for fruits and vegetables.



GULFOOD MANUFACTURING

07-09/11/2021

DUBAI

Fair for packaging and plants.



GULFHOST

07-09/11/2021

DUBAI

Fair of hospitality.



PACPROCESS FOOD PEX

09-11/12/2021

MUMBAI

Fair for product from packaging.



EXHIBITIONS - EXHIBITIONS

EXHIBITIONS

2020-2021-2022

VINITALY

18-21/04/2021

VERONA

International wine & spirits exhibition.



SPS/IPC DRIVES/ITALIA

05/2021

PARMA

Fair for manufacturers and suppliers in the industrial automation sector.



MACFRUT

04-06/05/2021

RIMINI

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



CIBUS

04-07/05/2021

PARMA

Fair of food product.



MEAT-TECH

17-20/05/2021

MILANO

Fair for the meat and ready meals industry.



FRUIT LOGISTICA

18-20/05/2021

BERLIN

Fair for fruit and vegetables.



HISPACK

18-21/05/2021

BARCELONA

Technology fair for packaging.



FISPAL

06/2021

SÃO PAULO

Fair for product from packaging.



FACHPACK

28-30/09/2021

NUREMBERG

International packaging trade fair.



SAVE

10/2021

VERONA

Fair for automation, instrumentation, sensors.



DRINKTEC

04-08/10/2021

MONACO

Fair for the beverage and liquid food industry



HOST

22-26/10/2021

MILANO

Fair for bakery production and for the hospitality.



IBA

23-28/10/2021

MONACO

Fair for the bakery and confectionery industry.



SIMEI

16-19/11/2021

MILANO

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



ANUGA FOODTEC

26-29/04/2021

COLOGNE

Fair on food and beverage technology.



IPACK-IMA

03-06/05/2022

MILANO

Exhibition for the packaging industry.



POWTECH

30-08/01-09/2022

NUREMBERG

The trade fair for powder processing.



SIAL

15-19/10/2022

PARIS

Fair on food products.



SUDBACK

22-25/10/2022

STUTTGART

Fair for bakery and confectionery industry.



ALL4PACK

11/2022

PARIS

Exhibition about packaging technology.

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

23-25/03/2021

MOSCOW

International trade fair for the beverage industry.



ACM ENGINEERING SRL**1-8**

Via Don A. Camera, 25
21020 Bardello - VA - Italy

**BERRYPLANT DI GRISENTI
MARIA MADDALENA &
C. SOCIETÀ SEMPLICE
AGRICOLA**
40/42

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

**BERTUZZI FOOD
PROCESSING SRL**
35/36

Corso Sempione, 212bis
21052 Busto Arsizio - VA
Italy

BONDANI SRL**96/97**

Via Romanina, 3
43015 Noceto - PR - Italy

**C&G DEPURAZIONE
INDUSTRIALE SRL**
38/39

Via I° Maggio, 53
50067 Rignano S. Arno - FI
Italy

CAMA GROUP**2- 70/72**

Via Como, 9
23846 Garbagnate Monastero
LC - Italy

CC TECHNOLOGY SRL**65**

Via A. Costa, 4
21012 Cassano Magnago - VA
Italy

COLUSSI ERMES SRL**81/83**

Via Valcunsat, 9
33072 Casarsa della Delizia - PN
Italy

ENOMET IMPIANTI SRL**37**

Via dei Laghi, 18/E - Calcinelli
61036 Colli al Metauro - PU
Italy

**GEA MECHANICAL
EQUIPMENT ITALIA SPA**
25/28

Via A. M. da Erba Edoari, 29
43123 Parma - Italy

GIUSTO FARAVELLI SPA**20/21**

Via Medardo Rosso, 8
20159 Milano - Italy

GORRERI SRL**74/77**

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

GRACO**9/11**

Slakweidestraat 31
Oude Bunders
3630 Maasmechelen Belgium

HERTI**49/52**

38, Antim I Str. 9700
Shumen - Bulgaria

**INTERPORTO TOSCANO
AMERIGO VESPUCCI SPA**
92

Strada Prima, 5 - Loc. Guasticce
57017 Collesalveti - LI - Italy

INTERPUMP GROUP SPA**29/31**

Via Giambattista Vico, 2
(Ingresso Via Pietro Micca, 2)
42124 Reggio Emilia - RE - Italy

ISHIDA**61/62**

11 Kettels Wood Drive Woodgate
Business Park - B32 3db
Birmingham - United Kingdom

M.H. MATERIAL HANDLING SPA**93/95**

Via G. di Vittorio, 3
20826 Misinto - MB - Italy

**NVC - NEDERLANDS
PACKAGING CENTRE**
53/56

Stationsplein 9k - Po Box 164 2801
AK - Gouda - The Netherland

OMAG SRL**57/58**

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

PETRONCINI IMPIANTI SPA**47/48**

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

PIGO SRL**32/34**

Via dell'Edilizia, 142
36100 Vicenza - VI - Italy

PND SRL**43/44**

Via Brancaccio, 11
84018 Scafati - SA - Italy

RADEMAKER BV**88/91**

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

REAL FORNI SRL**78/79**

Via Casalveghe, 34
37040 Gazzolo d'Arcole - VE
Italy

**ROCKWELL
AUTOMATION SRL**
66/69

Via Ludovico di Breme 13°
20156 Milano - Italy

SIGMA SRL**87**

Via Artigianato, 85
25030 Torbole Casaglia - BS -
Italy

SMI SPA - SMI GROUP**3/7**

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

TECNOPOOL SPA**45/46**

Via M. Buonarroti, 81
35010 S. Giorgio in Bosco - PD
Italy

BEUMERGROUP

BEUMER stretch hood® A

SOME THINK PACKAGING SYSTEMS TAKE A LOT OF SPACE. WE THINK DIFFERENT.

At BEUMER, we like to start with something good and make it better and better. Take our new transport packaging system BEUMER stretch hood® A. It's surprisingly compact – only 13.7 m² – and combines our proven stretch hood process with energy-saving motors. You get top performance from the improved process technology and save on power costs, too. For a new dimension in machine safety, operation and maintenance, switch to the innovation of BEUMER stretch hood® A.

For more information: www.beumergroup.com



www.editricezeus.com

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

