

it. MAGAZINE

FOOD

processing

beverage & packaging

PROCESS
AND PACKAGING

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n° 5-2020



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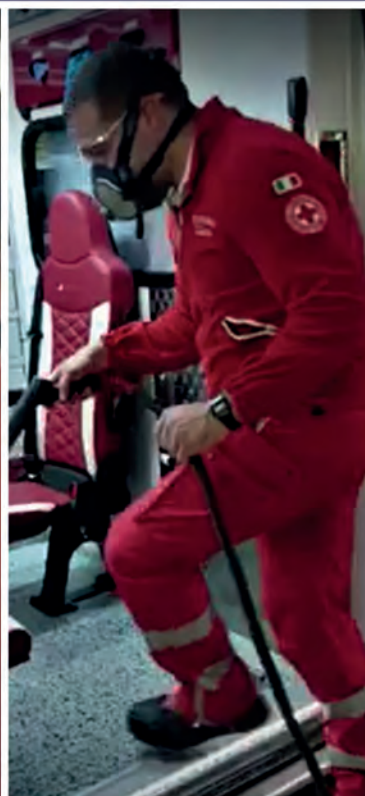
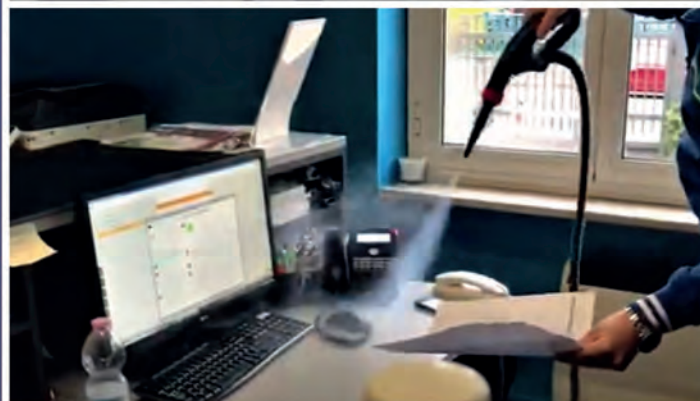
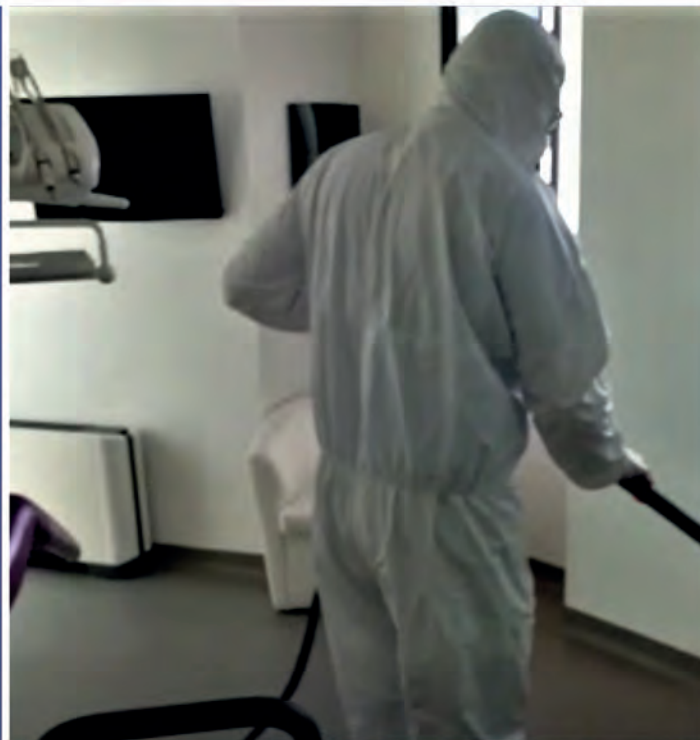
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Satisfying all labelling needs from 1,500 to 50,000 b/h is our result, appreciated by companies of every size.

The over 700 installations present throughout the world is our greatest confirmation.



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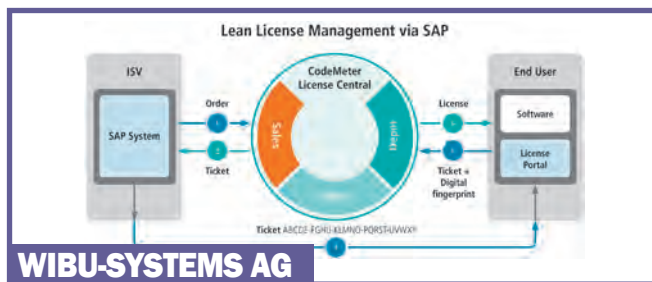


DRINK TECHNOLOGY MAGAZINE

Digital magazine in English focusing on lines, plants and equipment for bottling and beverage industries. Four issues a year, delivered to more than 20.000 beverage industries and to more than 3.000 suppliers, worldwide. The magazine has an extra launch before all the main international exhibitions about beverage technology.



www.drinktechnologymag.com



YOU CANNOT AFFORD TO COMPROMISE YOUR
LICENSING SOLUTION **pg. 120/122**



MH HANDLING THE PRODUCTION OF CHOCOLATE
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for food and beverage industry**

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SAFE RESTART: DEEP HYGIENE AND HOMOGENOUS SANITATION

Billy sanitation system provides a two-phase mixture (steam+liquid sanitizer) that, combined with the application temperature, penetrates deeply into all kind of surface, furnishing, equipment and tools of whatever shape and material.

- The commonly used spray system to apply a disinfectant leaves untreated gaps which are easily contaminated.

- Instead, the steam output, full of disinfecting particles, permeates and sticks evenly to the treated surface, whether a wall, a piece of furniture, a floor, an object of any shape, thus leaving no micro-spaces where bacteria, molds and pathogens would keep spreading.

- Disinfection takes place quickly and allows the immediate use of rooms and equipment.

- Further, the two-phase mixture (steam+liquid sanitizer), when in contact with the surface, condensates, dries quickly and leaves a thin and consistent film that lasts about 24 hrs.

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- Billy hygiene and cleaning system grants a sure sanitation, tested by independent labs that have certified its efficiency and the actual reduction of over 99.99% of bacteria.

Billy: the sanitation system

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Features


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- Peracetic Acid

Mandatory PPE to wear during sanitation process (*)

- FFP2 or FFP3 filtering masks
- face protection shield
- disposable gloves
- single use, long sleeve, waterproof lab coat

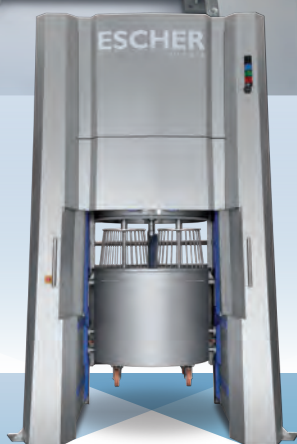
(*) Pursuant to Circular No. 5443 of 22 Feb. 2020 of the Italian Ministry of Health 

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Escher Mixers specializes in the production of mixing machinery for the bread and pastry-making sectors. Over the years we have gained specialized knowledge that has allowed us to develop machines and solutions to meet the needs of a variety of clients and different types of markets. Our machines are renowned for their sturdiness, durability, accurate finishes, and for the quality of the dough they produce.

BAKERY Equipment

We propose Spiral and Wendel mixing concepts. Both solutions can be with removable bowl through a Patented® bowl locking and motion system MR-MW Line or bottom discharge system MD-MDW Line with conveyors belts or bowl lifters which can be matched with automatic solutions with linear system and storage of the resting bowls in vertical or linear storages, rotating automatic systems-carousel, scraps recovery systems, transverse hopper systems and star-cutting / guillotine / roller with guillotine and other customized solutions.

PASTRY Equipment

The range of Planetary Mixers with double tool for the pastry industry is characterized by the lack of oil lubrication systems, improving hygiene and reducing machine maintenance. A wide range of interchangeable tools is available for different uses and doughs. For industrial productions, we have developed the PM-D Line with independent tool movement, with individual speed regulation and the possibility to reverse the motion. While the PM-DB Line with the bridge structure allows automatic insertion of the ingredients, air insufflation to reduce mixing times and increase volume, dough processing with negative / positive pressure and cleaning through CIP washing system. Various bowl discharge options are available. 🏠

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mixers



USED AND OVERHAULED MACHINES AND COMPATIBLE SPARE PARTS, THIS IS BBM SERVICE

BBM Service is a company with 15 years of growth and success behind, which establishes itself as a reliable reference point aiming at quality when it comes to bottling and packaging solutions. BBM Service offers several advantages, among them warranty on refurbished machines, an assistance service with the chance to buy hotline priority bundles, last but not least the opportunity to customize projects according to every production needs of customers. BBM can follow customers step by step, from the initial idea to the commissioning of the line, becoming the only reference point with which to interface for the construction of a plant that presents different types of challenges. BBM specialises in the supply of **turn-key water and beverage bottling plants**. We collaborate and work for the top brands of the beverage industry, offering the same excellence to large multinational firms and local ones. The customised, flexible and quick service is the main reason why customers identifying BBM as the ideal partner for every project.

BBM Service is specialized in buying and selling second-hand machines, which are reconditioned and updated to guarantee excellent performance similar to that of the latest generation machines. Buying used machinery means to reduce considerably the investment if compared with the purchase of a new one, and therefore minimize the risk of error when you go to invest in a new business or project. Many times a bottling company changes its machinery only because

it needs to increase production and has new requirements, linked to the format or materials used, but this does not mean that the machinery replaced is old and obsolete.

Buying a used BBM means taking advantage of the competence of experienced technicians, the flexibility of a solution tailored to the customer's needs, the guarantee of reliability. BBM Service offers an accurate selection of machines that are completely overhauled, updated and offered at very advantageous conditions. It is possible to view all the machines in

the showroom of over 7500 m², to attend the tests also from a distance and to follow step by step the progress of the revision works until the final est.

In addition to the sale of used machinery we are also specialized in **the production and distribution of spare parts compatible with the main bottling and packaging machines**. Our spare parts are compatible with Original Equipment Manufacturer (OEM) parts, including 3M, SIDEL, Krones, OCME. They represent a valid, and more economical,





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USED BOTTLING AND PACKAGING MACHINES:

Completely overhauled and updated machinery, offered at competitive conditions with guarantee. Same performance as new machinery, but at lower and cheaper prices.



SPARE PARTS COMPATIBLE WITH OEM:

Our spare parts, compatible with the main manufacturers represent a valid, and more economical, alternative to restore the machines quickly and effectively!



SERVICES AND TECHNICAL ASSISTANCE:

We are specialized in assistance on bottling machines and lines, for maintenance, relocation and machines upgrades on different models of machinery.



& MUCH MORE:

If you are thinking of a new idea, share it with us and what you have imagined will become reality, thanks to our competent and qualified technical and design department.



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alternative that allows you to restore the machinery quickly and effectively!

BBM Service engineers and markets compatible After Market spare parts that allow a saving of 20 to 40%

compared to the price of the original. BBM Service ensures a response in 24 hours and guarantees 100% compatibility of parts to the original component. All spare parts produced by BBM are tested and manufactured

to work best in any condition and in any environment. The specialized technical department is able to realize and find solutions for any need.

An independent alternative that allows avoiding long waiting times by after-sales services. BBM Service therefore offers a practical and efficient solution for the replacement of spare parts of the main bottling machines.

You can test the quality of BBM spare parts by requesting a sample, write an email with the list of machines of your interest at info@bbmpackaging.com to be contacted without obligation by a BBM technician. 🏢

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AUGMENTED REALITY UNDERPINS THE NEW NORMAL... AND THE **NEW FUTURE**

The rapid uptake of augmented reality has very quickly highlighted how essential it can be across all stages of a project lifecycle. Nothing else delivers the level of insight, problem solving and cost saving!

Multiple contemporary studies support the fact that companies that have exploited the digital capabilities of their assets – either as part of a transformation, or a general move to a more data-capable infrastructure – are weathering the effects of the COVID-19 pandemic more effectively... and more robustly.

Although many of the technologies being exploited by these companies are perceived as being fruits of “the new normal”, many actually find their roots in more established practises, which are finally getting the airplay they deserve – albeit as a short-term necessity as opposed to being part of a long-term technological plan.

Many of us have taken part in some form of virtual meeting, with and without video, and are used to dealing with project-team software, which adds a further level of distanced inclusion. But arguably, from an engineering sense, one of the most powerful tools at our disposal is augmented reality (AR).

By giving engineers and operators an immersive, intimate and highly interactive appreciation of a machine – sometimes before it has even been built – augmented reality



could very well be the foundation of Industry 4.1 – thanks to its ability to deliver incredible levels of information & presentation... based on the data delivered by Industry 4.0.

From an end user's perspective, the good news is that AR does not rely on an installed digitally transformed base of operations. Using CAD data,

OEM suppliers can deliver this immersive technology far more easily than many think.

“As a leading secondary packaging machine supplier to all of the major global vertical markets,” Massimo Monguzzi R&D Manager, at Cama Group explains, “it is a pre-requisite



that we must exploit and deliver the very latest features that technology can provide.

Augmented reality has always been part of our roadmap, as has virtual commissioning and testing, but the global pandemic has pushed the need for these technologies right to the forefront.

“From our perspective, having a digitally capable platform already in place – in the form of our BTG range of machines – has made the transition for us and our customers a lot simpler,” Massimo Monguzzi R&D Manager continues. “Like many companies, we have the in-depth CAD data that forms the foundation for our AR offering, but unlike some others, our exploitation of fully interconnected digitally capable hardware and software means that our AR solutions can be used for full simulation, as opposed to just creating pretty 3D images to show a customer.

“A case in point would be for a recent application we developed for a well-known household brand. Augmented Reality very quickly made it onto the customer’s wish list following the travel and distancing issues presented by the pandemic,” Massimo Monguzzi R&D Manager explains. “The COVID-19 situation led to global difficulties in location-based training and, as this was a brand-new machine for the customer, it asked us to look at how we could help speed up line operation by helping it get to know how to use the machine more quickly. The customer recognised that AR was ideal for training – even before receiving the machine – and wanted to start experimenting with the technology in order to get more confident in operations and procedures.

“We were able to deliver a virtual version of the customer’s precise machine thanks to highly detailed



CAD data,” Massimo Monguzzi R&D Manager adds. “Using this platform there were no surprises when the machine was delivered – there was nothing new... the operators already knew it intimately from the AR/VR models.

“This may sound like a relatively simple and obvious deployment of the technology, but AR offers so much more potential throughout a machine’s entire lifecycle,” Massimo Monguzzi R&D Manager elaborates. “It has the capability to deliver value at all the primary stage gates: tender, design, testing, installation, commissioning, operation, change-over, maintenance, support and modification. Indeed, there are very few operational facets of a machine where AR cannot play role and add value.”

From the outset, at the design and prototyping stage, customers can get a clearer appreciation of the machine and fully understand its capabilities. Operation can also be fine-tuned thanks to simulations based on accurate product models – and this is before any metal has even been cut. At this stage, the machine can be virtually superimposed into its proposed location, too, and then

manipulated, so any utility and real-estate issues can be solved prior to install.

Installation, commissioning and FAT are also helped with representative models and those undertaking the testing can be given informative and unambiguous instructions, all of which can be logged and recorded as part of the procedure. In addition to the aforementioned familiarisation, AR has more to offer in the operational phase of a machine’s life.

As well as training new operators, it can be used to deliver overlaid instructions and videos for component changeovers and batch-change procedures. This visual on-machine feature is also exploitable for maintenance operations and for the addition of revised hardware and sub-systems.

“Our deployment of contemporary automation solutions means that these Industry 4.0 capabilities are in easier reach for customers,” Massimo Monguzzi R&D Manager explains, “even for those with older machines, as the AR capabilities feed off the original 3D CAD data, which lives on our design servers. We have seen incredibly positive



real-life results recently, where they have proved vital for FATs, training, maintenance and operation, all delivered and performed virtually!”

“We are boxing up AR and other digitally enabled capabilities into what we call 4.0 Packages,” Massimo Monguzzi R&D Manager adds.

“These can comprise a combination of technologies, which can be tailored and adapted to the needs of the customer and application, and can cover anything from day-to-day operation, through consumable consumption and on to energy efficiency. We are also heavily involved in the development of auto changeover solutions with the absolute minimum need for human interaction. The idea being that the machine will prep itself for changeover using servo technology and the operators will only be involved where changes cannot be done automatically.

“Compared to the market average,” he adds, “we offer quicker changeovers than most, but the market is demanding even more.

Today we have managed to cut changeover in half – from 30 min-

utes to just 15. In coffee production, for example, where production speeds and outputs are so high, saving even 15 minutes per changeover is vital.

If there are 10 production changes per day, which is not uncommon, this equates to 2.5 hours of additional up time! Payback for the additional technology is less than one month!”

AR has always been on the future road map, but has rapidly evolved from a cool feature that companies imagine using one day, into a must-have technology that everyone needs to use every day. When the world returns to normal, AR will be one of the tools that stays in regular use... everywhere.

It is too good to use merely as a stop gap. It adds value, saves money, solves problems and makes everyone's life so much easier, what's not to like.

And the best thing is, you don't need advanced hardware to make it happen, just companies with their fingers on the technology and market pulse... such as Cama. 🏢

www.camagroup.com



MAKRO LABELLING: TECHNOLOGY IN EVOLUTION ON THE SMALL AND LARGE SCALE



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

faction of every labelling need and constant expansion on all the most important international markets.

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

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

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

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



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

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

ling as a rotary machine.

In common with the entire Makro range, the MAKLINE is fitted with the **Vision Control** system to verify the quality and correctness of the packaging and manage rejects. The **Follower** optical guide system (an exclusive patent) enables the bottles to be aligned for application of the labels in precise positions with respect to a reference on the bottle and reduces format change times and costs. It is available in carbon fibre and fitted with a line scan camera. Thanks to a special,

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

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

www.makrolabelling.it



YOUR NEW FOOD AUTOMATED MACHINE: FASTER TO DEVELOP, TURN-KEY IN MOTION CONTROL

CMZ solutions for motion control can strongly reduce the time to market of your new packaging & beverage machine. We develop and realize Hardware & Software systems fully in accordance with your project, to integrate tailor made configurations. Made in Italy since 1976.

CMZ Sistemi Elettronici Srl is a leading Italian producer of solutions for industrial motion control since 1976.

The focus of the company is to serve the market with hardware and software components (Controllers, brushless and stepless servo Drives and Motors, Libraries, Apps, up to Hmi operator panels) to build up a **whole tailor made electronic system for the motion of vertical and horizontal flowpacks, multihead and linear weighers, filling and bottling machines, capping and labelling machines, loading systems, end line.**

Beverage & packaging industry represents an excellence in terms of CMZ know-how from over 30 years, outstanding all our deep experience and technologies fully in accordance with the technical projects of OEMs and system integrators to satisfy both the dynamics of the machine and the need of costs reduction.

Software & Hardware, complete combination

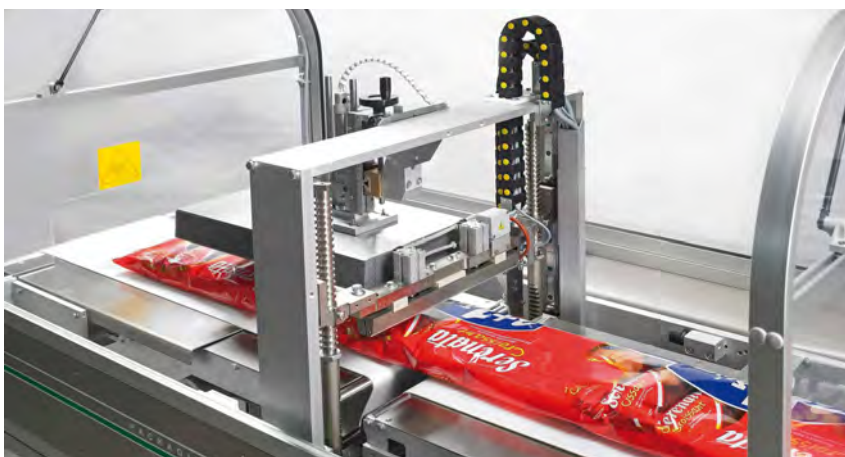
CMZ solutions include **the SOFTWARE** such as:

- **LIBRARIES** granting a pre-settled machine configuration while minimizing the commissioning set up, or developed by using fully customized functions for axis control.

- **APPLICATION APPs** in a wide range of available ready-to-use functions, all easily configurable on a new food automated machine (they can also be integrated with other applications already in use by the manufacturer).
- The newest **COGNITIVE V** software using machine learning algorithms for integrating **hi-tech vision and illumination systems** both with CMZ controllers and with others available on the market: the perfect combination for OEMs manufacturers of automated machines pursuing Industry 4.0.

CMZ also provides **the HARDWARE** components, the cutting-edge ones:

- **FCT640** new-generation **modular master controller** Codesys v3.5 with PLC + soft motion, whose technological soul is engineered by CMZ managing up to 99 axis thanks to dual core 64 bit 1.0 GHz CPU, it is compact and light (only 300 grams for basic version "basic"), providing connectivity and complete range of I/O modules. Settled up with **CMZ motion libraries, every flowpack can be ready to pack any format.**
- **IBD & ISD servodrives and motors** with **integrated electron-**



ics completely developed and made in Italy by CMZ always on tailor made logics for the most innovative and demanding manufacturers in multiaxis control. IBD &

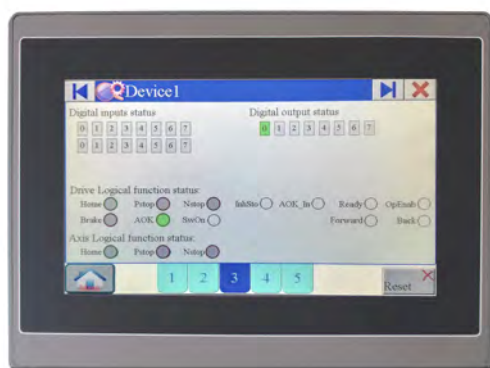
ISD provide high performance at high and low speed, maximum control, connectivity, internal programmability IEC61131-3 compliant, EtherCAT and CANopen field bus.



FCT640 modular master controller PLC + motion control



IBD integrated brushless drive; electronics developed by CMZ



PT2 HMI here with one of available CMZ libraries configured for a flowpack

Daisy chain connection is as an attractive solution for on field axis running, enabling to join more devices together in the same DC bus. The IBD family is ranging from 1,22 Nm on flange 60 up to 30 Nm on flange 190. Power supply from 270 to 740 Vdc (560 Vdc Nominal).

- **PT2 HMI operator panels**, these are not directly produced by CMZ but traded in aim to give OEMs a full turn-key solution from the controller to the final user's side. PT2 panels are a new series we've released in 2020 enhancing CMZ range, it is made up of 7 touch screen terminals models with simple window and top performances fitting Industry 4.0 and IoT. Dimensions from 4.3" up to 15".

CMZ solutions coming soon

- **PROFINET** field bus to enlarge CMZ open frame communication.
- **Wireless Bluetooth 4.2** connection to debug and diagnostic the devices without wiring any system.
- **OPC-UA** protocol to upper level systems currently becoming a widespread opportunity for interoperable communications between PLCs and SCADA systems, ensuring effective monitoring and control of the plant with a high level of data protection against attacks and threats.

The master way to motion control 4.0

Connectivity, user friendly, pre-configurability, easy to use, open network are common words we are using for our solutions. As the next industrial automation generation is setting up on a wider connection, CMZ welcomes those worldwide who would like to join us on this challenge. We strongly believe in creating partnerships with our customer as the master way to find solutions rather than only supply devices. 🏢

cmz.it | cmz@cmz.it





BONDUELLE PROJECT: sustainability in 6 points



by
Chiara Natalucci



Andrea Montagna
CEO of Bonduelle Italia



We interviewed Andrea Montagna, CEO of Bonduelle Italia, with whom we talked about the future of food consumptions, the recovery of OOH consumption and the new Bonduelle project.

The French company has always been very attentive to the needs of consumers and extremely sensitive to environmental issues. Here is the summary of our conversation.



Summer season: the recovery of fresh food consumption, predictions and trends

Here in Bonduelle, we have good reasons to expect fresh food consumption to recover firmly in the coming months. First of all, the healthy trend that has been developing in recent years will not only continue, but we think it will increase because after cooking and eating a lot during the lockdown, it feels like we need to go back to a more balanced and simple diet.

That is why we think that there could be a return to fresh food and IV range salads. Moreover, we expect the consumer today to buy a pre-packaged and therefore absolutely safe product that allows him to make quick shopping, without spending too much time in the store. Finally, in a moment of great insecurity like the one we are living now, we think that the consumers will buy the brands that they trust. Our predictions until September are therefore positive and we expect an improving trend in the coming months. A growth that we will try to support with the new Bonduelle commercial, on-air next July.

The second half of 2020: the recovery of OOH consumption

At Bonduelle, we are expecting the growth of the out-of-home segment to happen in two different moments, depending on the sector: the quick service restaurant, and the bar and restaurant sector. In the first segment, we include multinational chains like McDonald's and KFC and this is already recovering pretty well.

We expect it to go back to grow again in the second half of 2020 like it was growing the pre-COVID period. As for bars and restaurants, on the other hand, we expect less rapid growth. We think that by the end of the year it can return to pre-COVID levels, while we will have to wait until early 2021 to grow again.

Our vision of the future is the Bonduelle project: a new alliance between agriculture and nature.

In 1996, Bonduelle first created its agronomy agreement. From that day onwards, its 3100 partner farmers are required to sign it and adopt good practices to preserve the environment and alternative techniques with reduced impact on the environment. Things have greatly improved in sustainability and today Bonduelle has launched a new challenge, which strongly commits the Group and all its sta-



keholders to create "a better future through vegetable-based food".

Currently, Bonduelle is working to obtain B-corporation certification and aims at becoming a "better" company for the world.

Faced with the great challenge of feeding almost 9 billion people in the world, taking into account the environmental problems resulting from the climate change, Bonduelle has chosen to put vegetable-based food at the heart of its production. This decision is driven by Bonduelle's belief that vegetable-based food and the development of agroecological sectors are essential requirements for the creation of sustainable agriculture and the benefit of today's and tomorrow's generations.

In these circumstances and thanks to the collaboration with its agricultural partners, on February 20th at the Food Journalism Festival, Bonduelle presented the "Bonduelleproject", a 6-point commitment to sustainability.

- 1- Promoting local and seasonal productions
- 2- Restricting the use of pesticides to protect the soil and the environment
- 3- Preserving biodiversity and natural resources
- 4- Reducing the use of additives and preservatives
- 5- Guaranteeing a wide range of organic products
- 6- Promoting the use of sustainable packaging





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.

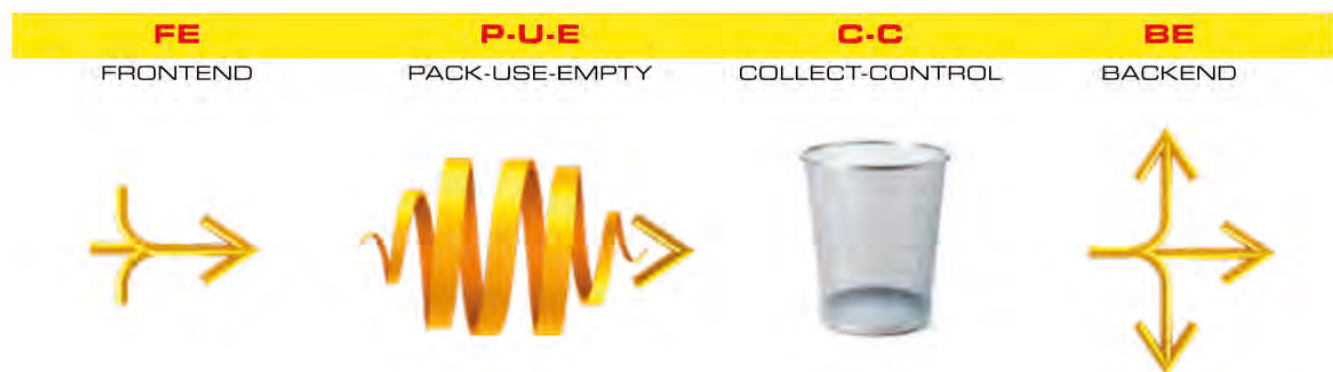


Holistic innovation is needed as we are all interconnected in packaging



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.



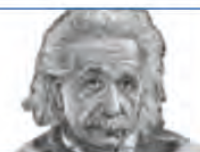
	FE	P-U-E	C-C	BE
Litter			✓	
CO ₂	✓			✓
Inadequate pack optimisation $\frac{\text{Product}}{\text{Packaging material} + \text{Total environmental impact}}$				
Future issues	✓	✓	✓	✓



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



OROGRAF: PERSONALIZED SLEEVES AND SELF-ADHESIVE LABELS

Orograf S.r.l. has been in the **SELF-ADHESIVE LABEL and SLEEVE** business for 50 years and we are a well-established firm, both in Italy and internationally, hold ISO 9001:2015 certificate.

We offer a high-quality and highly flexible all-round service, **from graphic design through to final printing.**

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

We have a wide range of printing systems (letterpress, screen, HD flexo, digital, offset, hot relief, dry relief, perforation, glitter effect and on-foil pantone overprinting), and **we can print on all types of material, adhesive and non-adhesive** (laid, embossed, metallized paper, synthetic films, twin and booklet labels, reels and sheets), for any kind of end product.

But what really distinguishes Orograf S.r.l. is **that we can combine multiple printing systems on the same production line** and therefore offer our customers unique and customized final products tailored to their specific needs.



FOOD Labels

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

they are to be applied. Above all they must be produced in compliance with **consumer health protection laws**. OROGRAF uses top-quality certified and guaranteed materials that meet these legal requirements and guarantee consumer protection.





In addition to informing the consumer about the product, food labels can be used as warranty seals or open-and-close labels; they can also carry advertising, recipes, warnings, information about competitions, discounts, and so on.

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

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

SLEEVES

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

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

An important characteristic is the option of providing every sleeve with a **“tear off” system**.

This is essential for products that consumers need to be able to open easily after purchase; this system also allows the sleeve to be removed from the container for recycling, once the product has been consumed.



MULTIPAGE, TWIN LABEL and PEEL-OFF

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

Multipage labels, as their name suggests, have a number of pages and they come in different sizes and

formats: they can take the form of folded leaflets; detachable or with a transparent resealable cover; or booklets (bound like a book).

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

other features, such as a tear-off system.

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

www.oro.graf.it





Self-adhesive **labels** and **Sleeves**

Made with **TYPOGRAPHIC, SERIGRAPHIC, HD FLEXO, OFFSET** and **HOT PRINTING TECHNOLOGY.**

On any type of adhesive paper
and synthetic film,
for any customization need.



Orograf srl

Viale Industria, 78 - 27025 Gambòlo (PV) • Tel. 0381 939939 info@orograf.it • www.orograf.it

OROGRAF Srl

INNOVATIVE TECHNOLOGY FOR C-WRAP LABELLING OF FOOD TRAYS



In the food sector, labelling is a crucial element of the whole production process, as it allows to decorate the product to be consumed while providing all the essential information, such as contents, sell-by date, origin, nutritional values and any other details which might be required. In order to meet the labelling needs of this industry, ALTECH has developed a line of labelling systems which is particularly suitable for products such as tubs and trays.


This line is called ALbelt and includes a range of extremely functional and customisable labellers, which can label a wide range of products. A high-demand configuration is the one that was developed for **C-wrap labelling** of thermoformed or clam-shell food

trays. In this application the folder is adapted on three sides of the product - **front, top and bottom** - with a two-fold function: **to identify the product and to guarantee its integrity**, like a tamper-proof seal. In order to perform this operation, the ALbelt system includes a conveyor transport system formed of two sections, a top labelling head (ALritma) fitted with a marker for printing variable data such as sell-by dates, promotional labels and barcodes and an adapter especially designed for this kind of labelling which is installed in the space between the two sections of the conveyor.

The system also includes a dual-belt spacer and a stabiliser with lateral mini belts that hold the product during labelling. All labelling parameters

are managed through a 7-inch colour touchscreen panel providing excellent legibility and user friendliness. In this configuration, an ALbelt system can reach a labelling speed of 60 pieces per minute.

Besides applying one or more labels on multiple parts of a product, the ALbelt system can take up special configurations for different applications - such as top and bottom labelling - as well as non-stop configurations, providing a continuous running solution.

ALTECH Srl is a leading Italian company specialised in the production of material coding, identification and labelling systems. 

www.altech.it - info@altech.it



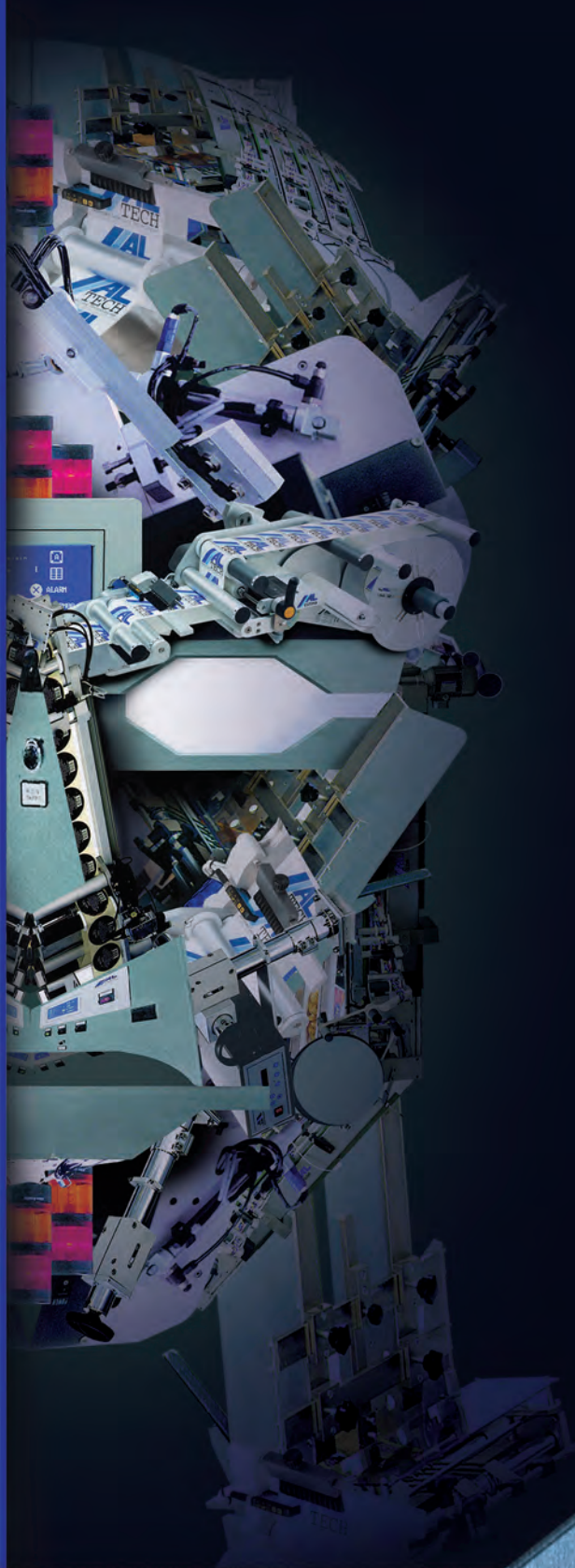
INDUSTRIAL LABELLING MACHINERY MADE IN ITALY



ALTECH SRL
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20010 Bareggio (MI)
Tel. +390290363464
info@altech.it
www.altech.it

interpack 

Düsseldorf - Germany
25 Feb - 3 Mar 2021
Hall 08B, Stand 8BC48



ESSEGI: TARGETED AND EFFICIENT SOLUTIONS

Essegi engineers and produces special packaging systems for foodstuff, characterized by different solutions depending on customer's production requirements



Essegi is a company specializing in the engineering and development of vertical and horizontal packaging systems, weighing and automation lines for a broad range of products, with a comprehensive range of weights and formats. It has on stock a comprehensive range of machinery to process different products: from traditional to the most particular. Last but not least, compression and automatic packaging from single-layer reel for bulky and slightly poor products. Upon request, fully stainless steel work is also possible for the smallest to the biggest models. For the food sector in particular, primary packaging for foodstuff is required to sell what it protects and to protect what it sells. For this reason, Essegi engi-



ESSEGI
ITALY
packaging system

VERTICAL PACKAGING MACHINES (VFFS) FOR FOOD INDUSTRY



ESSEGI

ITALY
packaging system

30
1987-2017
anniversary

ESSEGI 2 s.r.l.

Via Strada Degli Alberi, 47 - 35015 Galliera Veneta (PD) - Italy
Phone +39 049 9470 475 - Fax +39 049 9470 111
info@essegi.com - www.essegi.com - YouTube [essegi2srl](https://www.youtube.com/user/essegi2srl)

neers and produces special packaging systems for foodstuff, characterized by different solutions depending on customer's production requirements. As well as packaging machines, Essegi production range also includes dosing systems and electronic weighing machines. Moreover, it also supplies different feeding systems for every kind of products.

In addition to granting advanced packaging machines, Essegi's thirty-year experience in the sector also concretizes in a highly skilled commercial network, always looking for targeted and more efficient solutions, as to meet customers' packaging and automation requirements. Versatility, dynamism and adjustability to different formats, user friendliness, maximum safety and easy maintenance, are the reasons for us to choose Essegi products, since it means meeting any requirement and investing in unrivalled performances. Essegi after sales and technical assistance are the added value of the commercial system, particularly

modern and efficient, of Essegi machines. After-sales service can provide the best solution to customer's need because it is backed by a highly qualified staff, spare parts service and advanced maintenance. Essegi commercial department provides its best offers prompt-

ly, detailed technical designs, and complete projects of complete lines masterly studied by the technical staff as to present customers a preview of the final result already from the engineering stage. 🏢

www.essegi.com



PACKAGING MACHINES FOR MASKS

FP015 S

HORIZONTAL WRAPPER



Tecno Pack SpA immediately accepted the worldwide need to pack P.P.E. - masks - creating two models of electronic horizontal flow pack machines, suitable for packaging these items.

These packaging machines guarantee not only efficiency and speed in packaging, but also very high levels of hygiene, safety and perfection of the packaging.

Versatility of use and format change allows the packaging of masks and other personal protective equipment in single or multi-pack packages.



FP016 S

HORIZONTAL WRAPPER



FAST DELIVERY

InfoLine +39 348 931 00 69



Tecno Pack

PACKAGING MACHINES

Via Lago di Albano, 76 · 36015 · Schio (Vicenza) Italy · +39 0445 575 661 · www.tecnopackspa.it · comm@tecnopackspa.it

TECNO PACK: TECHNOLOGY TO IMPROVE EMERGENCY

SARCHIO, THE QUALITY OF ORGANIC, VEGAN AND GLUTEN-FREE NATURE SINCE 1982

MEETS TECNO PACK'S TECHNOLOGY

Sarchio's story began nearly 40 years ago. It was founded on 2 September 1982 in Carpi, in the province of Modena, to offer healthy, natural and high-quality food every day.

The forward-looking vision of Cesare Roberto, chief executive of the company, was to promote a lifestyle based on a correct diet using organic food, free of synthetic chemical substances and respecting the fertility of the soil, human health and the environment. The strong link with the nature is also reflected in the name he chose for the company: Sarchio, an old farming tool of rural tradition.

The first products made by Sarchio are linked to the Italian traditional cuisine: pasta, sauces, extra virgin olive oil and other main ingredients of the Mediterranean diet.

Over the years, Sarchio's offer has expanded and specialized to meet the consumers' different requests and needs.

Paying great attention to nutritional values and health benefits, in addition to the more traditional Italian products, Sarchio has added to their range more innovative food products.

With a focus on gluten-free and vegan solutions, the company has started producing biscuits, cereal and seed bars, chocolate, rice cakes, crackers and breadsticks, as well as breakfast cereal for those who follow



Cesare Roberto

particular dietary styles or have an intolerance to some ingredients.

Today, Sarchio's offer includes over 150 organic products, including the gluten-free and vegan lines – a complete range of products, ideal for those who have to give up gluten

as well as for vegetarians, vegans, adults, children and anyone who wants to make a healthier and lighter diet a real lifestyle.

Spreading the culture of a correct and healthy organic diet with light and balanced foods has always been Sarchio's mission.

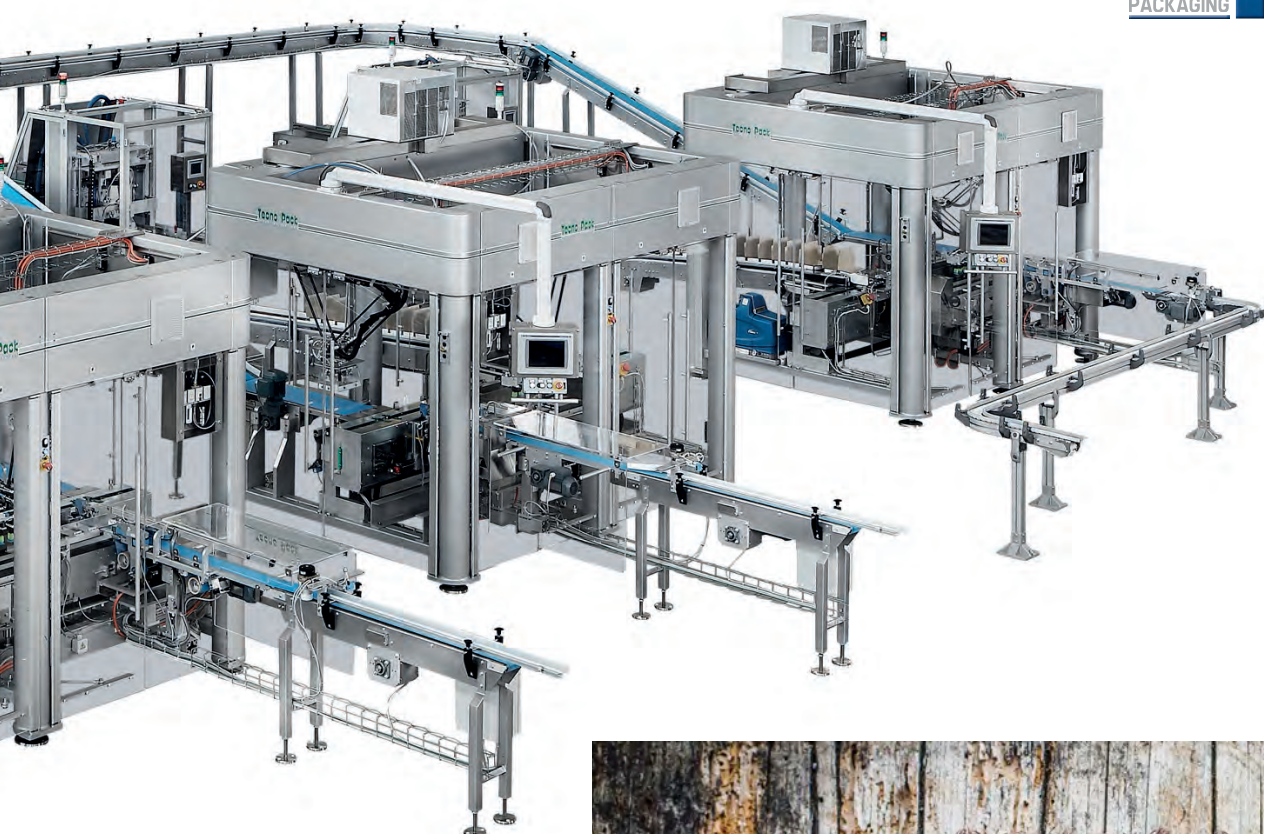
In addition to this, the company is renowned for their artisan care in the production process, starting from a careful selection of the best raw materials, focusing on organic, wholemeal, unrefined and gluten-free ingredients.



Tecno Pack
PACKAGING MACHINES

ifp
PACKAGING

SP
general system pack



In 2017, Sarchio added a new structure to its historic headquarters in Carpi.

It is more than 6,000 square meters divided into three plants with nine production lines in total and departments working only on gluten-free products, to manage better and more safely their processing.

The company decided to build a new "Sarchio house" for two reasons. On the one hand, the earthquake of 2012 severely damaged the old offices, forcing employees to work in containers for a long time; on the other hand, the positive trend of the





company made it necessary to enlarge their premises and invest significantly in technological innovation.

For this purpose, Sarchio turned to the Tecno Pack group, the Italian leader in the supply of packaging technologies, for the implementation of various automated end-of-line systems.

Moreover, the ethical commitment of the Carpi-based company towards the environment has led them to set a target for 2020: reducing to a minimum the environmental impact of their packaging materials, using more sustainable and 100% recyclable packaging.

The partnership with Tecno Pack was born to create recyclable packaging made of paper.

Since 2012 the collaboration with Tecno Pack has put Sarchio in the





technical conditions to produce and package all food products automatically.

Since their first meeting, Sarchio explained to Andrea Motta, Tecno Pack Area Manager, the urge to find a reliable partner, who could assess and implement Sarchio's projects in every detail, following the company's growth and evolution step by step.

The goal has been fully achieved to date, as demonstrated by the new packaging that guarantees freshness, traceability, sustainability and protection of the product.

Careful study, customised systems and widespread assistance are transformed into guarantees for Sarchio consumers, who always find a

natural product, perfectly preserved and intact.

Sarchio and Tecno Pack – two winning excellences. 🏛️



GIROPÈS: SOLUTIONS IN THE WORLD OF WEIGHING

Giropès, located in the north of Spain, has been providing solutions in the world of weighing for more than 20 years.

They currently have a staff of more than 125 people dedicated to design, technology, manufacturing and marketing. And they are already present in more than 35 countries around the world.

The Giropès brand itself encompasses the process of vision, design and manufacture of all the elements of a weighing system. From load cells to indicators to the weighing structure itself such as truck scales, weighing platforms, pallet trucks and other equipment

Giropès is made up of 4 brands: Giropès, Baxtran, Giropès Solutions and Girwim.

Giropès' extensive experience has led to the creation of several successful complete installations in companies in many different fields, from the agricultural sector to waste

treatment and even the aeronautical, competition, logistics and industrial sectors, among many others.

OUTSTANDING PROJECTS

A recent installation has been the start-up of equipment for the classification and discarding by weight in the packaging lines of disposable cardboard products. The installation has been carried out at the Raber Solutions company, a company with more than 30 years of experience in the manufacture, handling and marketing of single-use disposable products.

The distribution of these products under the P&H brand is a benchmark in the retail market and in Cash & Carry, where cardboard articles for

tables, plates and trays are everywhere on the shelves.

The introduction of this simple weighing system allows them to automatically detect deviations from the correct indicated weight for the packages and discard those that are not correct.

By adapting our products and optimizing them to the required level, our products are now being used in a variety of different production lines in the industry. This gives us experience and expertise from solving problems stemming from years of outdated industrial protocols.

You can see more products and more installations on the web

www.giropes.com 🏠

GIROPES





**Whatever market you're in,
P.E. Labellers adds more value
and performance to your products.
Flexible design makes the difference.**

Our ergonomic machines offer modular interchangeable independent stations that can each utilize different labeling technologies for non-stop quality production.

When the labeling system makes a difference:

P.E. LABELLERS, LEADER IN LABELING FOR ALMOST 50 YEARS EXPLAINS WHY

The PE group has made the history of food industry in the world, thanks to its ability to adapt the labelling machines to the new production needs of companies and the increasingly high-quality standards imposed by the market.

How? By always giving priority to our customers. Listening to them, visiting them, studying the different production needs, and understanding their business objectives. This is how, year after year, the requirements of these companies have become PE's own technological assets.

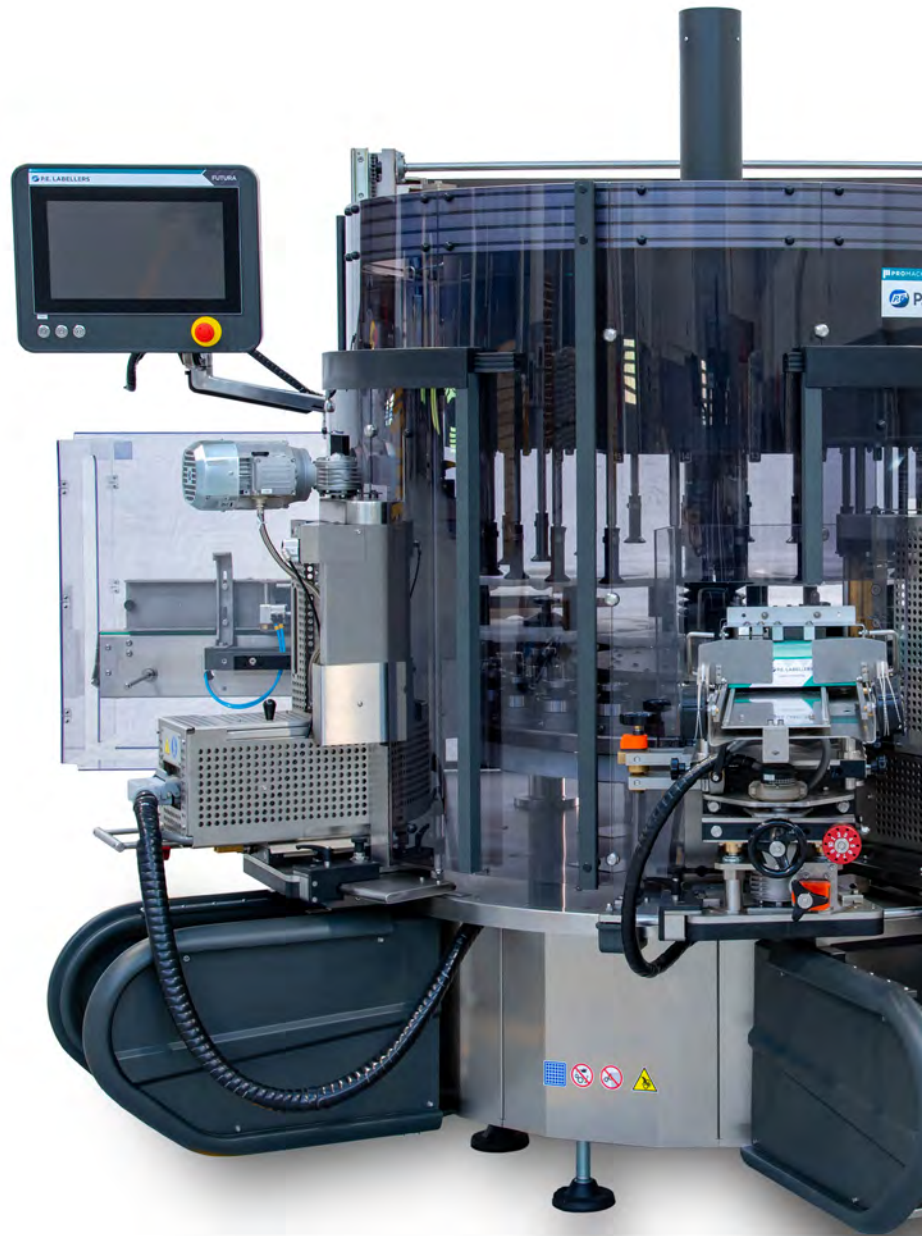
The key point remains the modularity: the absolute flexibility in combining the different labelling technologies, starting from a machine body and inserting any type of modular independent labeling stations, on the base of any specific production need to be met. P.E. develops a great range of self-adhesive machines, with cold glue, pre-cut with hot glue, hybrid labeling solutions, for multiple types of companies of different markets.

Today the food industry, from dairy to tinned foods, oil to sauces, jams and spreadable creams to pickles, demands a level of competence and flexibility that can be satisfied not only through a modular approach. Making an early move, PE responds with smart Innovation Design solutions.

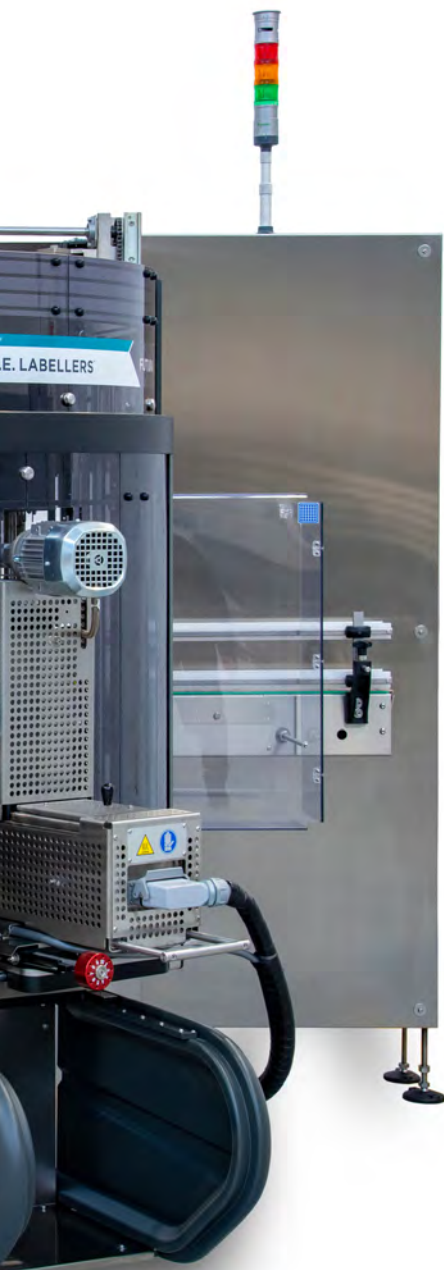
We can thus imagine the extension of the range of models we can choose from. **The driver is always the pro-**

duction requirement to be met, the speeds to be obtained and the types of covers with which to coat - and enhance - the products and containers that differ in materials, features and sizes. Thanks to Innovation Technology, every limit can be over-

come. **The concept of modularity is extended to every component of the machines, designed in ergonomic solutions and strongly focused on energy savings.** This is why many companies in the markets find in PE machines an effective



P.E. LABELLERS™



chemical and pharmaceutical industries worldwide.

As always, what is precious must be protected: the ability to **provide specialized services according to machine types in every geographical area, and a staff of over 90 technicians globally distributed**, represents added value factors. It can thus count on non-stop assistance, even remotely, specific and cutting-edge maintenance programs, dedicated training at the customer's facility or the modern PE University classrooms.

What's on the line? Everything.

QUOTE

<<The strength lies in flexibility. It is a fundamental concept that draws inspiration from the development principles themselves. As Darwin demonstrated, "Those who are most capable of adapting to changes survive and succeed." PE LABELLERS has built its leadership on this key point and for almost 50 years now the market continues to prove it right>>.

SHORT COMPANY PROFILE

The P.E. LABELLERS group


P.E. LABELLERS, incepted in 1974 in Mantua (Italy), has developed over the years, becoming a world leader in the production of automatic labelling machines.

The reference dimension is global: the group is made up of 8

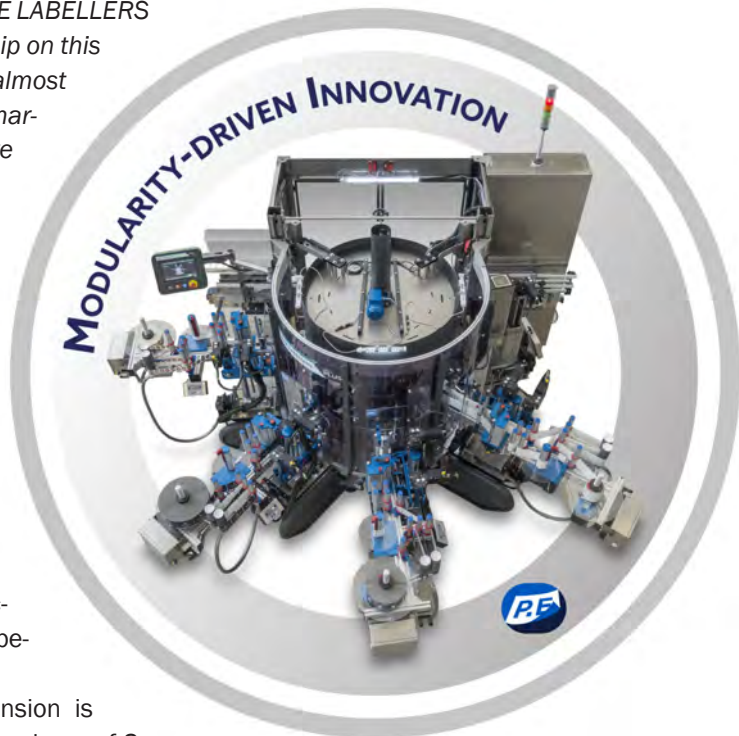
companies located in Italy, the USA and Brazil, and is part of the U.S. Pro Mach multinational group.

The strategy adopted by PE was to divide the production by creating dedicated factories in different production sites specialized in each line of machines.

Today the PE Group's Lean Production has led to the creation of 450 machines yearly, exported all over the world and widely managed remotely.

There are around 10,000 P.E. machines installed worldwide. Each line is developed in one of the 7 production sites in the world, according to the philosophy of vertical production. P.E. with its own labelling machines services the production chains of food, wine, dairy, pharmaceutical, chemical and cosmetic industries. 

www.pelabellers.com



response, which results in real savings and the economic optimization of their production lines. It is therefore not surprising that besides food & dairy, PE Labellers services the beverages, wine & spirits, mineral waters, personal & home care, and

DRINK TO A GREEN FUTURE WITH MACA

Sustainable innovation for a better world

Just as the film unrolls and runs fast, stroking the reels, MACA look to the future with a quick vision, but that follows a gentle rhythm that respects the environment.

Maca counts on a very deep level of internalization of the production process, from pre-press to logistics, from R&D to the quality laboratory, with a 4.0 integration of all the machines in the company software, in order to have 100% control over all production phases, including preparatory and final testing of the finished product. Maca produces Flexible Packaging for any application and label solutions with different materials and application techniques, from shrink sleeves to roll-fed to stretch sleeves, offering solutions with low environmental impact, 100% recyclability and logistical and economic advantages.

The partnership with Comag, which has specialized for over 30 years in innovative machines for packaging and bottling, allows the company to follow the customer from the design phase of the packaging machine to the creation of the finished packaging.

PACKAGING FOR BEVERAGE SHOULD BE BOTH ECONOMICALLY AND ECOLOGICALLY SENSITIVE? THE ANSWER IS YES!

With stretch sleeves solution we can produce flexible packaging with:

- Up to 50% cost saving
- Material 100% ecofriendly and full compatibility to recycling
- No thermal shrinkage
- Clean and low energy process of application
- 360° coverage with brilliant graphics and intense colors
- More space for creativity and branding

Thanks to the Stretch Sleeve Labeling Machine SLC200 NG it is possible to apply Stretch Sleeves on pet, pe, pvc and glass containers, metal kegs and plastic crates.

Thanks to the modern technology of Stretch Sleeve Labeling Machine – SLC200 NG, Maca is able to label up to 3000 kegs per hour with a label of great aesthetic appeal, with bright graphics, which adapts perfectly to the shape of the containers and totally sustainable. Stretch Sleeve, in fact, do not require glue or heat to be applied because there is no thermal shrinkage, drastically reducing energy consumption and the release of plastics into the environment. Furthermore, these labels allow the primary pack to be completely covered, opening up to the brands

infinite possibilities of personalization and creative expression at a cost reduced by 30/50%.

This machine can apply stretch sleeves on pet, pe, pvc and glass containers, metal drums and empty or full plastic crates (from 5lt to 50lt), wet or dry (humid conditions, special surface or dimensions do not affect the labeling) with more advantages:

- Endless customization possibilities thanks to the application on a wide range of container formats and shapes;
- 360° coverage with more branding opportunities





- Brilliant graphic display, printing up to 9 colors
- Reduction of energy consumption
- Cost saving in terms of reduction of energy consumption and quantity of material
- Optimization of storage and logistics
- Disposal (labels are 100% recyclable).

Maca and Comag will be at BrauBeviale Special Edition 2020. Meet the companies on November 10-11-12 in Nuremberg. Follow the LinkedIn page @Macasrl for more info or subscribe on www.macasrl.it

DESCRIPTION MACHINE

Stretch Sleeve Labeling Machine – SLC200 NG

Our linear labelling machines for stretch sleeves, available in single, double and triple head version, feature an innovative concept which merges a very simple way of functioning with advanced design and manufacturing technologies.



This gives several advantages:

- The machines can operate a wide range of sizes and forms, from small cans to large sized jars.
- The machines can apply the stretch sleeve label on PET, PE, PVC, aluminium, glass etc, either wet or dry containers.
- Non-stop positive transport of the cans which allows the machine to work either full or empty bottles.
- Easy handling of the sleeve: directly

from the reel to the can without any intermediate passages, allowing high precision and repeatability of the sleeve application.

- Operations for format changeover are simple and quick. Only a few mechanical parts need to be replaced and the changeover can be completed in a few minutes.
- The machines are very compact and can be easily installed on existing lines. 🏭

OUR COMPANY CELEBRATES 100 YEARS OF ACTIVITY

E. CALVI is an Italian company located in Milano known throughout the world for the construction of machines and equipment for the thermoforming of paper and cardboard.

Our production range includes:

Paper baking cases forming machines by blanks

Paper baking cases forming machines by reels

Paper Muffin cups/cases with rim by reel – paper tulips/lotus cups - paper plates /ovenable trays/containers / glasslids making machines

Die cutting machines by reel for cardboard and/or similar material

E. CALVI was established in 1918 and has been working since the beginning in both the mechanical and paper converting fields.

Its primary feature is thus always having, besides the machine building and assembly division, a paper engineering division allowing a full-time use of machinery, with the goal of a constant verification of all components, technical needs, and the evaluation of possible modifications and improvements.

Calvi's primary philosophy thus sits in the conviction that a long, trying testing of assembled machines in real production is of the utmost importance.

Besides the traditionally built machinery Calvi also creates special machines, according to the Customers' special needs. 🏭

www.e-calvi.it

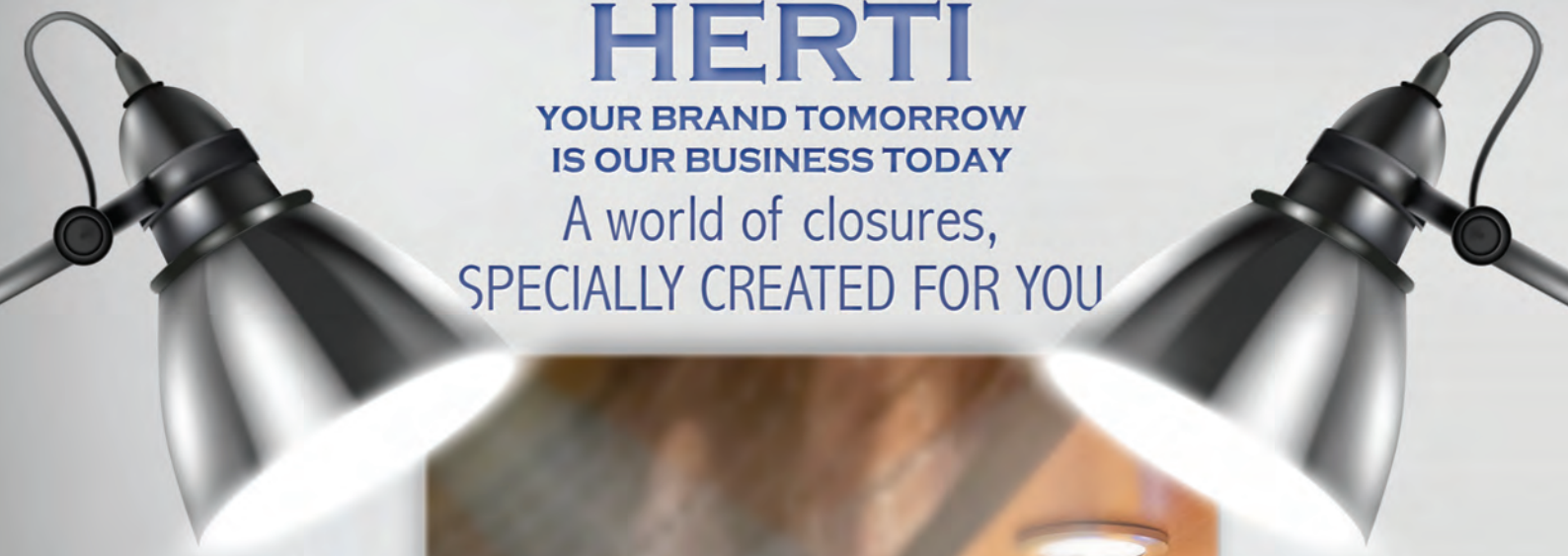




HERTI

YOUR BRAND TOMORROW
IS OUR BUSINESS TODAY

A world of closures,
SPECIALLY CREATED FOR YOU



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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 indi-

vidual 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. 🏢

Scopri anche altri prodotti di „Herti“ su www.herti.bg/en

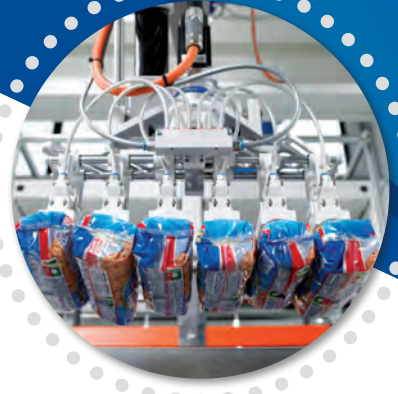
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PACKAGING

VERSATILITY, COMPACTNESS AND RELIABILITY

The new line of heat sealing machines: Foodpack Hyper

During these difficult times, ILPRA has been proactive in researching new technology to share in the marketplace. Despite the actual global pandemic,

ILPRA's values and constant commitment have allowed us not to forget our mission in providing quality packaging solutions throughout the global market.

That being said, during these uncertain times we have produced the next generation Tray Sealing machine that is qualified to be the pinnacle in ILPRA Tray Sealer lineup,

**FOODPACK
HYPER**





introduced as the "Hyper" Foodpack model.

The focus in the production of this new model is versatility, compact-

ness and reliability, high production throughput.

This new line is designed to satisfy a high production rate and suitable for a wide range of applications such as produce, meat & poultry, dairy, seafood, ready meals and much more.

The Foodpack Hyper has been designed to be extremely fast and is therefore able to process up to 25 cycles per minute in gas/flush version.

The sealing area is even wider (length 1000/1250/1450 mm x 350 mm optional at 450 mm length to work on double line) and it is carried out by mechanical handling with guaranteed precision, speed of execution, reduced maintenance and no consumption of compressed air.

This process sees the action of two jaws which, in complete synergy with the infeed conveyor, pick up the containers and transport them inside the sealing area, never stopping the flow of the trays.

All working surfaces, protective doors and electrical panel are positioned above the machine to avoid water or liquid stagnation and are designed to give immediate access to all areas.

This line also stands out for its reliability, compactness and guarantee of durability: it is in fact built almost

entirely in 304 Grade Stainless Steel. Also the cost of management and maintenance of the machine remains an important issue and also for this line the main movements are from a servo/brushless motor, therefore reducing air consumption.

The touch screen control panel is intuitive and allows the storing and retrieving of working recipes very quickly.

Moreover, by means of a badge assigned to the operator, the system keeps a record of information with full traceability of permitted and authorized operations according to safety levels and requirements.

Like all our ILPRA machines also for the Hyper it is possible to have support also with remote assistance diagnostics.

The customer, can always make the Foodpack Hyper tailored and customized and performing by combining various options immediately available such as tray denesting systems, dosing, coding, labeling, etc...

In a single concept, Foodpack Hyper is the culmination of ILPRA's 60+ year of experience and passion in food packaging, and the pride of an increasingly international, competitive and efficient quality brand. 🏢

Visit:
www.ilpra.com



TELOS CARDBOARD PACKAGING



TELOS - ENGINEERING FOR PACKAGING is a box factory based in the province of Verona that collects 30 years of experience gained in the cardboard packaging sector. It manufactures corrugated cardboard boxes to meet the most modern packaging needs in the most varied product sectors. More recently, Telos has specialized in the design of ad hoc packaging purposefully designed to meet specific needs: from the transport of fragile materials, to transition to eco-friendly packaging, to requests for integrated packaging with cardboard pallets.

ECOPALBOX

Ecopalbox is the 100% cardboard pallet, completely recyclable and eco-

sustainable. Thanks to its particular modular interlocking structure, Ecopalbox is the only cardboard pallet that carries loads even with **undistributed weight**.

It is available in the classic sizes: 60x40, 80x60 and 120x80, but also in a long series of variants: from small sizes for displays to bigger sizes for extra-large products.

The advantages that Ecopalbox offers to the food industry are considerable: starting from the integration into the manufacturing processes, as it is designed to allow automatic palletization at the end of the **production**, packaging or bottling line; to the **storage** of materials, since the

cardboard pallet allows storage within the production laboratories; up to **shipments**, thanks to the significant weight savings and high recyclability. Furthermore, Ecopalbox can be supplied disassembled to be assembled on site, thus saving additional space in the warehouse.

Ecopalbox does not require any sanitary certification, must not be treated for mold or insect infestation and meets all health and hygiene standards for international shipments (exempt from **ISPM15** phytosanitary measures).

Finally, all the elements of Ecopalbox can be printed with the company logo or with customized prints, acting as a promotional vehicle.

continued on page 60

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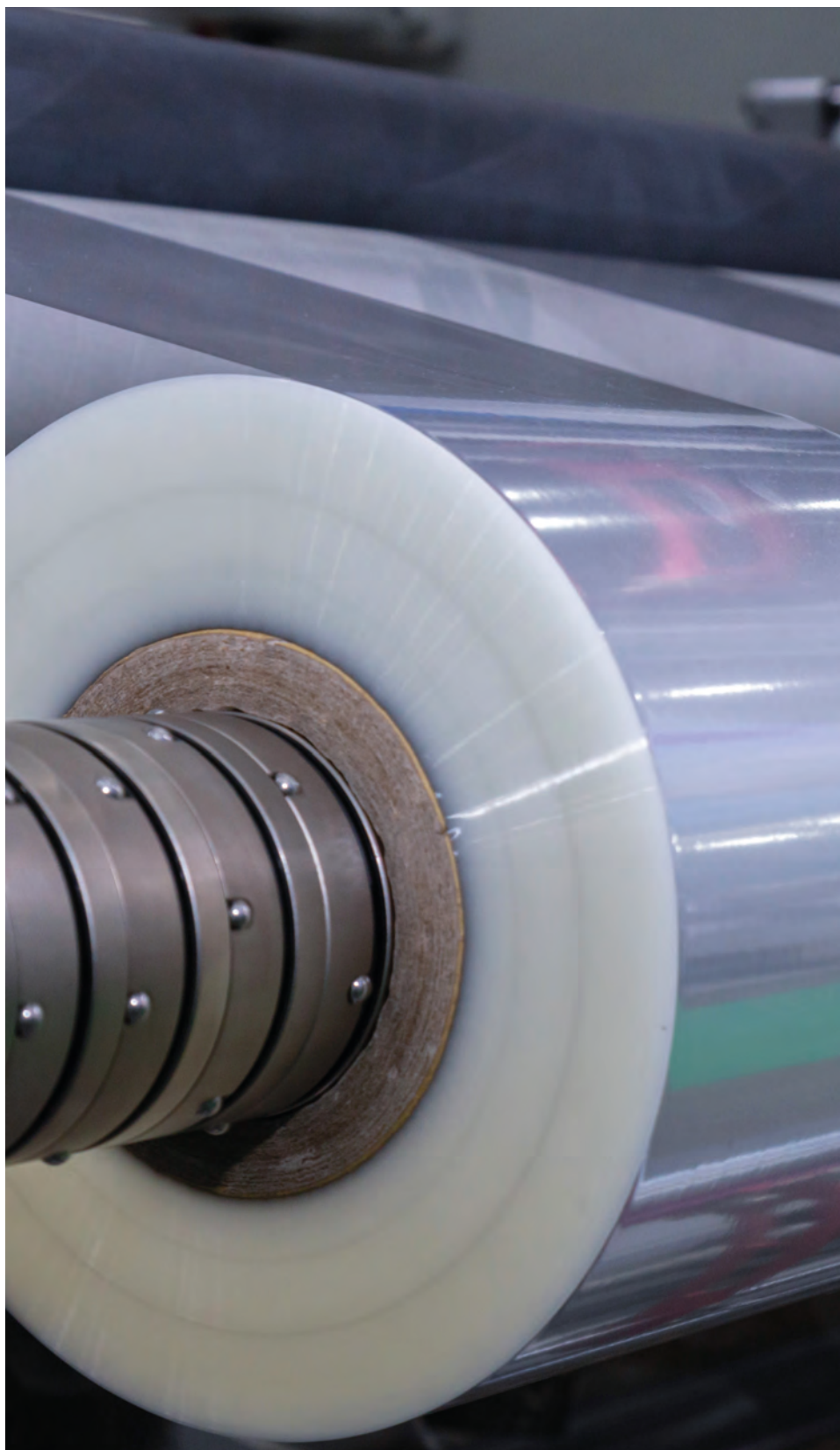
Tubitex is an Italian company specializing in the design and sale of industrial cardboard tubes. Established in 1976, Tubitex is among the leading European manufacturers of tubes, coils and cores in spiral and rectified cardboard for the producers of plastic food film, the paper and graphic industry, 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.

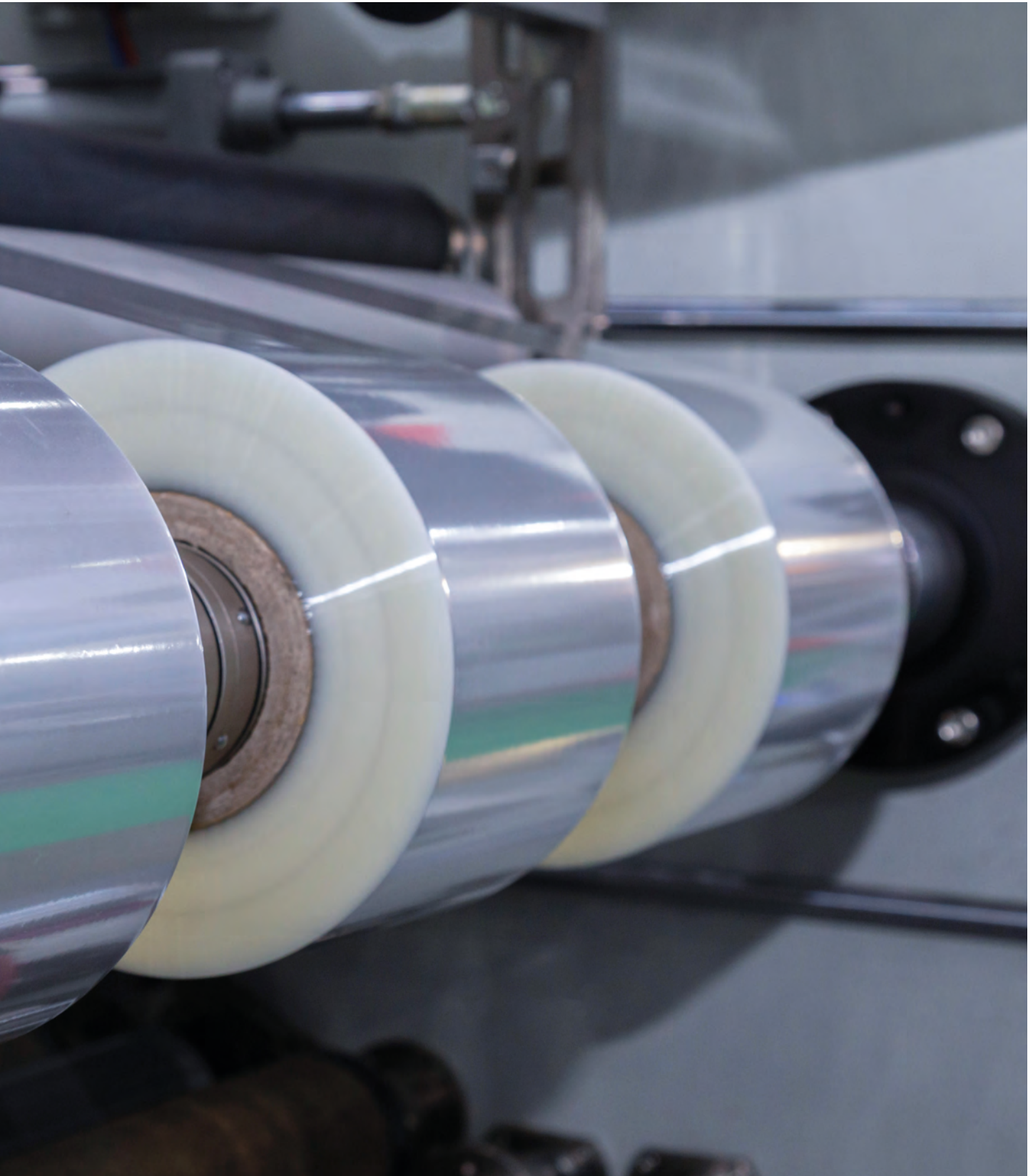
Products for the food packaging sector

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 commitment to environmental sustainability

Over the years, Tubitex' constant commitment to technological innovation and attention to environmental sustainability have allowed it to achieve important







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

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





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

A customer-focused approach

From a qualitative survey conducted in 2017 by the Cerved research institute on behalf of Tubitex, it emerged that 95% of our client companies are fully satisfied with the product and service received and 72% of them would recommend our company to other

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

Versatile products for different production sectors

Tubitex cardboard tubes are suitable for many uses, from the wrapping of various types of paper for the paper industry to the spools for the spinning of chemical fibres 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



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SPAZIO ZERO

SpazioZero is the revolutionary Telos branded **box-pallet** that can be assembled and disassembled in less than a minute.

The packaging consists in a complete pallet box hold in little more than the **small encumbrance** of the cardboard pallet. SpazioZero goes beyond the concept of ecological packaging, it's **reusable**: it is a packaging that,

once emptied, must be disassembled and returned to the sender, triggering a virtuous circle of returnable voids which also allows to reduce the cost of packaging itself.

SpazioZero is also available in the version with wooden pallet: Spazio Zero Cardboard & Wood.

ECOFOLD

EcoFold is the newest Telos proposal

for the **protection and packaging** of products such as snacks, bars, chocolate sticks, flatbr ads and the like.

It is a solution with a handmade and minimal look, with a rustic but **refined charm**; always keeping an eye on ecosustainability, typical of all Telos products.

EcoFold, in fact, is made entirely of corrugated cardboard which, in addition to giving a **green appearance** to the packaging, absorbs any impacts and prevents damage to the product inside, while letting the content see through thanks to the front opening.

Obviously EcoFold can be **printed** on request. 🏠

www.telosimballaggi.it



TELOS
ENGINEERING FOR PACKAGING

PACKAGING MACHINES FOR MASKS



General System Pack immediately accepted the worldwide need to pack P.P.E. - masks - creating two models of electronic horizontal flow pack machines, suitable for packaging these items.



GSP 45 S

These packaging machines guarantee not only efficiency and speed in packaging, but also very high levels of hygiene, safety and perfection of the packaging.

Versatility of use and format change allows the packaging of masks and other personal protective equipment in single or multi-pack packages.



GSP 50 S

video



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general system pack

XHOLDING: OUR 20 YEARS OF INNOVATION IN THE MANAGEMENT AND DISTRIBUTION OF LOGISTIC PRINTING

Objects, information, people, impulses, data, labels: these are all elements that make up our everyday life. Each of them, taken individually, has an essential relevance. However, the connection between them all creates an upper worth, a great value network in which there are no limits to sustainable human development.

For this reason, for 20 years, we have been successfully helping Italian companies in the food sector. Our mission is to integrate services and technologies for the management of traceability and identification of food, the same food we eat every day, and one of the most significant excellence of Made in Italy.

A delicate and fundamental task in any market sector - but essential in the food industry - is providing clear indications about the origin of products and ingredients on labels. This information ensures the final consumer could make a rational and aware choice evaluating the quality

of the food, the reliability and the safety of the county where the raw materials were produced. These requirements have always been the basis of the Italian position on food labelling. However, they have become mandatory imperatives following the health emergency that has spread. What Covid makes clear is our foods - as well as all the goods we produce - must always be made with the utmost respect for Earth and People. And to assure it, we need to pay great care to all stages of the production chain: from the procurement of raw materials to the traceability of the finished product. The challenge could seem demand-

ing. But Xholding Group has always believed that it was better to hard at work and give our best to support, day after day, the Italian food industries in fully achieving their tracking, identification and safety objectives. How did we do it? By sewing a customized, integrated, user-friendly, innovative and performing solution on our client companies that allows them to easily control the entire management and distribution process of logistic printing.

This single solution allows our customers to create labelling layouts and templates easily, to print automatically by sending data from ERP



system, to reprint old labels, to monitor trends and performance continually and, finally, to scale the market through a precise and in-depth analysis of the data.

It is not science fiction; it is not the future. It is a fact. It is the practical and complete way that for years the largest dairy company in Italy has been using with satisfaction and success, among our historical customers.

To ensure their production standards never go downhill or drop, we have chosen to work only with impeccable partners. Because no data, no information, no labels were never lost. We have chosen partners available 24/7, allowing companies to never shut down their factories due to technical failures. We have chosen partners with our same passion for improving the food & beverage market with human technology. 🏢

www.xholding.it



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- + Sell your products to an audience that is ready to buy



**The industry-defining fair for
the savoury snacks sector**

INSIDE ALPHAMAC



AlphaMAC was born at the beginning of 2019 as the brainchild of a group of highly specialized experts in the packaging field who wanted to build an innovation-driven company, which would stand out for its ability to adapt to the various needs of users and would create added value through its solutions for existing and newly emerging problems.

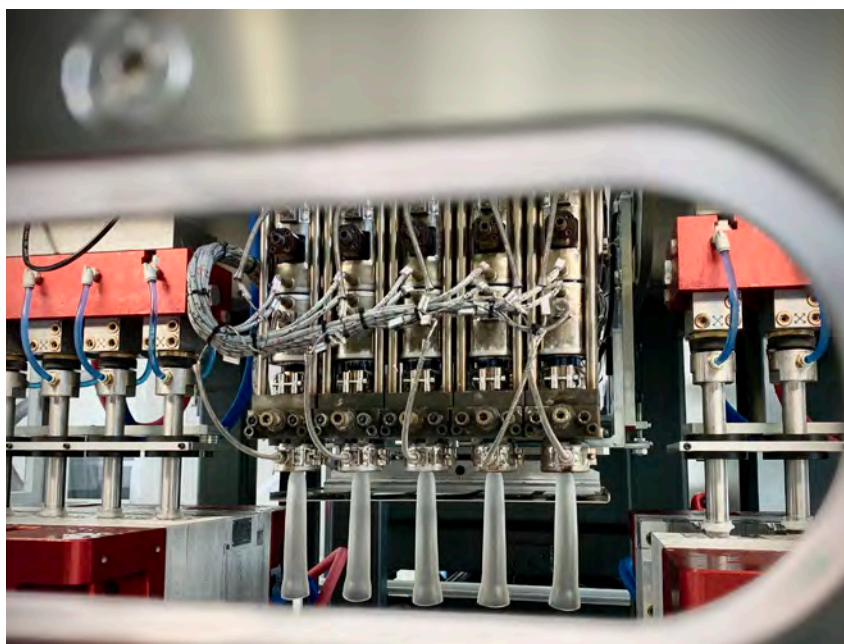
Our team, has decades of experience in the field of extrusion and blow-molding and an in-depth knowledge of the latest technologies, raw materials and complete packaging lines. This combination has helped us to become, within a very short period of time, a reference point in the industry for machinery for the production of plastic field containers.

“Our lean production structure”

Our business model is in itself not new and it has long been used in other segments

of the packaging machinery manufacturing industry. What's new is that it had never yet been applied to companies building extrusion and blow-molding machines. Our approach

involves a focus inside the company on the different high value activities – activities such as the management and supervision of design activities, research and development of innovation,





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BRUNI GLASS: ALL ABOUT SPECIALIZATION

Bruni Glass is a global leader in the manufacture of high-end special glass bottles and jars for a wide variety of markets: spirits, wine, sparkling, beer, gourmet, food products, room fragrances and pharmaceuticals. In addition to standard solutions, Bruni Glass boasts a portfolio of more than 3,000 customized design articles.

This bespoke approach is made possible by an international design team, a network of top-quality producers and the client-centric mindset we have had since our beginnings. Our goal: to proactively meet the needs of every client, providing complete assistance from concept to production, in order to create distinctive, unforgettable packaging.

Founded in Italy in 1974, our company is today an integral part of Berlin Packaging, an American multinational that is unlike any other worldwide, a group made up of some of the sector's top companies. From Food & Beverage to Gourmet, from bottles for spirits to those for chemicals and pharmaceuticals, right through to the world of room fragrances.

Bruni Glass supplies all the premium container sectors with original collections, tailor-made by our Innovation Center designers and technicians in collaboration with an international network of trusted producers who deliver top-quality service and specialization in every segment of the market.

There are more than 3,000 articles in the Bruni Glass assortment. Thousands of shapes developed

with combinations of different capacities, mouths and other design elements.

A range of products that includes containers not just in glass, but also in metal, plus closure systems and customizable caps, suitable for food pasteurizing and sterilizing processes.

FOCUS ON KNOWHOW

The Innovation Center is the Bruni Glass division recognized internationally as a center of excellence for research and development of new design solutions in the world of glass bottles and jars.

The division comprises a team of technicians and designers who work in close contact with the network of Bruni Glass producers and partners and collaborate with our clients to interpret and lend shape to their ideas.

A widespread culture of innovation focused on the creation of original tailored packaging that stands out on its reference market, anticipating fashions and future trends.

The Bruni Glass method entails direct constant involvement of the client in each step of the project. From concept to prototyping, from design to production specifications, from decoration to engraving on closures.

At every stage of the process, our Innovation Center guarantees proactive advice that starts with taking on board every specific need, guiding the client through creation of innovative packaging in line with their business goals as part of a relation-





ship based on continual sharing of experiences, competences and collaboration.

EXPRESSIONS IN DESIGN THROUGHT BRUNI GLASS DESIGN AWARD

Create, innovate, amaze. The Bruni Glass mission has always been to create projects on the cutting edge in terms of quality and aesthetics, exceeding standards and expectations.

Packaging that transmits significant added value to the product it contains, thanks to exclusive, unique custom design. Highly recognizable creations, studied to enhance the brand and communicate emotion, exponentially increasing consumer engagement.

In order to archive this purpose in addition to the Innovation Center, Bruni Glass has set up a packaging competition for international design universities.

Bruni Glass Design Award, created in 1997, offers students an unparalleled experience and an opportunity to transform their aspirations into a concrete professional result. During the past 15 editions, the Bruni Glass Design Award has proposed about 300 models, all of which have entered the Bruni Glass range of proposals by right. Of these, 60 were made industrially and generated 270 different items in terms of capacity, color and mouthpiece. The company has sold 90,000 pieces created or developed by the competition during its more than 20 years of life.

Bruni Glass Design Award is a contest aimed at students of the major International faculties of Design. Entirely financed by Bruni Glass, it lasts about 8 months and is divided into 3 main sessions in which projects are discussed and modified up to the final model. The 20 finalist projects, through careful selection, are submitted to the public and presented in single plexiglass models during important trade fairs.

The relationship with young people and schools has created enthusiasm since the first edition and has highlighted surprising and positive realities. This feedback has motivated the company to widen its participation to more universities and to increase the product sectors of the competition which, today, are 4: spirits, wine, oil and vinegar and home fragrances.

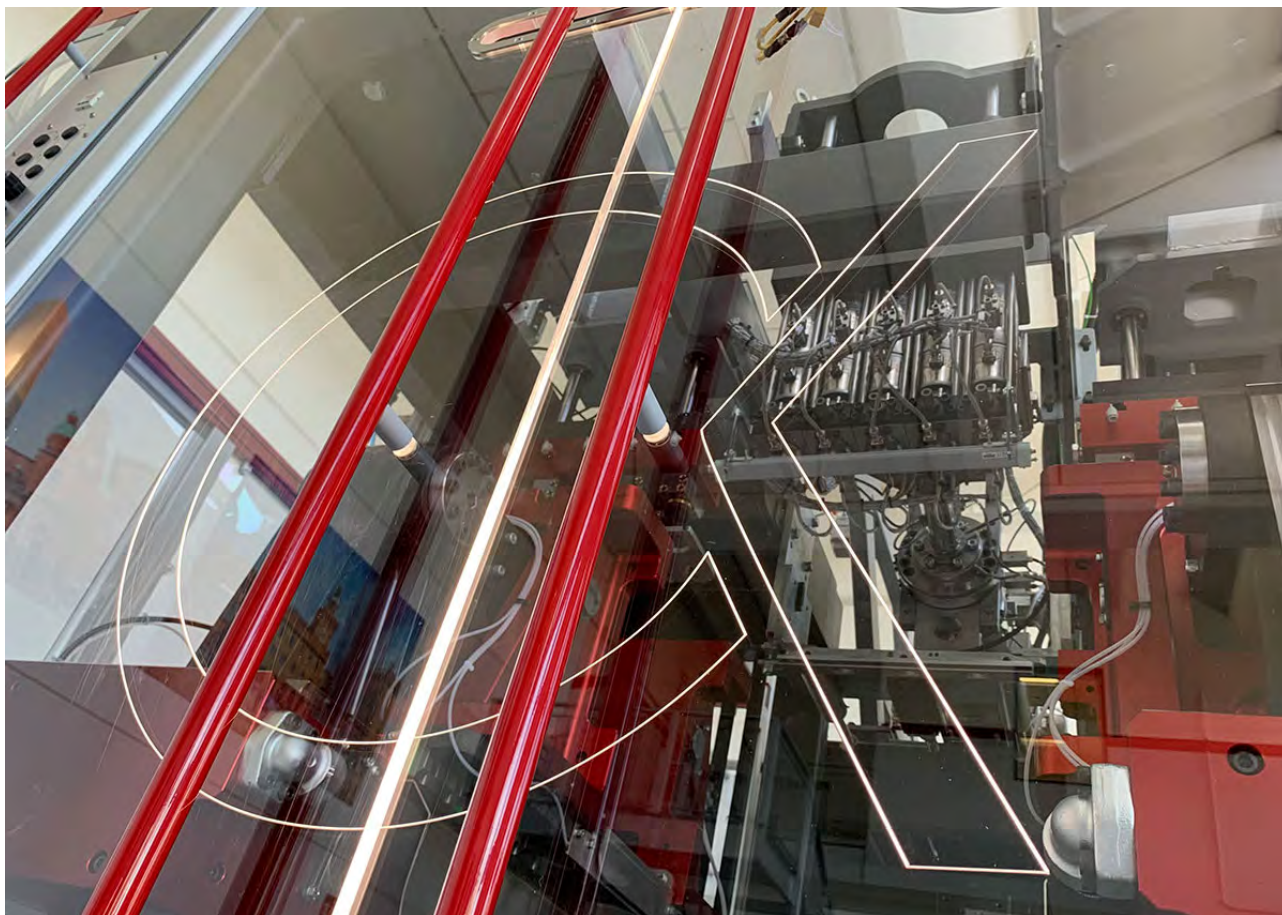
In the 2019 edition winner of the Oil and Vinegar - ELENIE - University of Münster (DE) - won with a project by Katharina Seizew, a bottle characterized by a sensual, harmonious and complied form. The shape is thin and tall without breaking the fluent shape of an olive.

Through this competition and the Innovation Center Bruni Glass tries to keep up with the times trying to launch new shapes on the market that can meet the various needs of the customer, an exclusive and recognizable container becomes an added value for the product. 🏛️

**DesignAward.BruniGlass.
com**



continue from page 64



in particular with regard to new raw materials, sales and customer support.

The remaining so-called “low value” activities are delegated to a consolidated network of companies specialized in the construction and testing of automatic packaging machinery. Specifically, this group is made up of 32 companies that work closely with each other, all located within a geographically defined area, which therefore allows a continuous and simple monitoring of operations. The synergy generated through this interaction between industrial partners - all of whom are highly specialized in their own sector of activity - results in a process that is extremely flexible, but with significantly lower fixed costs and a high-quality standard. Moreover, this cooperative approach ensures that all partner companies are continuously updated on the new technological solutions being developed and applied in automatic machines, which in turn enhances the quality and efficiency of our machinery.

“The latest trends in extrusion and blow-molding”

The use of fully electric machines is certainly one very important trend in the short and medium term. This is a partially consolidated technology, having been introduced to the market a decade ago. However, the rapid developments in technology and electronics still offers significant improvements to be made, which results can be for example a lower energy consumption of the machines and easier operation. To date, many converters and end users still have a significant number of hydraulic machines that will need to be replaced by more modern machines.

Another current trend is the use of highly flexible machines for various types of raw materials, in particular PCR (post-consumer resin) materials, as these are materials that will have to be used in much higher percentages in the future. Not all machines have extrusion screws suitable to maintain a stable process with these materials. In addition,

there are the new bio-materials that are currently under development or being experimented with that will not only certainly reach the market in the coming years but will become a mandatory choice for bottle producers.

Machines today must offer the users the ability to change formats quickly so that production efficiency and reconfiguration flexibility for different applications are not impacted. They must be simple to use, with the latest generation of intuitive HMIs that allow dialogue and the monitoring of production data, offering reliable technical solutions that guarantee perfect operation for years at the lowest possible energy level and with maximum efficiency. 🏢

www.alphamac.it

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FLEXICAP

*Capsule Filling & Sealing Machine
for Liquid and Powder Products*



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FLEXICAP DYNAMIC EXCELLENCE

FLEXICAP is an innovative assembling machine designed for coffee, soluble products, and liquids.

It is available in different models from a minimum of two lanes performing up to 120 capsules a minute to a maximum of eight lanes up to 450 capsules a minute according to the format and to the product to fill.

FLEXICAP boasts flexibility, dynamicity and the complete production efficiency.

The modularity of all the system makes quick and simple all the prod-

uct change over and all the operations fully accessible for the inspection.

One year after the presentation of the project at the exhibition HOST held in Milan, our R&D office continuously focused on the design studio and on the realization of many improvements on this project, both from an aesthetic and from a performance perspective.

The new FLEXICAP guarantees the maximum flexibility of the whole sys-

tem; from the feeding of the capsules by sorter or by storage for stacked capsules and available both in the New long-autonomy -supply version.

The loading and downloading of capsules is through Pick & Place system.

The inner capsules cleaning system before the filling and of the edge of the capsule after the filling is done by sterile micro-filtered air and the suction of the residual powders; this process allows a perfect sealing of





the edge of the capsule guaranteeing the sealing over the time and the closing of the top lid.

The filling and sealing stations are user-friendly and they include the maintenance and the cleaning. The machine is equipped for the installation of a laminar flow that ensure a 100% hygienic product.

All the machine is designed to work with more formats both for powders or coffee and liquid products and thanks to the use of pucks to transfer the capsules and the filling stations, filter insertion (if required) cut and seal top lid and “docking station” model.

This version is easy to dismount and performs an excellent cleaning. Furthermore, the change over is fast and it is carried out within minimum limits of time and with no tools.

The handling of the stations is made by brushless motors and allows accuracy and flexibility as well as the quality of the operations to be carried out; both the adjustments and the configurations of the parameters are carried out from the 15” “touch screen” control panel with the possibility to save the production data. The machine is prepared for the integration into industry 4.0.

FLEXICAP is equipped with controls for the correct execution of all the operations and for the installation of verification camera.

All the contact parts with the product are made of 316 L. stainless steel and FDA approved.

The uncoupling and descent system for the cleaning of the grinding system or upper feeding hopper (coffee or soluble products) or other devices

placed over the upper part of the FLEXICAP: it allows the maximum security of the operators and maintainers.

It is possible to connect directly the filling stations to the production installation of the product, in order to guarantee the maximum hygiene of production with no stops of the machine.

Thanks to the long experience in the designing and construction of the machines, we can customize and satisfy every single enquiry aimed at satisfy any customer need. 🏢

www.omastecnosistemi.it



OMS GROUP, A MATTER OF PACKAGING

OMS Group is a world leader for end-of-line packaging of palletized products for all market sectors

In addition to the Italian head-quarter the Group consists in 12 subsidiaries based in Italy, Europe, North and South America, Asia and Oceania.

Established in 1949, OMS has a long-established tradition of designing and manufacturing strapping, stretch & shrink hooding and wrapping systems. Reliability, experience and flexibility are three important characteristics that enable OMS to respond to today's market demands, from the simplest strapping machine up to the most sophisticated packaging plant as well as complete packaging lines for the food processing market.

All this was made possible thanks to the OMS' many years' experience in this market, along with a vast number of tailor made solutions specifically studied for its customers and the third generation of businessmen who have continued to be involved closely with the market, with the vision of a future characterized by innovation and continuous improvement.

OMS has developed the following machine model specifically for the food sector: the O6GS horizontal strapping machine equipped with the patented TR1400HD head and corner application device (optional).

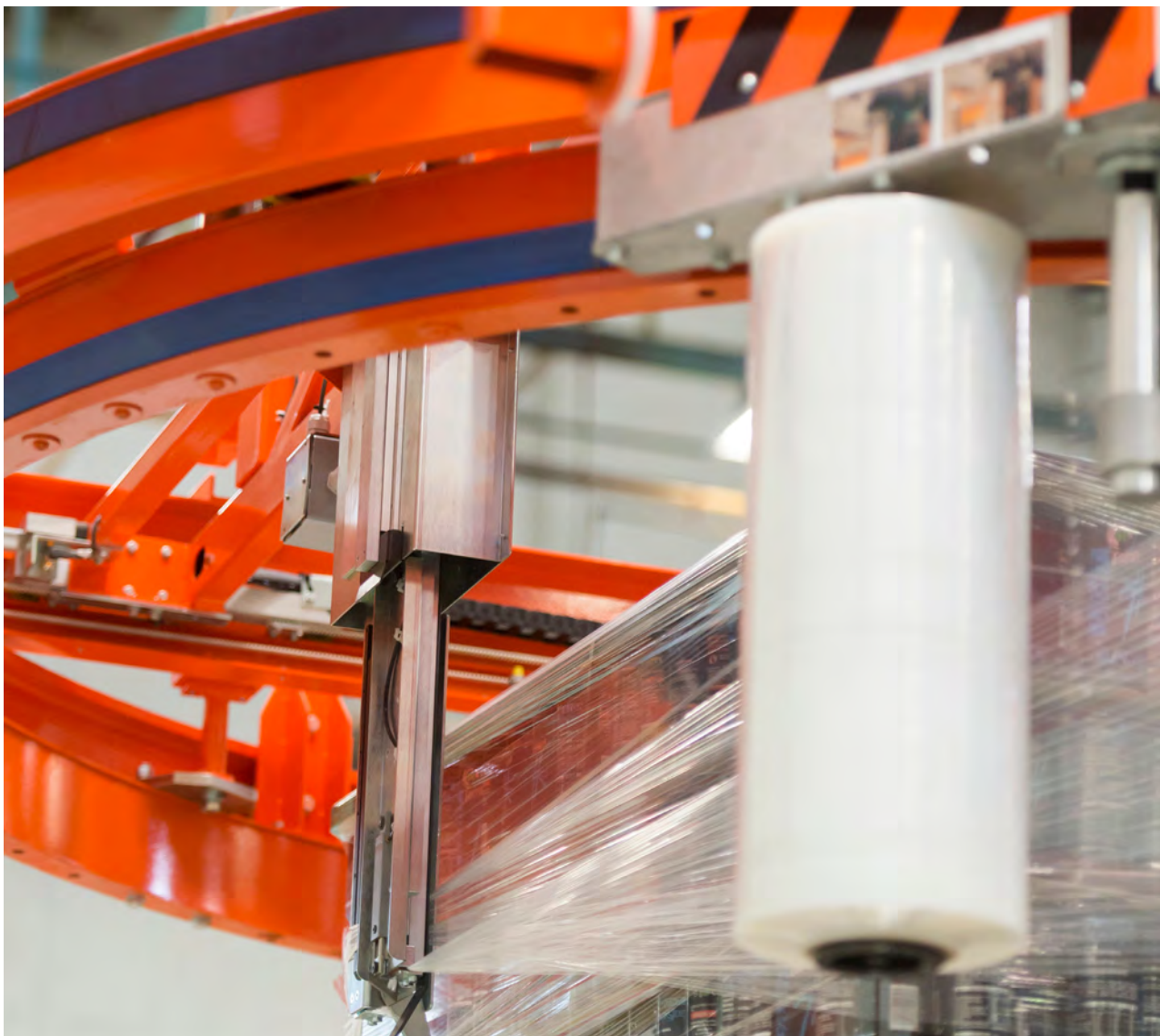
With this model is possible to automatically palletized products of any production food sector, which need to be kept together during transport or handling or for their safe warehousing or storage.

The structure of the O6GS model is not very bulky and can be easily transported. It is equipped with a small sized arch with which to strap products at only 130mm from the ground (or from a possible conveyor below the machine).

It can either be installed on completely automatic lines or it can work separately.

Automatic ring pallet wrapping machine type AVR900: it can be equipped with top sheet dispenser and advertising band applying (options)





The « ring » technology, allows to execute the wrapping cycle without moving the pallet and, consequently, without endangering the quality and the stability of the pallet load while guaranteeing a high production yield also thanks to the exclusive and patented pre-stretch unit (guarantees pre-stretch ratio up to 300%) activated by the motion of the ring.


Possibility to start and stop the wrapping cycle at any height of the pallet load, allowing specific wrapping programs, such as top wrapping and single wrapping.

The results are a largely increased reliability and reduced maintenance as well as stable loads with minimal film consumption.

Exclusive and patented “tuck under” system. At the end of the cycle, the final film tail is safely inserted under the previous wrap.

As results no loose film ends, guaranteeing a perfect finishing as well as no pallet alignment needed as the system detects and moves towards the pallet. Reliable film end

fixing without heat seal. Simplicity and flexibility.

With a constant attention to new technologies and market demands, all OMS models are designed to interface with the customer's network in accordance with the “Industry 4.0” protocols. 

www.omsspa.com



SMI: NATURAL AND BIOLOGICAL PRODUCTION THAT RESPECTS THE ENVIRONMENT

SMI solutions for Cereal Terra

Nutrition is one of the main ways we can demonstrate love for ourselves and for others

Starting from the concept that “we are what we eat”, the company Cereal Terra, a pride of made in Italy, since 1990 has been producing quality preserves using 100% organic raw materials and has been investing in new technology to combine technology and tradition and guarantee the quality of their products, starting from the selection of the seeds, up to the final product in jars that reaches the consumer's table. In the field of packaging, this Turin-based company recently turned to SMI for the

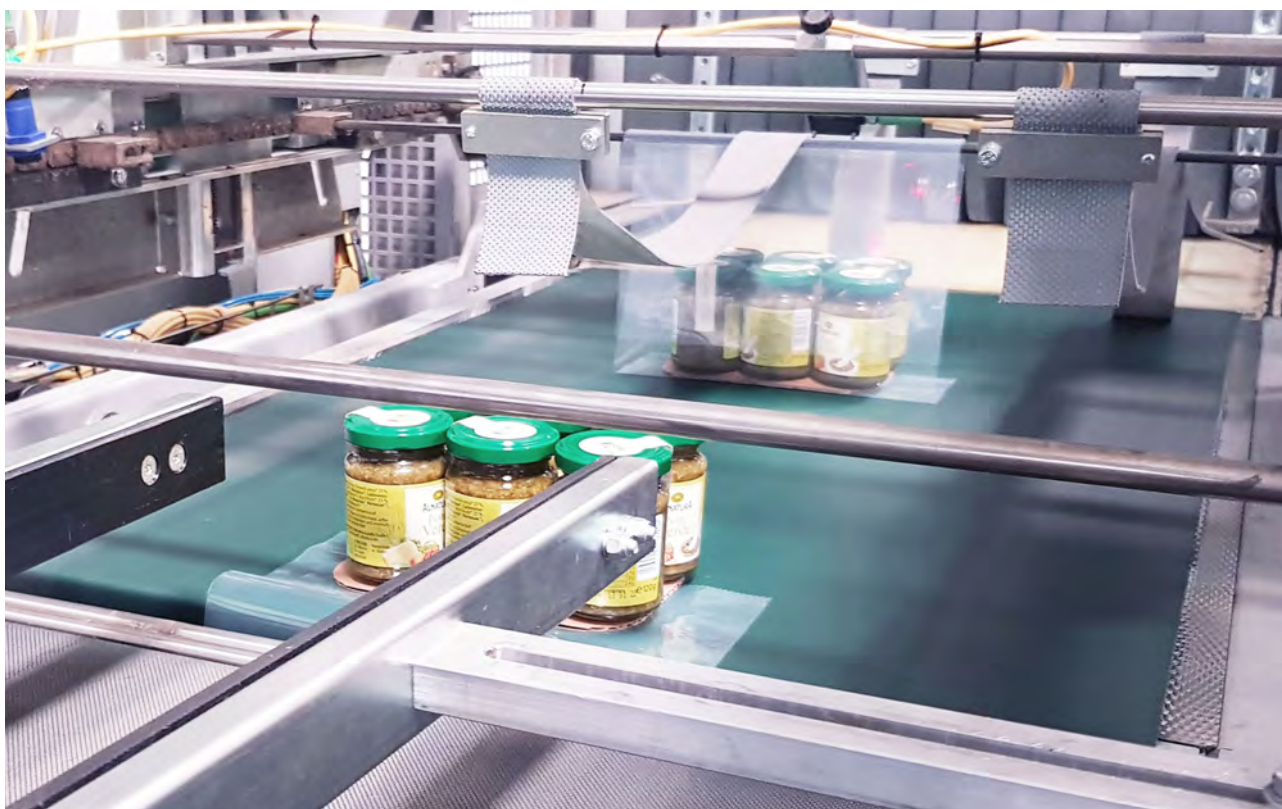
installation of a shrink film packaging machine from the LSK 40 T range, for the packaging of a wide range of jars from its production line, in tray and fil or pad and film

The story of the love for good things

Cereal Terra has a strong link with the territory in which it operates, putting the main importance on the natural cycle of raw materials, to enhance seasonal varieties. The Piedmontese company, has managed to create a

strong bond between tradition and family passion, the use of cutting-edge production techniques and cooperation with the entire supply chain, to offer its customers the highest quality products and the ability to trace every step of the raw materials used.

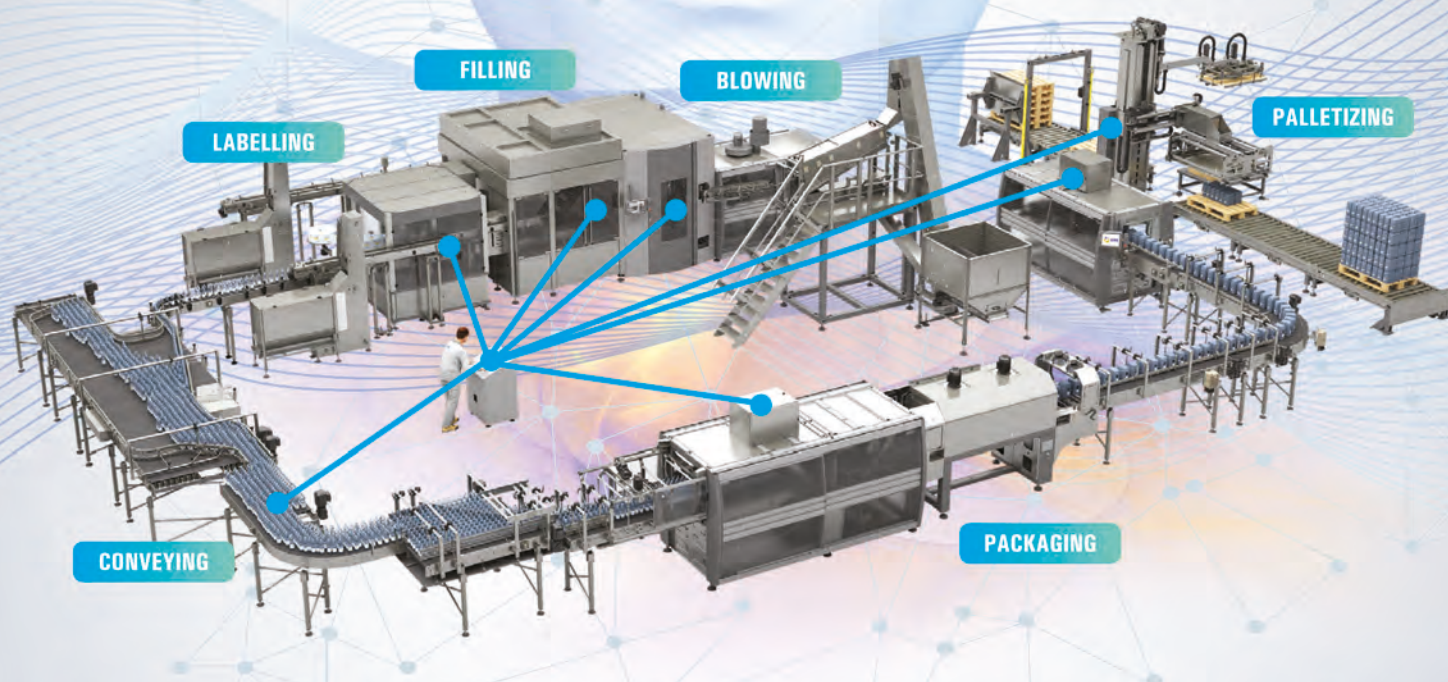
Its history can be told through its products, because each jar contains unique aromas and flavors of fresh products, which, after rigorous checks and inspections to ensure impeccable quality, are transformed and sold to the final consumer. Cereal Terra



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





is characterised by its wide range of production, which includes numerous types of jars and glass bottles of appetizers, sauces, pesto, ready-made dishes, etc., packed by an SMI shrink wrapper from the LSK ERGON range in practical shrink film packs with tray or pad. LSK 40T shrink wrapper is the best solution for packing in tray+fil or pad+film the wide range of jars produced by Cereal Terra.

Main features:

- automatic packer suitable for packing different types of containers
- mechanical product grouping system; format changeover is manual
- small size, capable of meeting the requirements of those who do not have large spaces in their production plants
- great quality-price ratio: despite the use of cutting-edge technological solutions and highly reliable components, the new LSK ERGON range has very competitive prices

- the film cutting unit has a compact design and the blade of the knife is managed by a direct-drive brushless motor, which makes the cutting operation more precise and the maintenance easier
- carton and pad magazine has been elongated to guarantee a greater operating autonomy and simplify management operations

Unique scents and flavors, enclosed in a jar

The first objective of Cereal Terra is to always obtain the best quality; to do this, it starts from extraordinary and very fresh raw materials that are processed in just one day, preferring manual and artisan production and bottling. For example, to produce pesto, characterised by the unique aroma and taste of freshly picked basil, the Piedmontese company uses exclusively organic products grown on their family farm, the Ciliegio, which is located in Sarzana in Liguria, a symbol of an agriculture that respects the land

and culture and guarantees genuine and quality products. The Genoese PDO Basil, with which it produces its pesto, is a traditional product guaranteed by a production regulation controlled by the Chambers of Commerce and labeled 100% transparently. The corporate philosophy of Cereal Terra is based on ethics and respect for the environment and contributes to the development of a healthier and more sustainable world. The company is very demanding regards the guarantees of origin, the excellent quality and traceability of the products it uses and, to achieve these objectives, it makes use of an independent laboratory. It also collaborates with accredited and continually monitored farms. Every single process of transformation takes place in compliance with strict hygiene standards and with the highest respect for the environment. In addition to the attentive manual work carried out by skilled hands, just like in the past, Cereal Terra uses cutting-edge machinery to perform scrupulous safety and quality checks, such as metal detectors, blowers, scales for corrections of the weight of the jars and mechanical closure and the use of highly modern, production techniques alongside a long tradition of artisan excellence.

SMI S.p.A.

SMI designs and manufactures bottling plants and packaging machines with an innovative design, equipped with IoT technology, providing thousands of customers from more than 130 countries with smart solutions, able to meet their requirements in terms of competitiveness, production efficiency, operational flexibility, energy saving, easy management and monitoring of the whole production process. The latest developments and the continuous investments in Research & Development have led to the production of even more compact, economic and eco-friendly machines, able to meet production requirements **up to 36,800 bottles/hour.** 🏭

www.smigroup.it



Wedge wire screen VICO Screen Candles®

The VICO-screen filter candles are used in applications where a high filtering value is required. In modern filtering systems, the VICO-screen filter candles allow high flow rates and minimum and easy maintenance, thanks to the ease of cleaning and limited clogging. The use of very slim profiles increases the open area and allows filtering of higher volumes of liquid compared to other filtering elements. Despite the small size of the wires and thanks to their structure, the filter candles have a high pressure resistance.

FROM CONVEYOR BELTS TO WEDGE WIRE SCREENS

Costacurta S.p.A.-VICO is an Italian company specialised in the design and production of metal components for industry and architecture serving international markets.

Located in Milan, with two production plants in the province of Lecco, Costacurta boasts a consolidated Made in Italy experience since 1921. The company is active in several areas (Food & Beverage, Energy, Textile, etc.), and its entire product portfolio is made entirely of raw materials made of wires or metal plates:

- Filter elements
- Conveyor belts
- Products for the Oil & Gas, chemical and petrochemical sectors.

Costacurta S.p.A.-VICO produces a wide range of filter elements and conveyor belts that are used in countless applications in very different industrial sectors. These applications include beer production and pasteurisation.

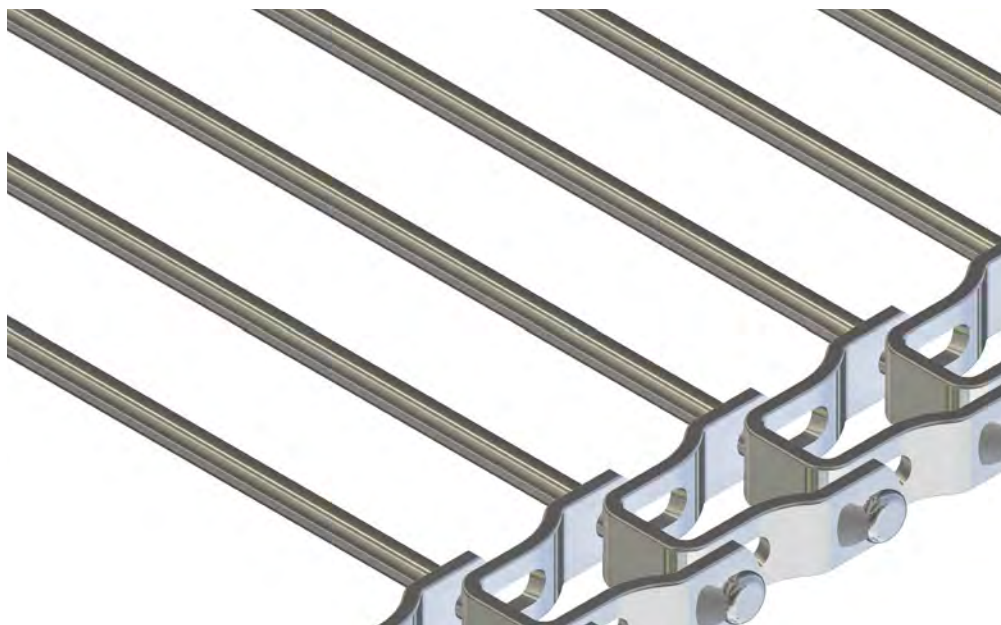
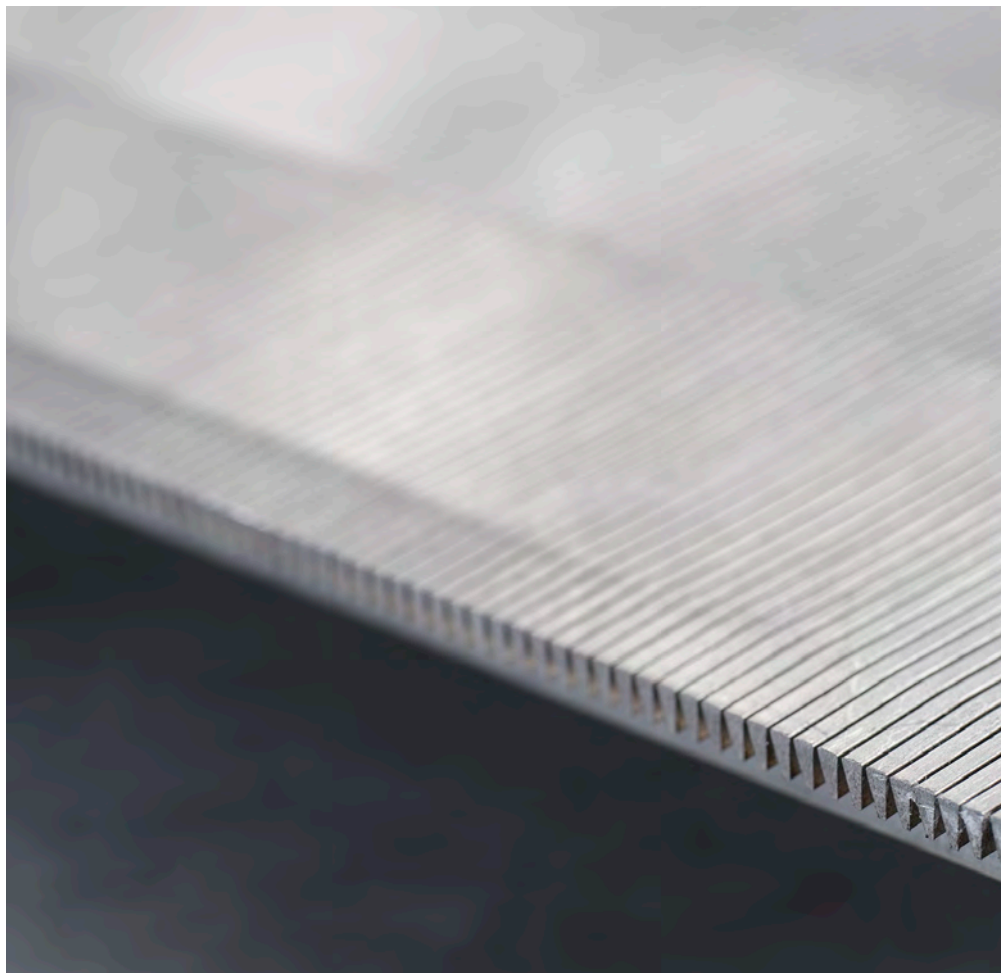
Brewing and pasteurisation

In the field of beer production, Costacurta products generally used are:

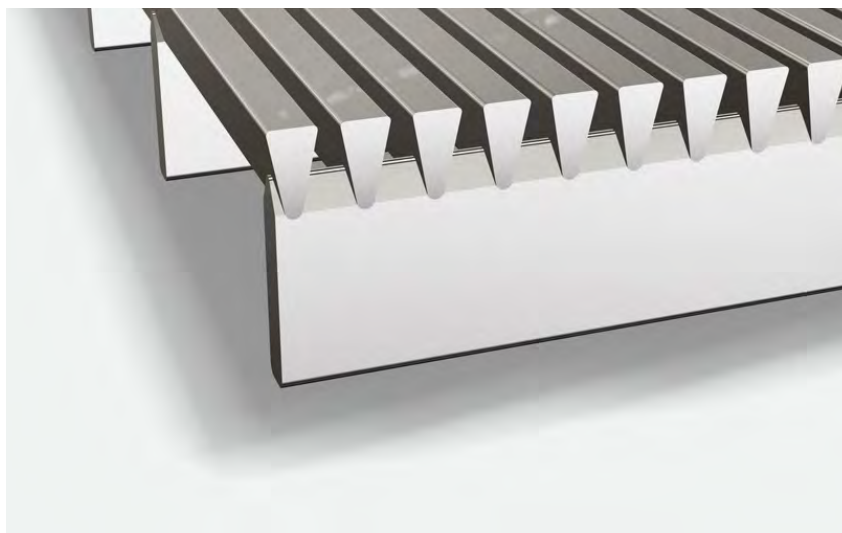
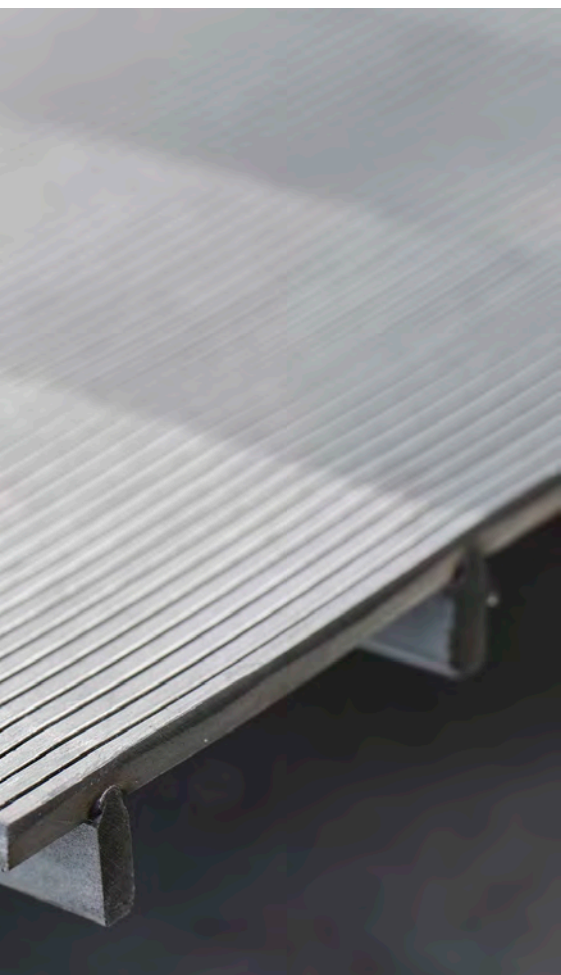
- VICO-Screen flat panels or slotted plates for Lauter Tun used in wort filtration processes (lautering)
- VICO-Screen candles for microfiltration
- conveyor belts for pasteurisation

For beer production, Costacurta products used are Wedge wire screens: in flat panels for Lauter Tun and candles for pressure filters, coated with filtering material.

Beer is produced by alcoholic fermentation. In this process, the barley malt grains are ground and mixed



VICO Costacurta



with hot water so the enzymes in the malt can be activated. Once the starches have been transformed into sugars, the resulting solution is transferred into a large tank at the base of which there is a false bottom consisting of a wedge wire VICO-Screen or a stainless-steel slotted plate, which acts as a filter.

The solution is drained through the slots in the filter component, which retain the solid residues inside the tank. The solution drained through the filter passes to the next processing steps, i.e. boiling and hopping, cooling and oxygenation.

Flat panels for Lauter Tun

Costacurta VICO-Screens used inside the lauter tuns are made of stainless steel, to guarantee the best level of hygiene.

VICO-Screen flat panels are obtained by levelling the cylinders produced by the machine.

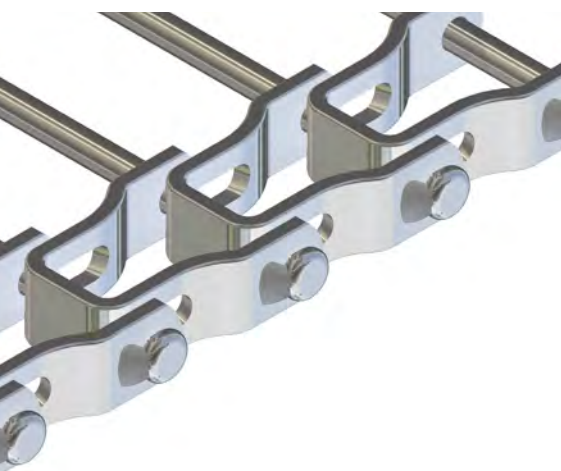
VICO-Screens are suitable for retaining materials, filtering and screening. Correct filtration is fundamental to prevent the skins from passing to the next boiling stage causing the

release of bitter substances into the beer. The components have very defined continuous openings, which allow a high free area and, consequently, very low pressure drop values through the filtering surface. The high number of welds also gives a considerable mechanical resistance generally allowing a very long life. The continuous opening and the triangular section of the wires allow only two points of contact between the particles, thus minimising the tendency to clogging. Furthermore, thanks to the particularly smooth surface of the VICO-Screen, the abrasive effect due to the contact between the product and the filtering surface is very limited.

On request, VICO-Screen panels can be supplied complete with edging or stiffening elements according to customer specifications and drawings. Surface treatments such as degreasing, pickling and electropolishing can also be applied.

Candles

VICO-screen candles are used in applications where a high degree of



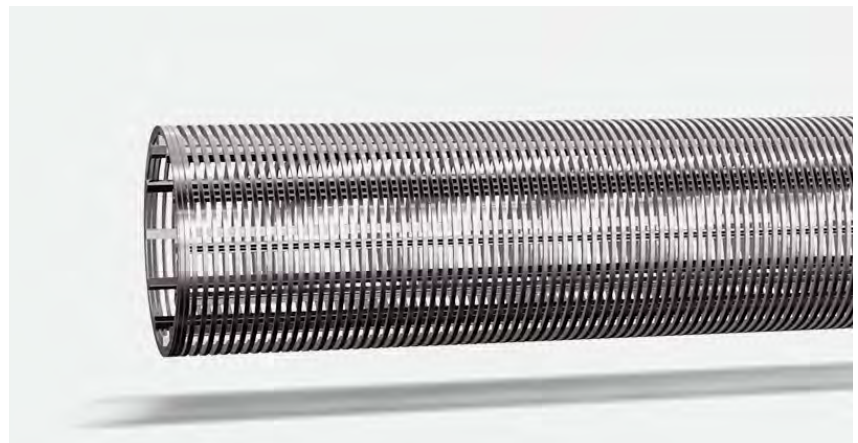
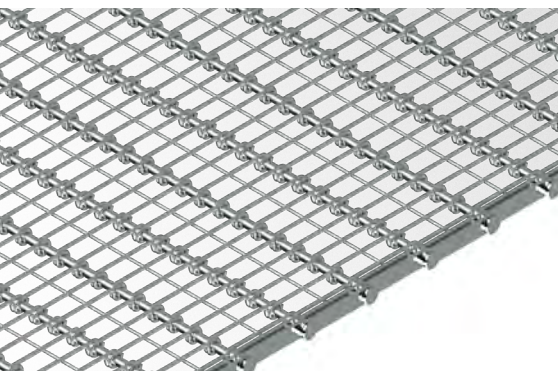


filtration is required. In modern filtration systems, VICO-screen candles allow high levels of fluid flow and low and easy maintenance thanks to their simple cleaning and low level of clogging. The use of very thin profiles increases the passage area and allows the filtration of higher volumes of liquid compared to other filter elements. Thanks to their structure, WWS candles are extremely resistant to pressure despite the small size of their wires.

On request, VICO-Screen candles can be supplied with sleeves / sockets. Surface treatments such as high pressure washing, degreasing, pickling and electropolishing can also be applied.

Conveyor belts for pasteurisation

Pasteurisation is a thermal recovery process aimed at eliminating patho-



genic microorganisms inside liquid or semi-liquid foods. It takes place between 60°C and 85°C ~ and increases the storage time of the food as well as reducing the risk of bacterial contamination, keeping the quality of the product almost unchanged. This process usually takes place inside spiral towers or straight tunnels. Spiral towers allow the vertical use of the necessary space to guarantee the food the right transit time inside the pasteurisation equipment. Spiral towers are usually built as single or double towers and can be tailored in different ways to suit existing production processes as well as available space.

Costacurta products used in this application are conveyor belts, which carry the food to be pasteurised inside the pasteurisation system.

Thanks to the wide range of geometries, the quality of the steel used and the production process, Costacurta conveyor belts are suitable for all types of continuous pasteurisation machines, guaranteeing the highest level of hygiene and the best process performance.

Why you should choose Costacurta S.p.A.-VICO

The advanced quality control systems on materials and production process, allow us to create a high-quality product fully compliant with our customer's design specifications. Moreover, our wide range of products and high production flexibility allow us to respond to any of our customer's needs. 🏠

www.costacurta.it



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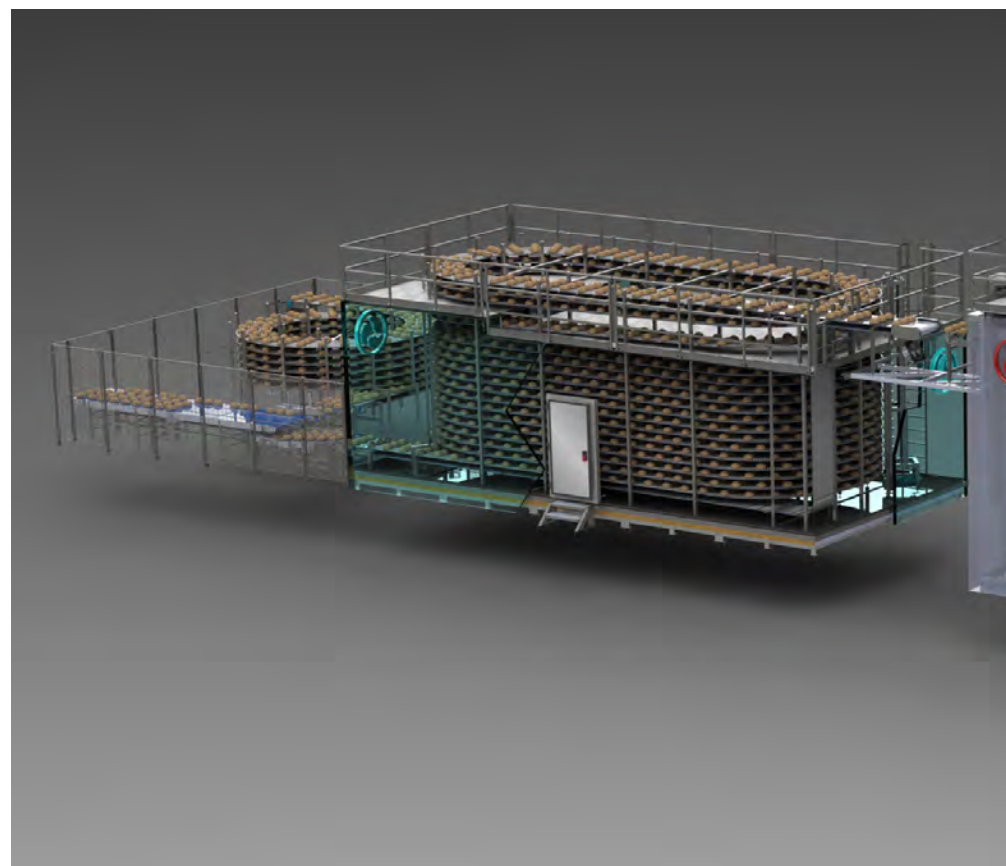
ENHANCED COOKING PERFORMANCE: THE FUTURE OF FOOD IS IN A SPIRAL OVEN

Apart from this unusual 2020, those who normally visit stands at international trade fairs for the food processing sector are well aware that the food industry is highly innovative.

The growing demand for food, the development of new markets in countries with emerging economies, and the constant demand for performance and profitability in mature markets continuously drives the food industry towards the optimisation of technological processes.

Such progress involves all sectors: industries such as refrigeration, cosmetics and packaging have welcomed new technologies decade after decade. The same applies to the cooking industry, which has experienced the development of sensors, airflow mechanics and the digitisation of controls and programmes. Even the heart of the oven, namely the very dynamics of heat, has seen important innovations after having remained substantially unchanged for centuries. These include the UK-designed impingement oven and French clean-room technology. The next evolutionary leap in cooking technology, however, will be taken by an Italian company.

Davide Deppieri, a master baker and R&D consultant for Tecnopool, explains, "Over the past few decades, industrial baking technology has still been very much linked to the needs of a growing industry: combining standards of quality with high productivity, a good shelf-life and the optimisation



of treatment times was obviously very difficult. In recent years, needs have changed and a much more sensitive food culture has taken hold.

This scenario presents us with new opportunities not to be missed when it comes to rethinking baking technology.

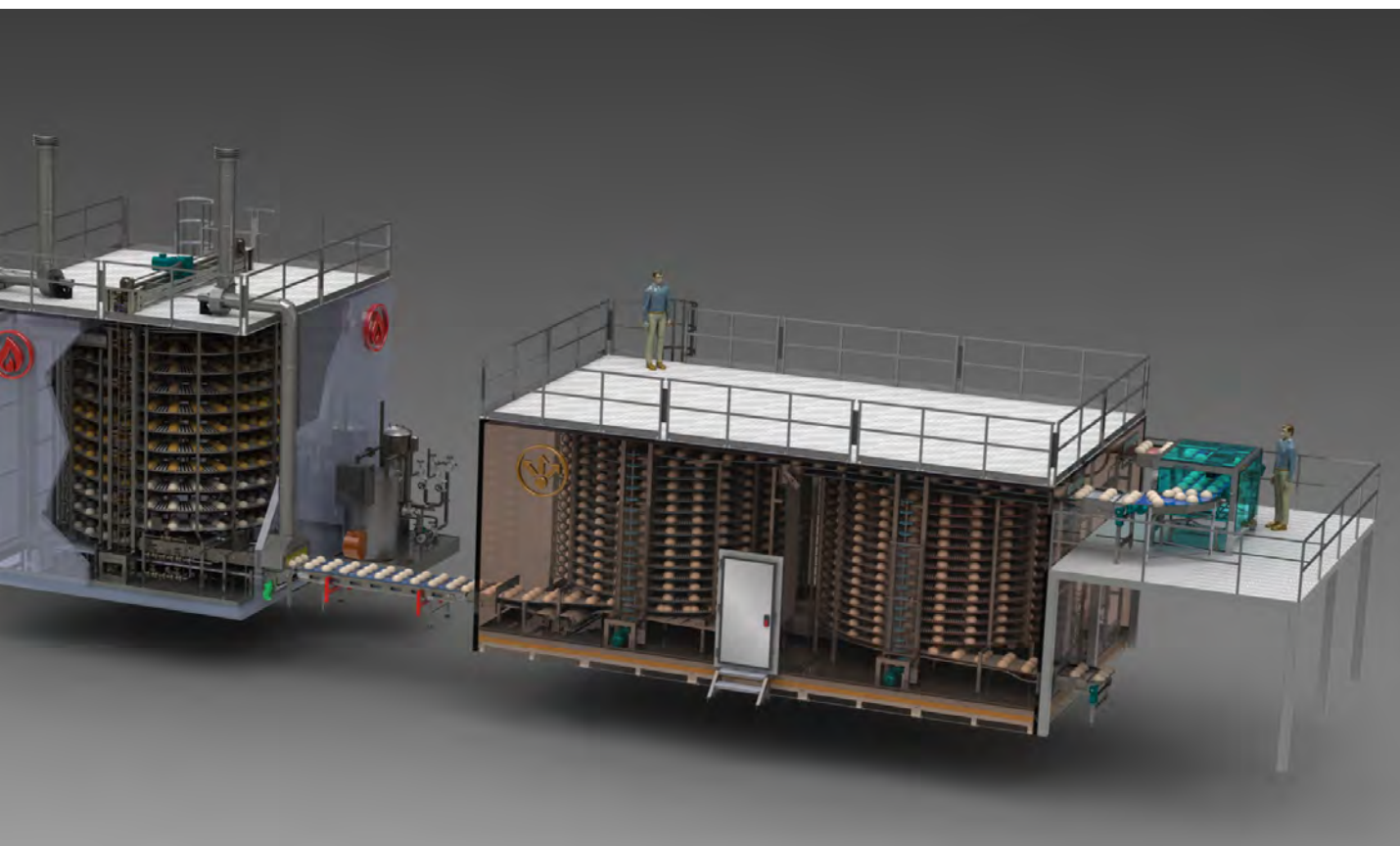
This is because baking does not simply involve changing the cooking temperature or mode, but it is a process that radically changes a product in a complex way. If properly done, it can greatly improve the end quality of products. The British use a wonderful expression to describe the potential advantage of good baking: oven spring."

In order to seize opportunities that really improve baking, over the years Tecnopool has researched and perfected its exclusive spiral technology.

Mr. Deppieri continues, "I joined Tecnopool after having collaborated with the company and tested their products for years working as a business owner and setting up plants, precisely because I have first-hand experience of the potential of the spiral oven. It is currently the only technology that can make a difference not only in terms of production performance but also quality."

Deppieri explains, "The advantages are many, from efficiency to less

Tecnopool is ready to redefine the oven concept: the next generation will consume less and cook better



space consumption on the ground, but the first and most important for me is that extra push to the product. I fell in love with these ovens while I was starting up a very large bakery plant near Ravenna. Usually the difficulty is to have sufficient bread growth in the first baking phase in conjunction with the starch gelation: in that case I found myself having to calibrate the system to contain its development, because at the end of baking the forms were too much voluminous. Practically the problem that every producer would like to have. “

The credit goes to high-precision baking, achieved by combining all three heat transmission modes: these ovens

use conduction, convection and radiation, distributing heat perfectly uniformly in the spiral chamber with great uniformity. Heat transfer is so efficient and uniform that it does not even result in the typical differences in baking normally found at the beginning and the end of the production cycle.

Mr. Deppieri adds, “In tests performed last summer, the baking was so precise that we did not notice any significant differences, not even when loading a single piece instead of a full load. We tested the ovens with all types of leavening agents, from organic (bakery products) to chemical (cookies and ladyfingers) and physical (curled bread sticks,



TECNOPOOL
TP FOOD GROUP
TOTAL PROCESSING

puff pastries, etc.). In all cases, the results proved to be much higher than the standard ones for the industry to the extent that we will soon start testing even more complex baking products such as “panettone”, all butter and with only natural yeast

In all tests we observed a much higher centre of gravity during baking, optimal distribution of moisture, excellent dimensional development and a much more uniform internal texture. This also entails an improved life



for end products, with more uniform cooling slower and improved moisture performance over time.”

Another decisive factor that Tecnopool will use to change the market is the high heat efficiency of the new ovens. Thanks to much reduced thermal inertia and more effective heat transmission with diathermic oil, they offer not only significant reductions in consumption but also flexibility of management that is unheard of with traditional ovens. The same applies to the risk of fire.

Mr. Deppieri continues, “On Sundays, some ovens need to be turned on in

order to be ready for production on Mondays. You can imagine what it means to a company to have an oven that can be heated to the right temperature (or cooled) in 20-30 minutes. Moreover, instead of stopping the production line for a day in order to clean the oven, this can be done half an hour after turning it off.”

Mr. Deppieri concludes, “It has been clear to us for some time that we can reap huge benefits with this technology in terms of energy, management and quality: the solutions we are about to launch are already in operation at many of our customers’

premises, developed on but a case-by-case basis.

The market currently has an urgent need for such innovations. Just consider bakeries: in the last century, bakery products were a staple food in people’s diets, and the huge need for quantity may have been a hindrance in terms of quality. We now consume much less, but we demand much higher quality from products such as bread and the like.

Also, for this reason, I have already noticed a strong curiosity towards these new devices: we all clearly believe that as soon as we launch them on the market, things will quickly change.

I am very pleased that the third generation of our ovens is now ready: we have figured out how to develop them in a modular system in order to standardise the customisation of the ovens according to different recipes and various types of leavening. I have no doubt that as soon as we have installed a few ovens, we will see an increase in demand.” 🏠

www.tecnopool.it
www.tpfoodgroup.com





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



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VLS
Technologies

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-





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 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. 🏢

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-

www.vlstechologies.it



YOUR EXPERIENCE. OUR TECHNOLOGY. AMAZING RESULTS.



BNX: LOW PRESSURE AND REVERSE FLAME STEAM BOILER

The BNX low pressure and reverse flame steam boiler, with steam drum technology, provides the production process saturated steam with the right degree of humidity which, in contact with the product, maintains the fragrance and browning features. The perfect relation between content and exchange surface ensures maximum reliability and high performance.

icicaldaie.com



RUMMO IS BORN AGAIN THANKS TO UNIQUE PARTNERS

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

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

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

#SAVERUMMO IS ICI CALDAIE'S CONTRIBUTION

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

to the energetic improvement of the factory with its expertise.

The beginning of a successful collaboration

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

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





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

To do so, ICI Caldaie has always relied on the collaboration with national and international partners, including research centres, universities and manufacturing companies, and on innovative methods (including design thinking, a person-centred process aimed at solving complex problems). ICI Caldaie, in fact, strongly believes that only through a

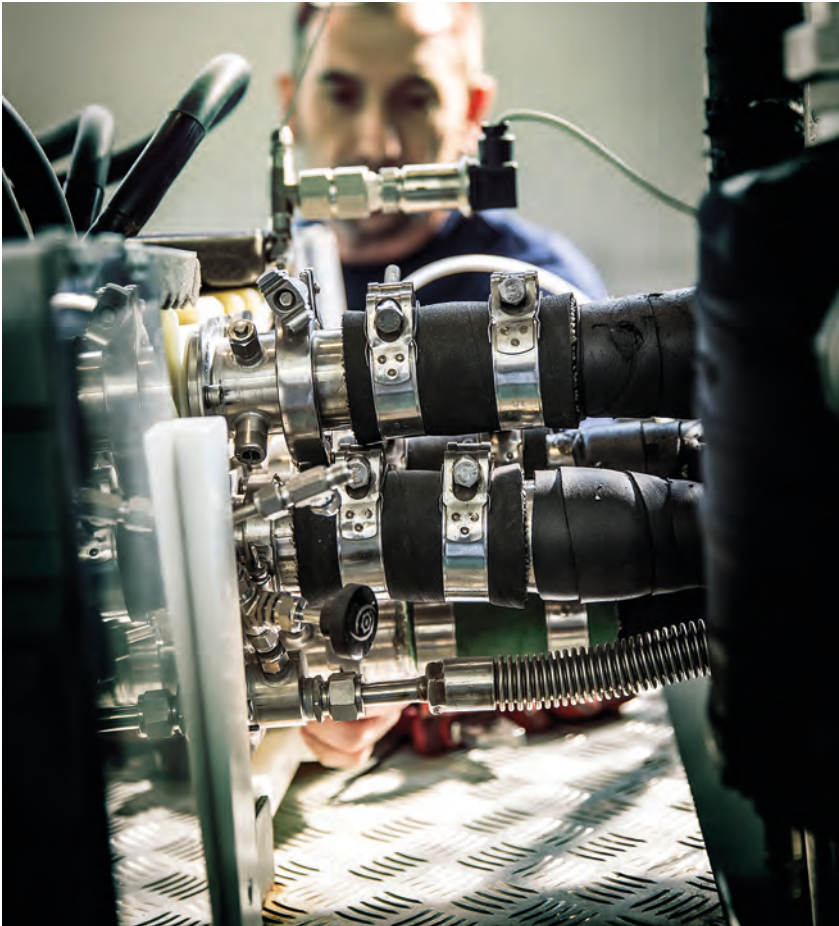
multifaceted and versatile know-how it is possible to create a truly efficient and functional system. In the specific case of Rummo, the challenge was to continue to improve the quality of its production, reducing both energy costs and the company's environmental impact. Making use of each other's expertise, ICI Caldaie and S4E System developed several solutions that perfectly met the requirements of the pasta factory.

Interventions and results

The design and modernizing activity was performed throughout 2016 in collaboration with the plant technicians, and ended in 2017. The interventions mainly focused on the heating plant, but also involved the refrigeration plant, the compressed air plant, the vacuum plant and the general energy monitoring system of the heating and refrigeration plant,

including the Energy Diagnosis procedure according to the Legislative Decree 102/2014. The main intervention in the heating plant was to improve the production efficiency of superheated water. S4E System identified the main problem, detecting an ex-ante situation with an efficiency of 86% characterised by the presence of a boiler that used diathermic oil as an intermediate heat transfer fluid for the production of superheated water at 140°C.

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



To date, the boiler working on the three pasta production lines in Room 2 produces at full capacity about 50% of the nominal power. This translates into a methane consumption saving of 200,233 Sm³/year, corresponding to about 58,000 €/year. The new system configuration also eliminates the diathermic oil circulation pump (diathermic oil pump Q=400mc/h H=35mt c.l. Pel ass= 45kWel) with a consequent electricity-saving equal to 356,400 kWh/year, about 28,500 €/year.

The energy efficiency path has thus produced the expected results: lower costs and reduced environmental impact. Overall, the intervention conceived by S4E System and carried out through the introduction of an ICI Caldaie boiler has led to saving about 234 TOE/year, a cost reduction of about 86,500 €/year and a decrease of about 520.86 tons of CO₂. The energy improvement process is not limited to this but has involved other sectors with excellent

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



TOTAL ECONOMIC SAVINGS

154.100 €/year



TONS OF CO₂ SAVING EVERY YEAR

800 Ton/year



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



TOTAL POWER SAVING

1.202.359 kWh/year





results. In the refrigeration plant, for instance, a reduction in energy consumption for the production of chilled water has been achieved by changing the system configuration and improving the efficiency of chilled water production by achieving an EER of 4.5.

This result was made possible thanks to inserting refrigeration units with screw compressors under inverter and replacing the plate heat exchanger with direct exchange and

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

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

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

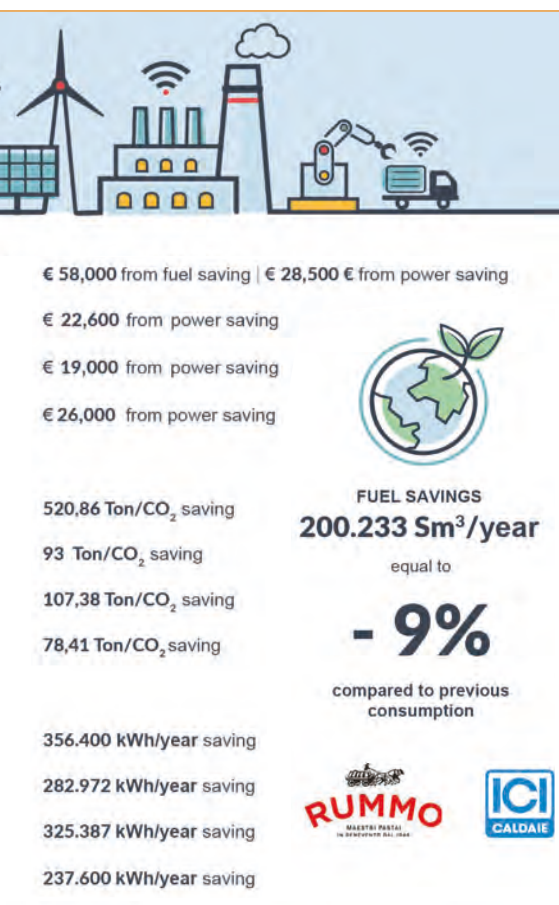
sis procedure according to the Legislative Decree 102/2014.

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

When the client's initial needs are fully met, there is no question of success. Success is made possible by the vision of those companies that no longer think themselves in terms of simple producers, from an individual perspective, but see the project on a larger scale. Only if driven by the desire to achieve a comprehensive solution one can establish partnerships with other companies that have different specializations and bring together multiple skills to develop complete projects. With this ambition in mind, a company like ICI Caldaie collaborated in the energy improvement process of another company, in this case Rummo, not simply offering its boilers, but participating in a design process that involved many other areas. Starting from a specific urgency, making useful energy-saving actions, it has been possible to create a condition of saving in a wider sense, making the company sustainable while maintaining the high-quality standards of its efficiency and productivity.

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

www.icicaldaie.com



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

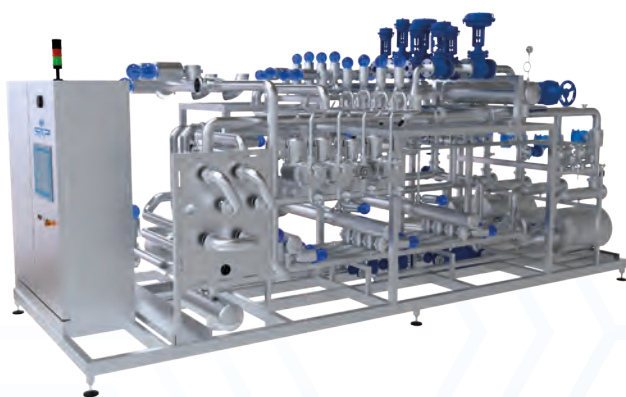
Mixing and Carbonating Units



Pasteurization Plants



Cip Cleaning Plants



Continuous Sugar Dissolvers



Syrup Rooms



Aseptic Tanks



Food Processing Plants



SAP ITALIA SRL
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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

Since 1983, SAP Italia has operated successfully on an international level in the field of construction of processing plants for the food industry.

The range of services that SAP Italia offers its customers includes indepth feasibility studies, comprehensive and detailed cost estimates, custom design for specific needs, production, installation, testing, staff training, preventive maintenance, assistance with specialized technicians and a spare parts service.

Our portfolio includes:

- Mixing and carbonating units,
- HTST pasteurizers and UHT sterilizer,
- CIP and SIP plants,
- Syrup and juice preparation rooms,
- Batch and continuous sugar dissolvers,
- Aseptic dosage and aseptic storage tanks
- Turn key projects.

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 installations 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

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 fittings 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



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 fittings, 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

AKOMAG



.... THE BOTTLE WASHER



AKOMAG S.r.l.

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info@akomag.com - www.akomag.com

NEW SUCCESS FOR AKOMAG

Recently the company delivered, installed and tested a new machine intended for washing recycled glass bottles. The machine for the PepsiCo group is a Hydra 8.2, characterised by a very high production: 37,500 bottles/h.

The new model, the pride of mechanical Made in Italy, reaches a mechanical efficiency equal to 99.4%, successfully exceeding the standards required by the customer in the contractual phase. With this new provision, Akomag confirms itself once again as world leader in the construction of glass bottle washers.

The bottle washer has been specially designed in order to minimise the environmental impact, with particular attention to water and steam consumptions, and to the duration of the detergent bath. The completely automated wash cycle includes an initial bottle-emptying station followed by a pre-wash spraying and first pre-soak bath that significantly reduces detergent bath pollution and markedly decreases consumption levels. In the pre-soak area the project also provides for the installation of a belt filter that allows to automatically remove the main impurities typical of recycled bottles (straws, paper, cigarette butts, for instance).

The washing of bottles is completed with the internal and external high-pressure detergent wash sprays, using self-cleaning and self-centring rotating nozzles.

Mains water for spray-rinsing

In designing Hydra 8.2, Akomag has focused on the final rinsing sprays using mains water. The expedients developed during the design stage





have allowed to achieve extraordinary results. By installing a special valve with integrated flow meter on the mains pipe (controlled directly by the control panel), it is possible to detect the instantaneous and daily water consumption required for the proper washing of the bottles.

With pride and satisfaction, Akomag technicians declare that thanks to the new design the new machine has a water consumption equal to 0.098 litres per bottle. A lower value than rigidly imposed in contractual phase by the customer.

The supply is completed with many other technological innovations, including sensors for slowing down or stopping the machine in case of missing or clogging of the bottles on the conveyor belts; synchronization systems of the bottle washer speed with that of the filling monobloc; control and introduction of detergent and additives in the washing bath

and of sequestrants/ disinfectants in the spray tanks; self-cleaning filters in the tanks; automatic bottle loading and unloading, perfectly synchronized with the movement of the main chain.

Akomag is a flexible and dynamic company that bases its policy on customer satisfaction, the quality of its systems, its assistance services and technological innovation. Akomag has been working for several years in the bottling sector and thanks to the proven experience developed in this field, the company can guarantee to its customers maximum yields, user-friendly operation and minimum operational costs, as well as long working life of its machines built with top quality materials. From the province of Parma, Akomag aims to meet the needs of all those who are looking for high quality products. 🏭

www.akomag.com



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.

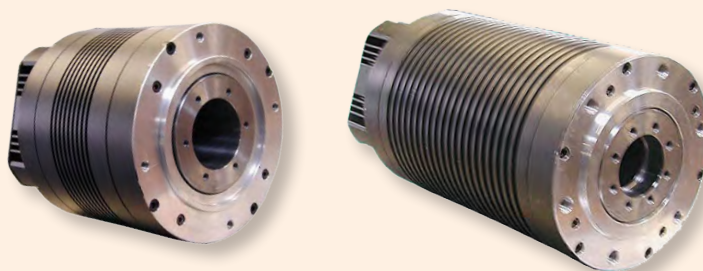
- Sheet metal processing machinery.
- Wind turbine plants.
- Automotive applications.

- Naval applications. 🏠

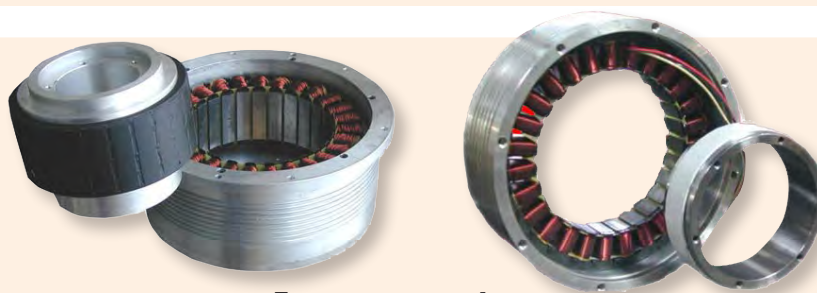
www.acmengineering.it



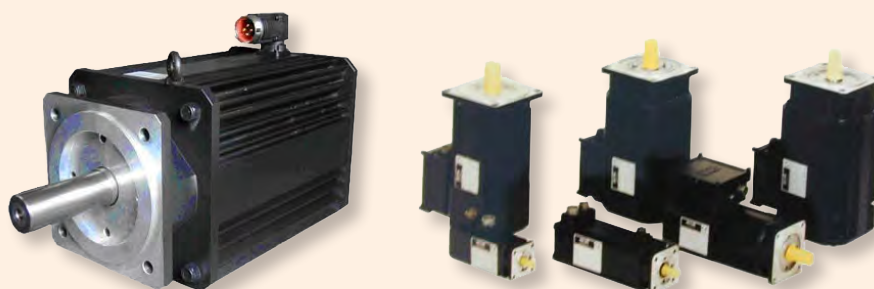
Direct drive servomotors



Hollow-shaft servomotors



Torque servomotor



Brushless servomotor

NULOGY

DIGITALISATION ENABLES LEADING CONTRACT PACKER TO STREAMLINE OPERATIONS AND ACCELERATE GROWTH

Leading contract packer APS has successfully migrated to Nulogy's advanced and flexible cloud-based software for co-packers, enabling it to respond more quickly and effectively to customer demands. Given the constraints of lockdown, Nulogy implemented the solution entirely remotely, handling the change management process from APS's legacy systems through a combination of video-based conferencing and its robust online learning platform, Nulogy University. Based in the North East of England, APS is a well-established market leader in contract packing, working with blue chip brands since its formation. The business had been using a combination of manual processes and ERP

systems and recognised the need to improve traceability and visibility of materials and labour productivity across its operations. David Howes, operations director at APS, said: "To execute successfully on our growth strategy for the business, it was clear that we had to modernise our systems. Nulogy presented a clear vision of the benefits available from digitalisation through its cloud-based solution, and while we had some concerns about migrating to a new software system virtually during a pandemic, the team at Nulogy made the transition possible with continued support and guidance throughout. Josephine Coombe, Managing Director, Nulogy UK, said: "We're thrilled to be welcoming APS to the community of Nulogy-powered co-packers in the UK and delighted that our teams worked together successfully to enable a smooth remote implementation given the con-

straints posed by the pandemic." "As FMCG brands increasingly seek highly collaborative and responsive external supply chain partners, a robust digital backbone for co-packing operations is increasingly a competitive advantage. "We look forward to helping APS reap the benefits of this advantage and deliver the agile performance required to meet their customers' operational and quality standards, even during these uncertain times." The pandemic has meant many FMCG-focused contract manufacturing and packing providers have had to adjust and evolve their operations. Recognising this, Nulogy moved quickly to ensure its software not only provides robust labour management, inventory and traceability controls, but also allows contract packers to better manage infection control protocols on the shop floor. 🏭

www.nulogy.com



GREAT FLEXIBILITY, HIGH PROFESSIONALISM

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www.tecninoximpiantialimentari.it - tecninox.namaziano@gmail.com

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 🏠





NTE PROCESS, FROM WORDS TO DEEDS:

ANOTHER SUCCESSFUL APPLICATION OF OUR LIQUID CONCENTRATION TECHNOLOGY

NTE Process is the Single Solution Provider of process solutions for industry, ranging from dense phase pneumatic conveying to mixing but also liquid injection, drying, atomization and in-line formulation to packaging.

In particular, NTE Process drying technologies - which are offered in partnership with Okawara MFG Co. Ltd. - find an excellent application in the food and nutraceutical industries.

A concrete evidence of these advantages is represented by a recent case study in which NTE Process supported a primary customer in the production of extracts from berries, blackberries, blueberries, etc. in solving a series of problems by improving the whole production process.

“The company - located in Finland and active in various health food productions derived from natural plant extracts turned to us to process natural extracts with ethanol content up to 80% in order to obtain a water-based product by recovering as much ethanol as possible and increasing the solid base of the extract. We used the Evapor concentrator to have an imperceptible impact on taste, colour, active ingredients and complex compounds of the natural extracts.” - explains Emanuele Fratto, NTE Process’s Corporate Sales Manager- “We have carried out a series of 1:1 scale tests at our Research and Innovation Centre located near Milan. It was a fundamental step to help customers understand our



technology, evaluate their capabilities and provide them samples of product for their quality analysis”.

Thanks to Evapor - a thin film centrifugal vacuum evaporator consisting of a horizontal tapered rotor, - the combination of heating and centrifugal force leads to a high concentration in a single step, in a very short time, at a very low temperature that minimizes the thermal impact on the product.

“In this case - says Fratto - the quality of the product could even be improved thanks to the concentration at low temperature (from 30 to 50°C) and

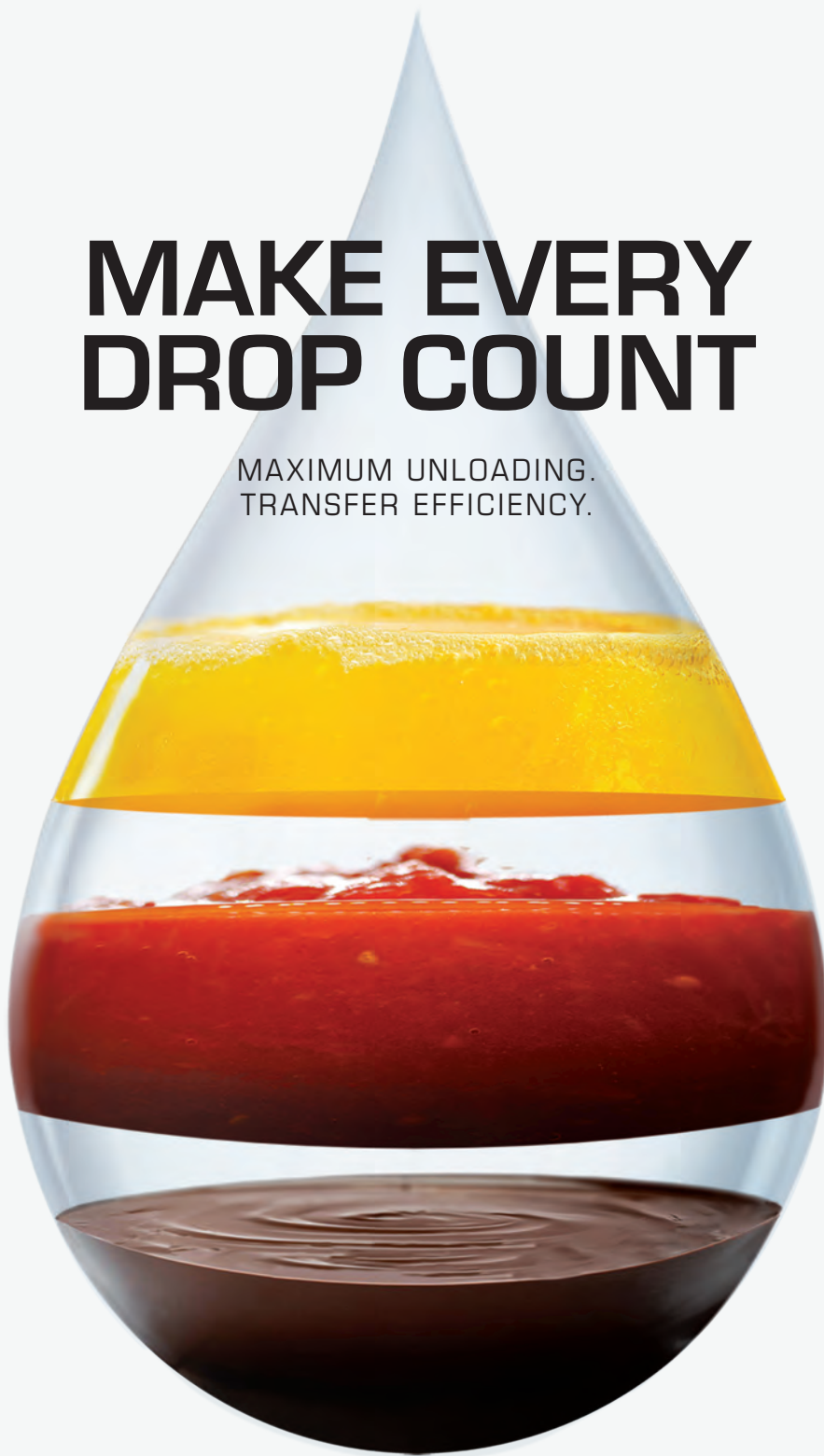
thanks to the short contact time of the product with the heat: a few seconds compared to the minutes required by the traditional tubular evaporator that the customer used. Evapor was able to produce concentrates with a significantly higher level of soluble solids and a higher viscosity than the technology previously used by the customer”.

A very successful result that fully met customer’s expectations, returning a better quality product with a higher added value. 🏠

www.nol-teceurope.com

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TRANSFER EFFICIENCY.



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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 fillings, 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



THE PIGGING SYSTEM FOR THE RECOVERY OF OLIVE OIL

The “pigging” technology was developed many years ago in the oil industry to clean oil pipelines. A mechanical device known as “pig” is sent through the ducts in a carrier fluid, swabbing the internal walls of the pipeline system or industrial tubing, emptying the ducts from the residual liquid.

Pigging technology has progressed over the years and is currently applied in a wide variety of industrial applications and in food industry, for the recovery of the product left inside the pipes at the end of each transfer cycle.

For more than twenty years, **GRANZOTTO** has been designing, manufacturing and installing highly customized “pig” systems for product recovery, designed according to the specific requests of the client. Among the numerous projects managed by **GRANZOTTO**, particular attention was paid to the design and installation of two product transfer lines at a prestigious oil mill plant in Tuscany, both equipped with a pigging system.

This project is set to meet the customer's need to obtain a better process efficiency and quality during the production cycle, specifically the transfer of the precious olive oil, from the mill area to the storage tanks.

Before the installation by **GRANZOTTO** of the two “pigged” lines for the automatic transfer of olive oil, during the pressing phase the client was forced to carry out more than 500 product transfers through portable oil tanks.



Freshly pressed oil was poured into mobile containers and transported manually with the help of a pallet truck, from the station to the storage tanks located about 60 meters from the pressing area. At last, the manual transferring operation from the mobile containers to the tanks

concluded the transfer cycle. Today, thanks to the installation of the two “pigged” transfer lines, one for the traditional olive oil and one for organic oil, all operations are carried out automatically, ensuring maximum efficiency and effectiveness. All manual transferring and handling

continued on page 114

1970-2020 **50**

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“A **ality designed to last”.** This is Lawer’s mission statement, a Biella based company, internationally recognized for the excellence of powders and liquids dispensing systems.

This excellence begins with a preliminary analysis phase, to the equipment commissioning, to ensure safe and automated systems, operated by a high-class software which is able to adapt itself to the manufacturing companies’ changing needs.

Quality is also the ability to provide the most efficient service and maintenance, being always on time and close to its customers thanks to a worldwide presence.

Since the beginning Lawer has always implemented the strategic decision to invest on people, research

and new technologies. Thanks to the analysis and development of the technical department the company shows its strong projecting capabilities.

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

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

All Lawer’s systems are the result of Lawer’s 50-year experience and know-how in the design and manu-

facturing of dosing systems for many different applications in different types of industrial productions.

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

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

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

Confidentiality, it is possible to keep secret the composition of the



recipe and protect your creativity and your know-how.

Control, it is possible to monitor and verify the daily production, monthly production, the consumption of each single raw material or each single recipe accessing to a protected area.

Replicability, in a fully automatic way, the system repeats countless

times the error free weighing of the micro-ingredients of the recipes, guaranteeing constant quality at all times. Less errors, less cost, higher quality of the finished product.

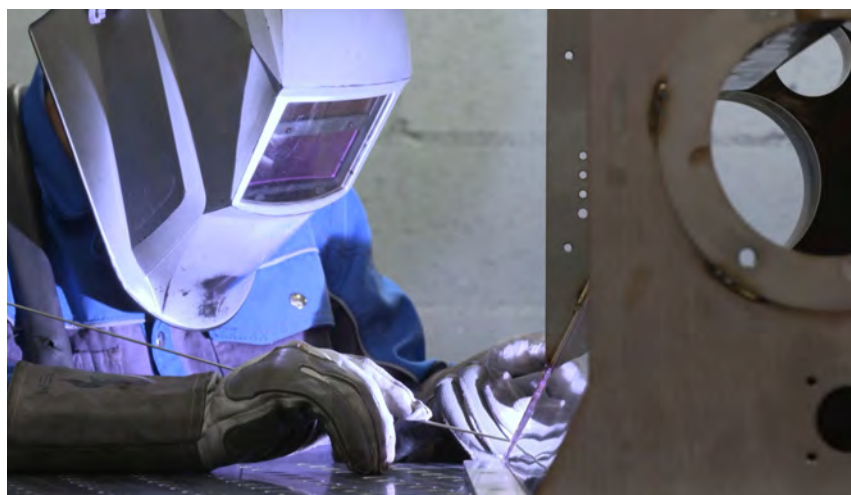
Traceability, all the weighing operations are saved and made available for a perfect traceability. **Saving**, the systems contribute to reducing errors and time in the recipe prepara-

tion, thus reducing costs of production and personnel.

Lawer can supply different models of Automatic Dosing Systems, with single, double and multi scale technology (**mod. UNICA TWIN, UNICA HD & SD** and **mod. SUPERSINCRO**), with different levels of accuracy (**1gr – 0.1 gr or 0.01 gr**) and different capacity of powders' storage (from **50 lt** up to **300 lt**. capacity of each hopper).

Lawer is the ideal partner for the automation of the powder micro-ingredients dosing. 🏭

lawer.com



 **LAWER®**
dosing & dispensing systems

FOOD
processing

continue from page 110



operations have been eliminated, thus eliminating the relative costs, in terms of time and resources.

The perfect quality of each production is guaranteed by the passage of the “pig”. Every use of the “pig” recovers the full quantity of the olive oil remaining inside of the pipes, transferring it to its destination thus leaving the transfer pipes completely free from any olive oil of the previous lot.

The “pig” is made of certified silicone material currently used in the food industry. It is also equipped with “pig” detectors that enables you to determine its accurate position inside the pipes at any time.

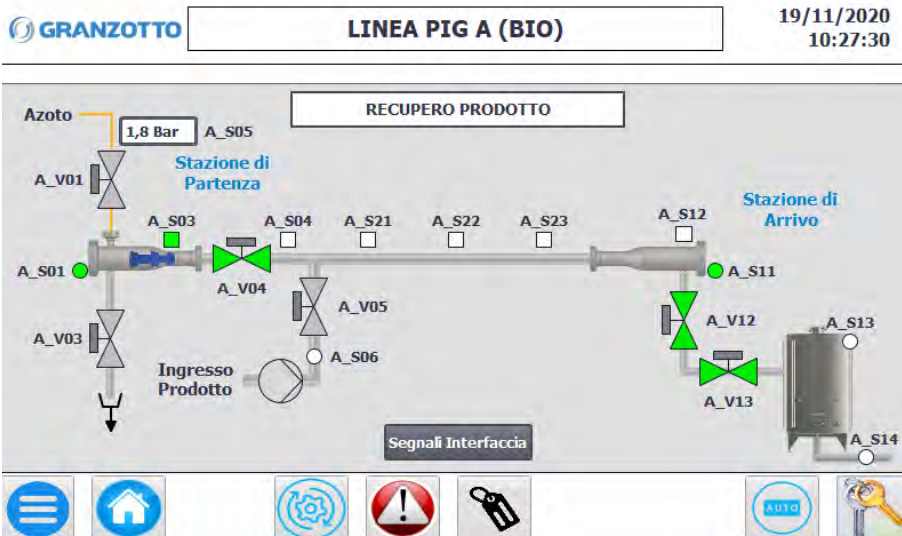
At completion, a management software system entirely programmed by our electronic technical facilities in **GRANZOTTO** manages each “pig” launch and activity.

In conclusion, thanks to the “pig” technology designed, built and installed by **GRANZOTTO**, an important Tuscan oil Producer has given to its company a more modern and cutting-edge profile, as regards the transfer and recovery of the product. Nowadays, the oil mill plant is able to transfer the oil automatically and effectively from the mill to more than 100 storage tanks.

We therefore proudly state that **GRANZOTTO** has contributed to implementing and improving the production system of an important Tuscan olive oil producer, as a result of an in-depth knowledge of the “pig” technology developed in over 20 years of experience and countless applications in the most diverse sectors of the food industry. 🏠

www.granzotto.it

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in love with the perfect shape

baking pan for



croissants



baking pan for

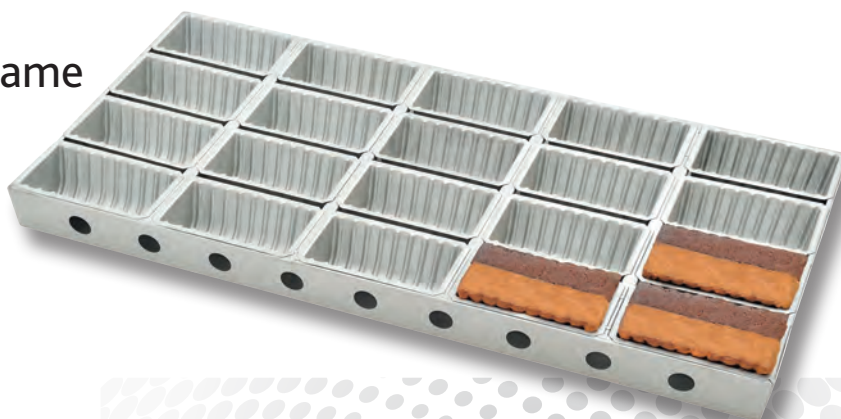


muffins

cake



baking frame



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FLUORINATED COATING FOR THE HIGHEST PROTECTION

The benefits of Tomace's products are: easier cleaning of coated surfaces, higher productivity, less waste production and higher quality of the finished product



Tomace Srl is a skilled company working in fluorinated coating fields. Thanks to the experience acquired in more than twenty years, Tomace is able to grant complete satisfaction to its customers who are looking for solutions against corrosion, stickiness and friction problems of a given surface. The applications are of the most varied: from packaging machine components, to food, pharmaceutical, ceramics and rubber moulding plastic industries, to the machines for wood processing and mechanical engineering in general. The benefits are easier cleaning of coated surfaces, higher pro-

ductivity, less waste production and higher quality of the finished product. The categories of fluoropolymers are multiple: PTFE, FEP and PFA combined with other resins allow obtaining an infinite variety of products able to enhance their own particular feature for any specific use.

PTFE Line - very low friction and "no stick" coefficient. Its main use is in the industrial field with a wide range of applications.

PFA-FEP-SOLGEL Line includes a wide range of coatings specifically developed to prevent products from sticking





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				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
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to surfaces such as pasta, bakery products and others, on account of their own nature.

PTFE – VICOTE PEEK Line coatings have been developed to improve the performance of mechanical components through the maximum reduction of friction coefficient, both static or dynamic, even in event of corrosive conditions.

MOLYCOTE Line – dry lubrication. Some of the main benefits of those coatings are: we can treat metals and

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PFA – ETFE Line combines higher mechanical strength with exceptional chemical inertia. Micro Shot Peening Line with micro glass and ceramic balls on stainless steel and aluminum - eliminates causes of corrosion, ensuring aesthetic improvement, im-

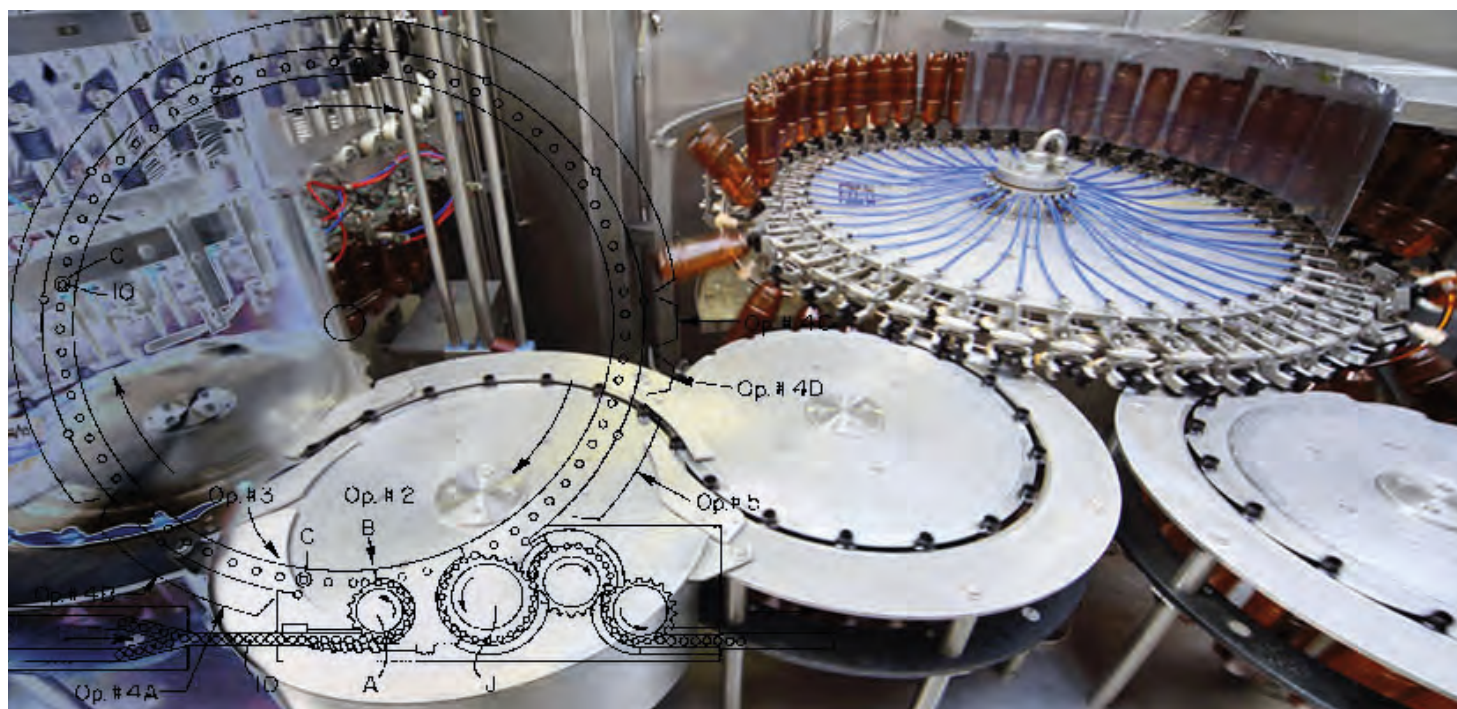
proved mechanical characteristics, as well as sanitized surfaces.

Micro Shot Peening Line with micro glass and ceramic balls on stainless steel and aluminum -eliminates causes of corrosion, ensuring aesthetic improvement, improved mechanical characteristics, as well as sanitized surfaces.

Tomace Srl, leader in metal surface treatment and finishing. 🏭

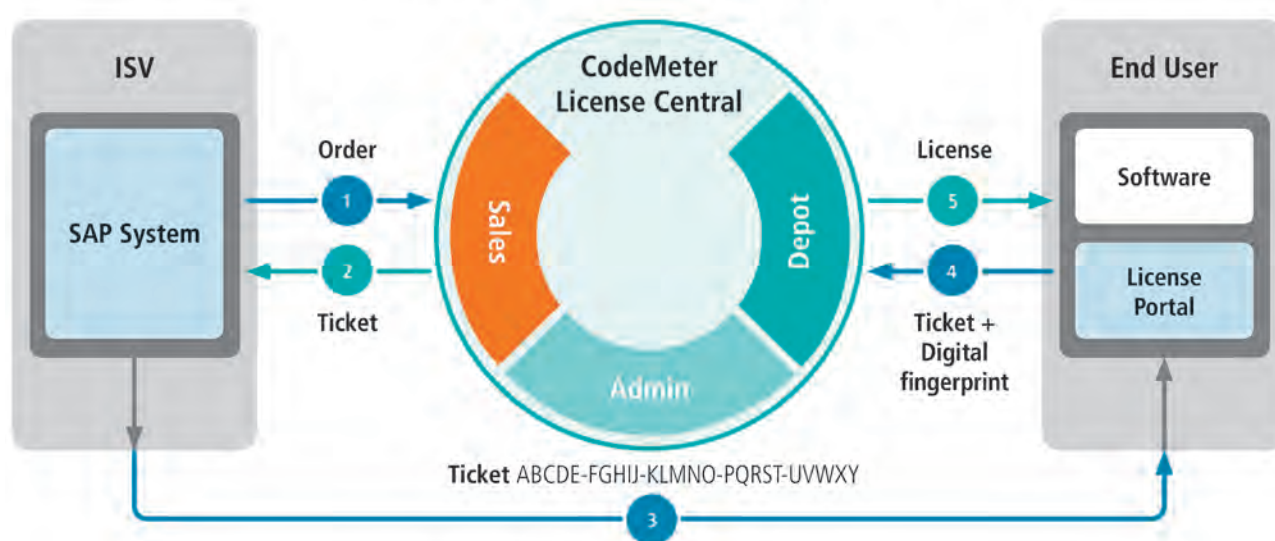
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YOU CANNOT AFFORD TO COMPROMISE YOUR LICENSING SOLUTION

Lean License Management via SAP



The current high-tech talent pool is insufficient to meet the demand for enterprise cybersecurity experts and experienced software developers. The cybersecurity skills shortage has worsened for the third year in a row. Making matters still worse is the COVID-19 pandemic. Corporate lockdowns have been driving many cybersecurity workers online, and skilled trainers have been slow to respond.

However, today, software licensing is at the core of a dynamic landscape that can make or break a business. ISVs need to understand their customers' preferences and be able to package and repackage their software in innovative ways that meet their customers' needs. If you are currently using a home-grown system, you are likely to divert valuable resources. Now, more than ever, it makes more sense to look at licens-

ing system alternatives outside of your office. Here are the features and functionality you should consider in your next generation licensing system:

- **Licensing Flexibility** — the licensing platform of choice should enable you to create, deliver, activate, update, and manage licenses using the business model that's optimum for your customers without any compromise, whether it is single user licenses, network licenses, feature on-demand licenses, demo/trial licenses, pay-per-use licenses, or whatever license model you dream up.
- **License Security** — the licensing platform should provide mechanisms to securely store and deliver licenses, whether it is via a hardware device (dongle), an endpoint-bound soft license file, or the cloud. Dongles offer the highest security and portability from PC to PC while soft licenses offer the fastest delivery and activation. Cloud licensing is the most efficient way to manage licenses in remote office scenarios.
- **Easy Integration into Your Business Processes** — for ease-of-use and to reduce costs, the licensing solution should integrate seamlessly into your existing ERP, CRM, e-commerce or other business processes and it should have a customer facing portal that can be branded and customized to support the specific use case of your end users.
- **License Activation Options** — you should have the flexibility to activate licenses online from within the software application or via an Internet web portal or offline

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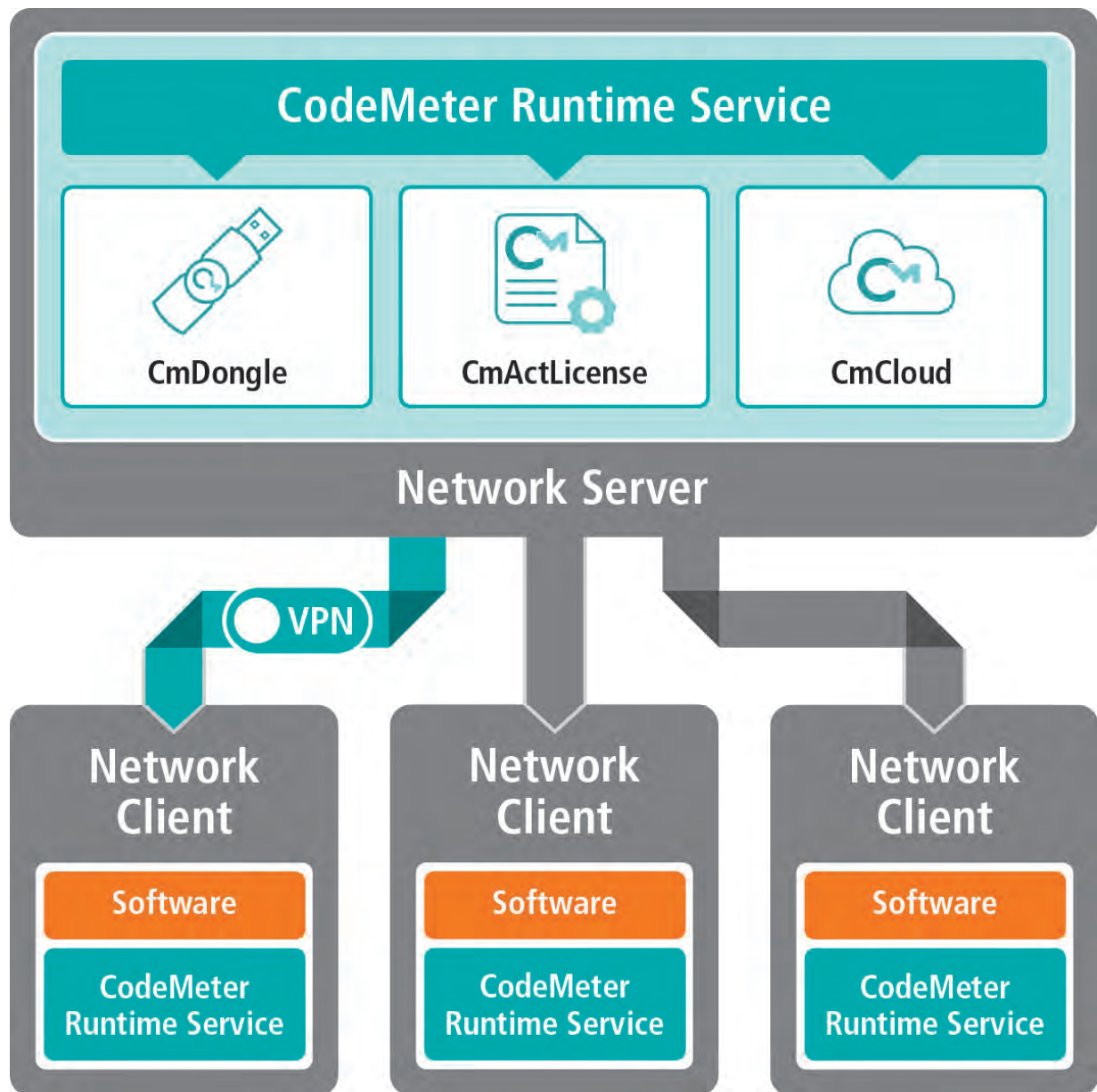


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**SECURITY
LICENSING**
PERFECTION IN PROTECTION



via file transfer from the computer with the software application to another computer with access to the portal.

- **Hosting Flexibility** — the solution should provide you with the option to host your license server on a local web server or host and manage it in the cloud of the licensing system provider.
- **Software Monetization** — the solution should provide data mining, analytics and reporting capabilities that give you the ability to make sound business decisions

and the ability to shift your marketing strategy as market requirements change.

- **Vendor Reliability** — the licensing vendor should be assessed in terms of long-standing nature of their business, single focus on this technology, high profile customer references, quality of their support services.

By integrating a 3rd party licensing solution like CodeMeter from Wibu-Systems, you will free up your developers to do what they do best — write code, you will give your marketing

team the ability to deliver the software in a manner that is most desirable for the customers, and you will be able to generate the revenues that you deserve from your development and commercialization efforts. 🏢

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Food & Beverage e-commerce boom

in the second quarter of 2020 the pandemic in the USA showed a 58% increase compared to the first months of the year

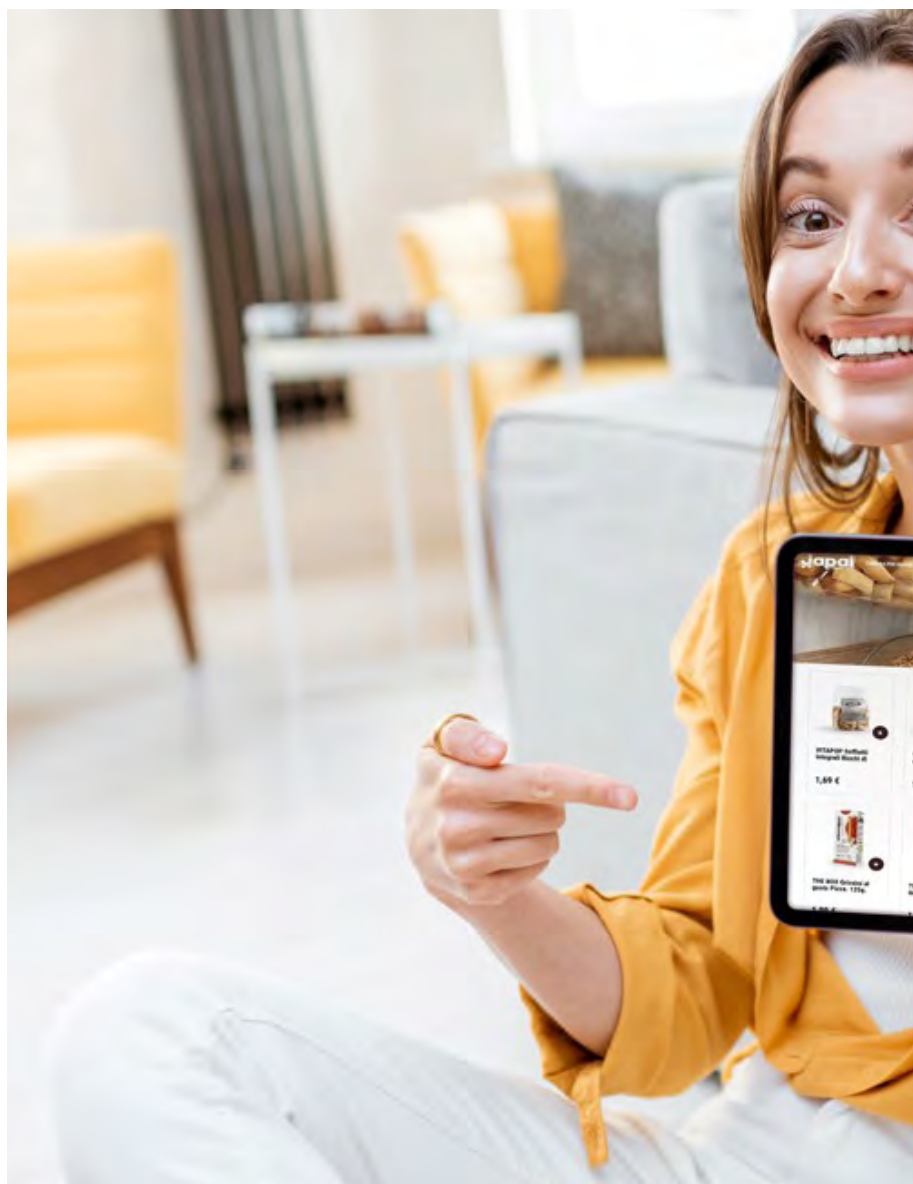


by
Gabriele De Luca

That the months of lockdown had boosted the e-commerce sector was pretty predictable. It is less so if we consider the dizzying increase that food & beverage has experienced in this sector of commerce. A US eMarketer survey, recently published in TechCrunch, highlighted the fact that the most profitable industry in the second quarter of 2020 was the food and beverage sector, with growth as high as 58.5%. This trend concerns the entire e-commerce sector at an international level.

According to a survey by Salesforce, online purchases increased by 71% in the second quarter, and a British study carried out by the Office for National Statistics shows that online sales related to the retail sector increased from 18.7% in July 2019 to 28.1% in the same month this year, recording a growth of 9.4%. Consumers spent over \$211 billion on online purchases, resulting in e-commerce growth of 31.8% compared to the previous four months.

The venture of a Milanese company, Vitavigor, is part of this scenario. Vitavigor has created an online portal dedicated to lovers of breadsticks and snacks from Italy and all over Europe to take advantage of this trend and make up for the drop in consumption in large-scale retail trade. "We firmly believe in the strength of



e-commerce,” explains Federica Bigiogera, Vitavigor’s marketing manager, “and this is why we decided to embark on a new adventure. The original idea took some time to be planned because we wanted to make sure that our customers could also find their favourite products on our official website.

Our e-commerce shop was created in collaboration with the Japal platform and is greatly committed to supporting Made in Italy and the food sector in general in these difficult times.

We guarantee the possibility to buy products and receive them in just 48 hours, with free deliveries starting from 49 euros and customers can also take advantage of exciting promotions through social channels”.



BOOM DELL'E-COMMERCE PER IL FOOD & BEVERAGE: NEL 2° QUADRIMESTRE DEL 2020 LA PANDEMIA FA SEGNARE NEGLI USA UN AUMENTO DEL 58% RISPETTO AI PRIMI MESI DELL'ANNO

Che i mesi di lockdown avessero favorito una crescita del settore dell'e-commerce era un dato abbastanza prevedibile.

Lo è meno se si considera l'aumento vertiginoso che, in questo settore del commercio, ha avuto il food & beverage. Una ricerca statunitense di eMarketer, pubblicata recentemente su TechCrunch, ha infatti sottolineato come il settore più avvantaggiato nel secondo quadrimestre del 2020 sia stato proprio quello dei cibi e delle bevande, con una crescita addirittura del 58,5%. Un trend che riguarda tutto il settore dell'e-commerce a livello internazionale.

Secondo una ricerca di Salesforce gli acquisti online sono aumentati del 71% nel secondo quadrimestre e un'indagine britannica dell'Office for National Statistics mostra come le vendite online correlate al totale del settore retail sono passate dal 18,7% di luglio 2019 al 28,1% dello stesso mese di quest'anno, registrando una crescita del 9,4%.

I consumatori hanno speso oltre 211 miliardi di dollari in acquisti online, portando a una crescita dell'e-commerce del 31,8% rispetto al quadrimestre precedente.

È in questo scenario che si colloca l'iniziativa di un'azienda come la milanese Vitavigor, che ha realizzato un portale online dedicato agli amanti di grissini e snack italiani e di tutta Europa per sfruttare questo trend e sopperire ai cali dei consumi nella GDO.

“Crediamo fermamente nella forza dell'e-commerce - spiega Federica Bigiogera, marketing manager di Vitavigor - ed è per questo che abbiamo deciso di lanciarcisi in questa nuova avventura, programmata da tempo, per garantire ai nostri clienti la possibilità di trovare i propri prodotti preferiti anche sul nostro portale ufficiale.

Realizzato in collaborazione con la piattaforma Japal, il nostro e-commerce vuole rappresentare un grande impegno per sostenere il made in Italy e il settore del food in generale in questo periodo di difficoltà.

Garantiamo la possibilità di acquistare i prodotti e riceverli in modalità espressa in sole 48 ore, con consegne gratuite a partire da 49 euro di acquisti, e di usufruire di importanti promozioni veicolate anche tramite i canali social”.



Advanced traceability and information reliability

The food industry nowadays has the important need to monitor every step relating to the production process of what it places on the market, so as to provide consumers who are now increasingly attentive and aware, accurate and exact data related to the quality of their products. Connecting Food solves this imperative by providing an indispensable tool for quality management.



Stefano Volpi
Connecting Food

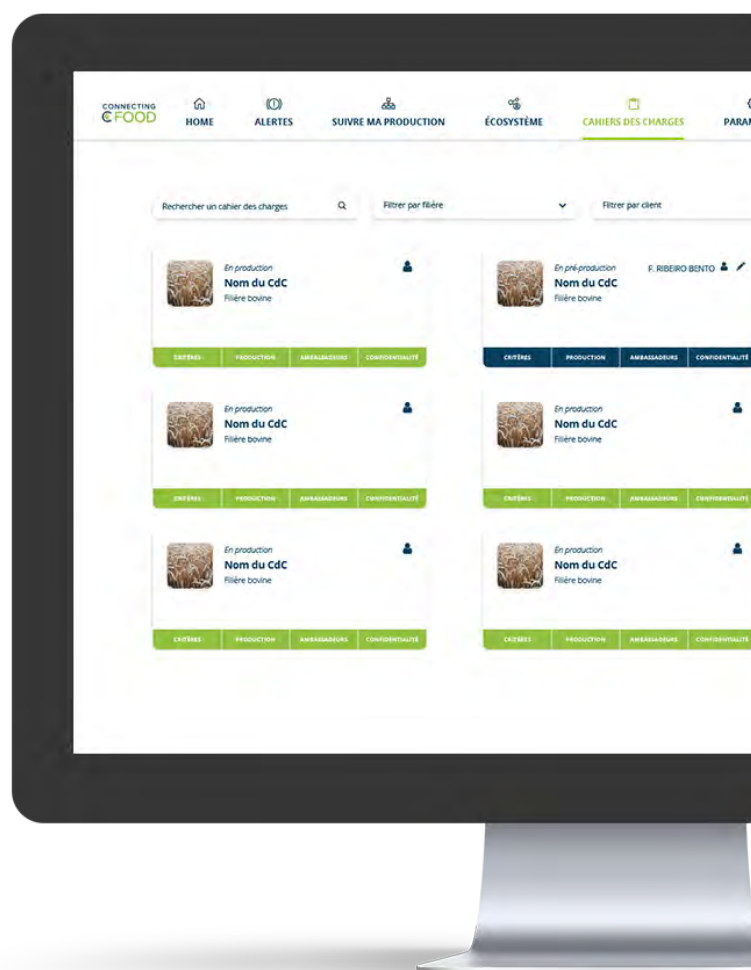


Where did the idea for Connecting Food come from?

Prior to founding Connecting Food, Maxine and I spent 40 years working for various agri-food companies. Throughout our careers, we saw how the lack of transparency in food supply chains was impacting consumer trust, and how much damage food scandals were doing to brands. We began looking into possible solutions for resolving this trust issue, and came upon blockchain technology, which was growing at the time in the FinTech market. We realized that those same blockchain principles could be used to not only ensure the total traceability of a food product, but to also ensure that each actor along the food chain truly respected their commitments and delivered the right product to the right customer.

Why did blockchain feel like the right tool/technology for this business?

As a secure distributed ledger, it was obvious that blockchain had the potential to play a key role when it came to sharing information in a secure way. Data security is especially important in the food industry, as it is both a very competitive market, but also a highly risky one; everyone is very concerned about ensuring their privacy while obtaining food safety and food traceability. Therefore, we opted for Hyperledger



Fabric, a private, permission-based blockchain. Hyperledger is known as the 'blockchain for business', as it enables a consortium of actors to set different levels of user-rights when it comes to sharing, writing, and reading information. This is vital for a producer for example, because if you're selling half of your production to one client, and the other half to their competitor, you obviously don't want all of your orders to be visible by both of your clients!

Another advantage to Hyperledger blockchains is that they do not require any mining, meaning they are much more energy efficient than public blockchains.

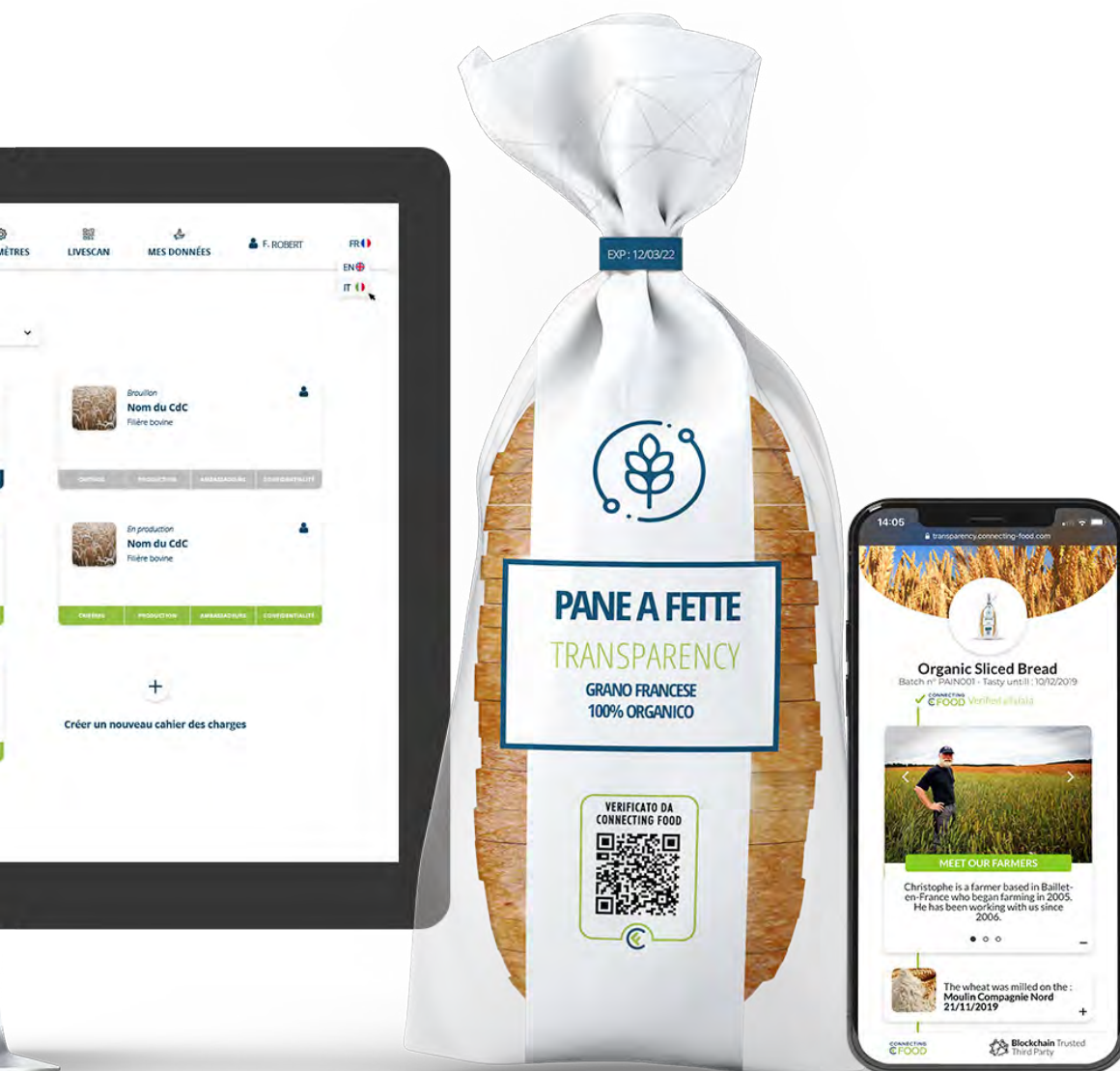
There is one common misconception about blockchain that we would like to address. Many people think that blockchain technology alone will be able to resolve the trust & traceability issues plaguing our industry. However, it is important to understand that blockchain simply records the information you enter in and renders it im-

mutable – it will not in any way tell you if that information is accurate.

This is what drove us to add an additional layer of intelligence to our blockchain platform, which allows us to first validate the data's veracity prior to recording it on the blockchain, providing the peace of mind our users needed to feel confident sharing data upstream and downstream. This process occurs via our LiveAudit® module, which is a combination of mathematic calculations and algorithms, and gives our clients the ability to verify in real-time that every single product is compliant with its product specifications.

What has been the role of sustainability in the process of setting up the business? How important is it to the model?

Sustainability is at the heart of Connecting Food, as our mission is to identify supply chain problems in real-time,



limiting the risk of product recalls and food wastage. We believe that traceability is the founding principle of sustainability in the food business: knowing where your product came from and how it was made should be the basis of any sustainability roadmap.

In terms of food waste, we have a very important role to play on the industrial level, as Connecting Food identifies non-compliant batches of production in real-time.

In the past, batches were often found to be non-compliant they had already been packed and/or shipped to a retailer, meaning everything had to be destroyed, regardless of what the problem was.

By using the Connecting Food platform, producers and manufacturers can identify the problem earlier on in the food chain, allowing

them to downgrade the product or reroute it to another food chain instead of throwing it away.

Our LiveAudit® module is also a great tool to measure and prove that the CSR commitments for a product are truly being kept. For instance, if a product is supposed to be locally sourced, organic, GMO-free, or pesticide-free, our platform can verify this by leveraging production data, therefore proving the promises of the brand.

The Connecting Food platform enables our clients to put proof of sustainability directly into the hands of the end-user, instead of just saying 'believe me, they are sustainable' – and this makes all the difference in today's era where connected consumers want to be able to verify everything for themselves! 🏠



SIEMENS MAKES INDUSTRIAL DATA ACCESSIBLE AND ACTIONABLE



Siemens Digital Industries Software is leveraging the Mendix™ low-code application development platform to help customers across industries build contextual and personalized solutions and help enable data-driven decision-making processes. With the general availability of Mendix Data Hub and new Mendix for Industrial Edge services, Siemens can help customers achieve an end-to-end view of their plants, factories, and systems and provide domain experts with actionable insights through solutions that have been developed with the right data from across the organization. The Mendix platform extends the Xcelera-

tor™ portfolio with the ability to build multi experience apps and share data from any location, on any device, on any cloud or platform, to more quickly realize the benefits of digital transformation.

“Our vision at Mendix is not only to offer our customers a technology to let them develop applications faster and more efficiently, but to also extend Siemens’ Xcelerator portfolio to help realize unprecedented scalability and flexibility for our customers,” said Derek Roos, Mendix CEO. “As part of Siemens, we are expanding the Mendix platform to help provide value to our industrial customers by enabling

them to get value from their data, be that on a factory floor, across systems of record, or in a field service context.”

Enabling Data-Driven Decisioning on the Factory Floor

A key goal for digital transformation is factory automation, which can be slowed down by distance - both physical and organizational - between operational technology (OT) and organizations co-located at factory locations, and IT organizations housed at corporate headquarters. The new Mendix for Industrial Edge platform, announced today at Mendix World Version 2.0, empowers factory operators to create custom applications on

New services enabled by the Mendix low-code platform enable data-driven decision making in factories and across enterprise data sources



the Mendix low-code platform that run locally as Edge Apps to collect data, have access to insights in near real-time and provide optimal user experiences to a variety of end users. The Mendix low-code platform is designed to abstract much of the complexities and expand the talent pool for IoT application development, further empowering OT leaders to address their most pressing issues with limited IT intervention. Business developers, domain engineers and plant operations staff can now create Apps for Siemens Industrial Edge without programming skills. When combined with Siemens' MindSphere®, the industrial IoT as a service solution from Siemens, and

other Xcelerator cloud solutions, customers can quickly realize the benefits of a completely integrated edge to cloud experience.

Unlocking, Extending, and Personalizing Data from Core Systems

Disparate legacy systems, containing data in various formats and heritage that supports complex physical models can challenge companies in providing developers and engineers secure access to the right data. To help organizations discover, understand, use, and curate data from across the enterprise, and employ it in software development, business intelligence, and other data-rich applications, Sie-

mens announced availability of the Mendix Data Hub. In conjunction with the Mendix low-code development platform, the Mendix Data Hub can help organizations realize a dramatic decrease in application delivery time, as developers no longer waste time searching for the right data, seeking the right data owner, minding API calls, and securing access to the data they need.

Initially, the Mendix Data Hub will connect to the most common industrial data sources, such as Teamcenter® software and SAP, with future releases expanding support for other common data services and databases, and industry-specific applications. The Mendix Data Hub can also be extended by eQ's eQube® Data-as-a-Service, as part of a newly expanded partnership between Siemens and eQ Technologic, with a rich set of over 60 smart connectors, providing support for industrial data and system integrations.

Siemens Digital Industries Software is driving transformation to enable a digital enterprise where engineering, manufacturing and electronics design meet tomorrow. The Xcelerator portfolio helps companies of all sizes create and leverage digital twins that provide organizations with new insights, opportunities and levels of automation to drive innovation. For more information on Siemens Digital Industries Software products and services, visit www.sw.siemens.com or follow us on LinkedIn, Twitter, Facebook and Instagram. Siemens Digital Industries Software – Where today meets tomorrow. 🏭

SIEMENS

FOOD
processing



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.



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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.



BAT BUFFER

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.



MERGER DU32



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 fig res (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 fl wpacks

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.

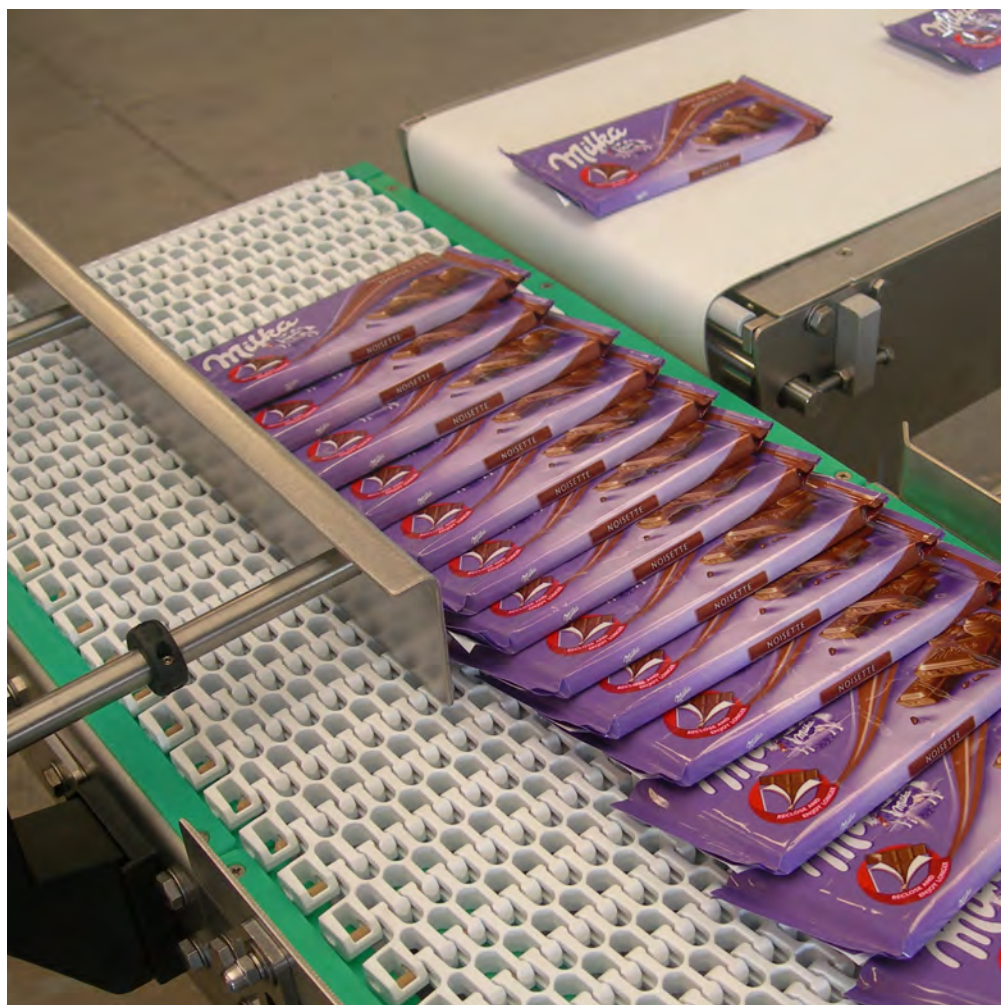
MH prefers to opt for a **Multi-Layer Belt Buffer**, which remains a FIFO, but has a much less onerous economic impact than a Gondola. On the other hand, to use this type of





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 fl w-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**



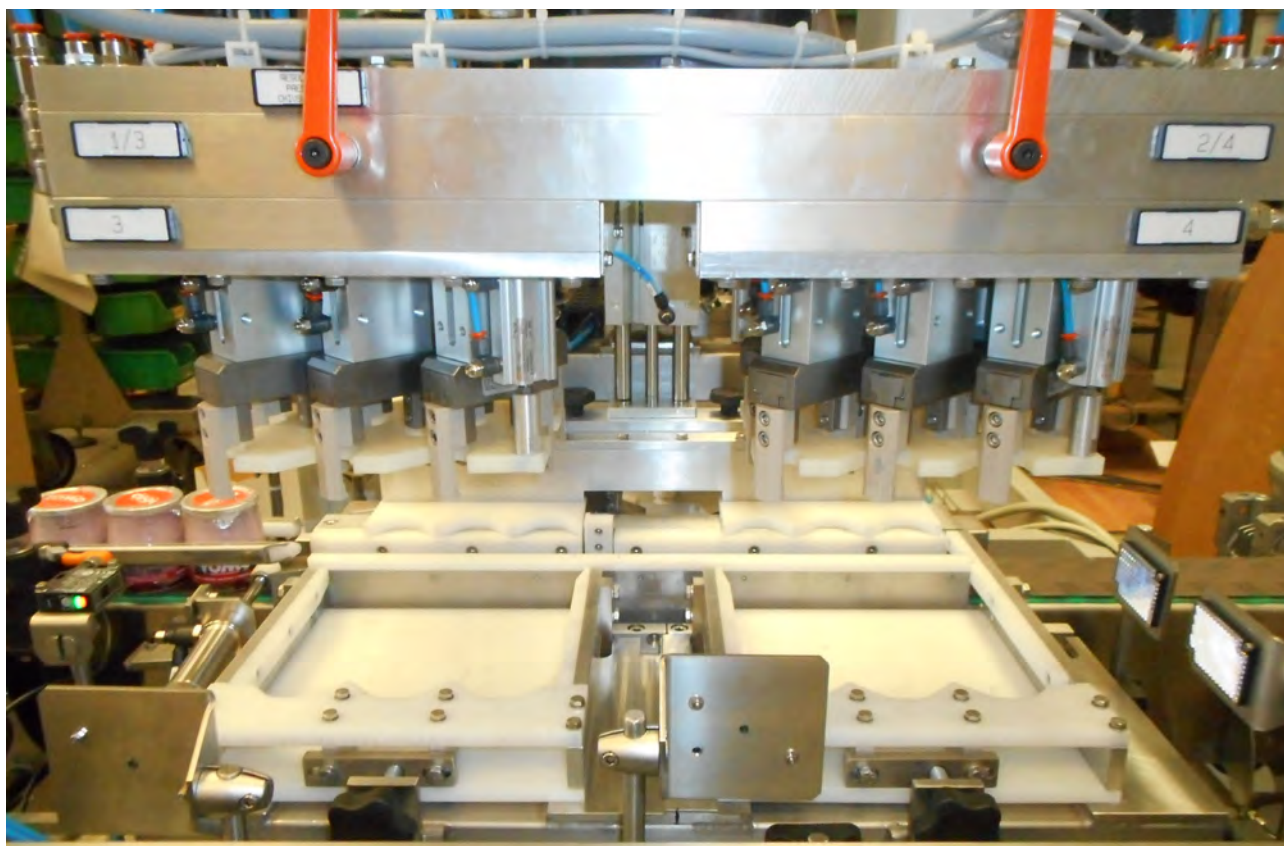
systems. Eggs and cables in general are placed in light moulded plastic trays, which then go into an outer carton envelope, called displays, which end up directly in the shops. The conveyor belts that MH uses for this type of packaging is typically of **modular chain**, with the same precautions that 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

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



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.



ANUGA FOODTEC

23-26/03/2021

COLOGNE

Fair on food and beverage technology.



BEER&FOOD ATTRACTION

11-13/04/2021

RIMINI

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



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



ANUTEC

03-05/02/2021

MUMBAI

Fair for the food&beverage industry.



GULFOOD

21-25/02/2021

DUBAI

Fair for food and hospitality.



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

LATINPACK

14-16/04/2021

SANTIAGO CHILE

International packaging trade fair.



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.



POWTECH

26-28/04/2022

NUREMBERG

The trade fair for powder processing.



IPACK-IMA

03-06/05/2022

MILANO

Exhibition for the packaging industry.



SIAL

15-19/10/2022

PARIS

Fair on food products.



SUDBACK

22-25/10/2022

STUTTART

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**102**

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

AKOMAG SRL**99/101**

Frazione Diolo, 15/D
43019 Soragna - PR - Italy

ALPHAMAC SRL**1-64-68**

Via Nobel, 20
40064 Ozzano Dell'emilia - BO
Italy

ALTECH SRL**30-31**

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

BBM PACKAGING SRL**10/12**

Via Pregalleno, 24
24016 San Pellegrino Terme - BG
Italy

BONDANI SRL**134-135**

Via Romanina, 3
43015 Noceto - PR - Italy

BONDUELLE ITALIA SRL**20-21**

Via Trento Snc
26060 S.paolo d'Argon - BG - Italy

BRUNI GLASS**65/67**

Viale Colombo, 12/14
20090 Trezzano S/N - MI
Italy

CAMA GROUP**13/15**

Via Como, 9
23846 Garbagnate Monastero - LC
Italy

CC TECHNOLOGY SRL**2-6**

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

CMZ SISTEMI**ELETRONICI SRL****18-19**

Via Dell'artigianato, 21
31050 Vascon - TV - Italy

CONNECTING FOOD**126/128**

Morning Coworking
République 2 Rue Dieu,
75010 Parigi - France

COSTACURTA SPA-VICO**77/80**

Via Grazioli, 30
20161 Milano - Italy

E. CALVI SRL**46**

Via Flumendosa, 12
20132 Milano - Italy

ENOMET IMPIANTI SRL**98**

Via Dei Laghi, 18/E - Calcinelli
61036 Colli Al Metauro - PU
Italy

ERREPAN SRL**115**

Via Terracini, 4
24047 Treviglio - BG
Italy

ESCHER MIXERS SRL**7/9**

Via Copernico, 62
36034 Malo - VI - Italy

ESSEGI 2 SRL**32/34**

Via Strada Degli Alberi, 4
35015 Galliera Veneta - PD
Italy

EUROPEAN SNACKS**ASSOCIATION ASBL****63**

Rue Des Deux Eglises 26
1000 Brussels - Belgium

GENERAL SYSTEM PACK SRL -**GSP****61**

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

GIROPES**40**

Pol. Empordà Internacional - C.
Molló, 15-16 17469
Vilamallà Provincia De Girona
Spain

GIUSTO FARAVELLI SPA**104-105**

Via Medardo Rosso, 8
20159 Milano - Italy

GRACO**107/109**Slakweidestraat 31

Oude Bunders
3630 Maasmechelen - Belgium

GRANZOTTO SRL**110-114**

Via dei Colli, 61
31058 Susegana - TV - Italy

HERTI JSC**47/50**

38, Antim I Str.
9700 Shumen - Bulgaria

ICI CALDAIE SPA**89/93**

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

IFP PACKAGING SRL**51**

Via Lago Di Albano, 70
36015 Schio - VI - Italy

ILPRA SPA**52-53**

Corso Pavia, 30
27029 Vigevano - PV - Italy

**INTERPORTO TOSCANO
AMERIGO VESPUCCI SPA****136**

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

KOELNMESSE GMBH**lv Cov**

Messeplatz, 1
50679 Koeln
Germany

LAWER SPA**111/113**

Via Amendola, 12/14
13836 Cossato - BI - Italy

M.H. MATERIAL HANDLING SPA**131/133**

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

MACA SRL**44-45**

Zona Industriale Pescarole
83028 Serino - AV - Italy

MAKRO LABELLING SRL**3-16-17**

Via S. Giovanna d'Arco, 9
46044 Goito - MN - Italy

MINI MOTOR SPA**123**

Via E. Fermi, 5
42011 Bagnolo In Piano - RE - Italy

NOL-TEC EUROPE SRL**106**

Via Milano, 14/N
20064 Gorgonzola - MI - Italy

**NVC - NEDERLANDS
PACKAGING CENTRE****22/25**

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

OMAS SPA**69/73**

Via Edison, 39
20023 Cerro Maggiore - MI - Italy

**OMS OFFICINA MECCANICA
SESTESE SPA****72-73**

Via Borgomanero, 44
28040 Panizzaro - NO - Italy

ON CAFFÈ**81**

Via Piave, 79
23879 Verderio - LC - Italy

OROGRAF SRL**26/29**

Viale Industria, 78
27025 Gambolo' - PV - Italy

**OSTS: OLIVIA SIMONAZZI
TECHNICAL SERVICE SRL****119**

Via Lodovico Borsari, 7-9/A
43126 Parma - Italy

PE LABELLERS SPA**41/43**

Via Europa, 25
46047 Porto Mantovano - MN - Italy

**PERNIX SRL - AXTER SRL -
XERUM SRL****62-63**

Via G. Pascoli, 42/M1
30020 Quarto d'Altino - VE - Italy

SAP ITALIA SRL**94/97**

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

**SIEMENS DIGITAL
INDUSTRIES SOFTWARE****129-130**

Via Werner Von Siemens, 1
20128 Milano - Italy

SMI SPA - SMI GROUP**74/76**

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

SPRINT24 SRL**117**

Via della Mercede, 11
00187 Roma
Italy

**TECNINOX
DI A. NAMAZIANO SRL****103**

Via Costa, 27
43035 Felino - PR
Italy

TECNO PACK SPA**35/39**

Via Lago Di Albano, 76
36015 Schio - VI
Italy

TECNOPOOL SPA**82/84**

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

TELOS SRLS**54-60**

Viale del Lavoro 4/6
37050 San Pietro Di Morubio - VR
Italy

TOMACE SRL**116-118**

Via B. Buoizzi, 47
40057 Granarolo dell'Emilia - BO
Italy

TUBITEX SPA**55/59**

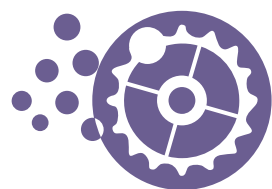
Viale del Lavoro, 31
36021 Barbarano Vicentino - VI - Italy

VELO ACCIAI SRL - VLS**85/88**

Via S. Lorenzo, 42 - Cà Rainati
31020 S. Zenone Degli Ezzelini - TV
Italy

WIBU-SYSTEMS AG**120/122**

Rüppurrer Str. 52
76137 Karlsruhe
Germany



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