

Drink

TECHNOLOGY

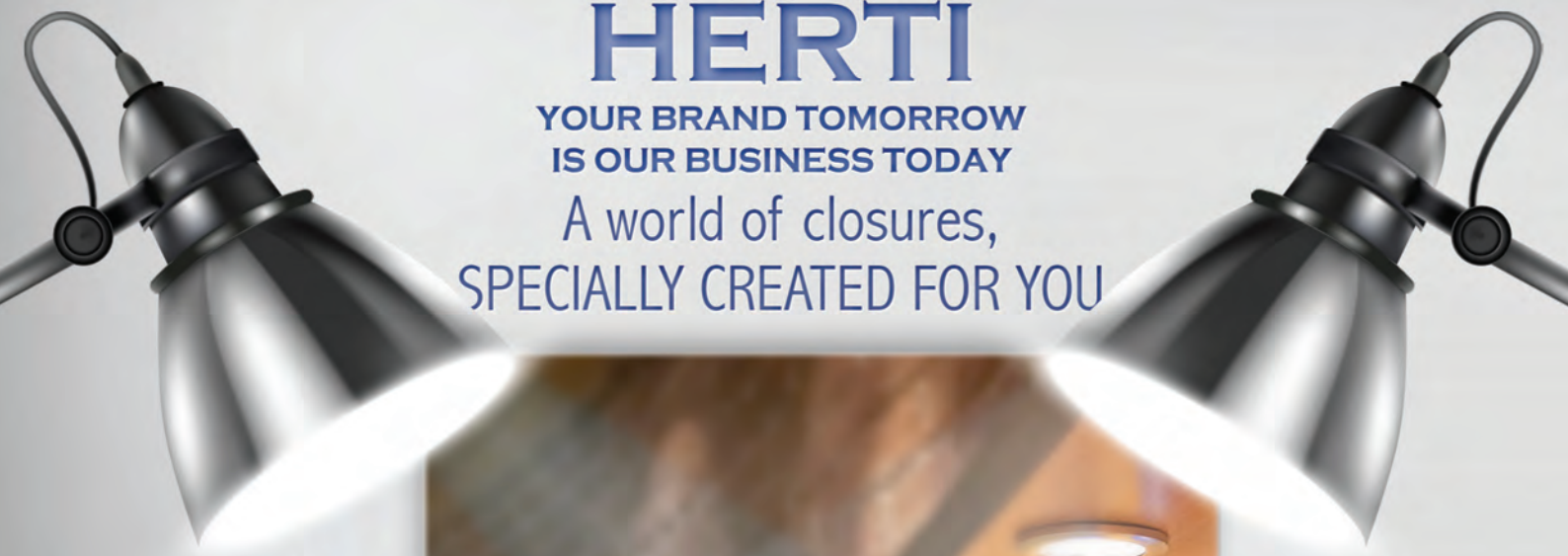




HERTI

YOUR BRAND TOMORROW
IS OUR BUSINESS TODAY

A world of closures,
SPECIALLY CREATED FOR YOU



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

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

CONTENTS



SMI SPA SMI GROUP

2/7

INNOVATION AND
SUSTAINABILITY IN THE
CIRCULAR ECONOMY



MAKRO LABELLING SRL

19/22

FROM MAKRO LABELLING, THE
M.A.I.A. AND A.L.I.C.E. MACHINE
VISION SYSTEMS



GEA MECHANICAL EQUIPMENT ITALIA SPA

47/50

GEA HIGH PRESSURE
HOMOGENIZATION
TECHNOLOGY FOR BEVERAGE
INDUSTRY



PILZ ITALIA SRL

60-61

BECAUSE SAFETY CANNOT
BE LEFT TO CHANCE



DRINK TECHNOLOGY

editorial management
and registered office:

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

web site: www.editricezeus.com

e-mail: redazione@editricezeus.com

portal: www.itfoodonline.com

e-mail: marketing@itfoodonline.com

skype™: editricezeus

Machineries, plants and
equipment for beverage industry
year VII - issue n. 1 - 2020

managing editor

Enrico Maffizzoni

direzione@editricezeus.com

editorial manager

S.V. Maffizzoni

redazione@editricezeus.com

editorial production

Sonia Bennati

bennati@editricezeus.com

account dep. manager

Elena Costanzo

amministrazione@editricezeus.com

project and layout design

ZEUS Agency

grafica@editricezeus.com

creative dep.

ZEUS Agency

grafica@editricezeus.com

translation

C. Natalucci translator

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

By manufacturing machines with an innovative design equipped with IoT technology, SMI provides customers from all over the world with smart solutions, capable of satisfying their needs in terms of production efficiency, operational flexibility, energy

saving and ease of use and monitoring of bottling and packaging lines. The latest developments and the considerable and continuous investments in Research & Development have led to the launch of compact, ergonomic, eco-friendly machines, such as the ECOBLOC® ERGON integrated systems for the stretch-blow mould-

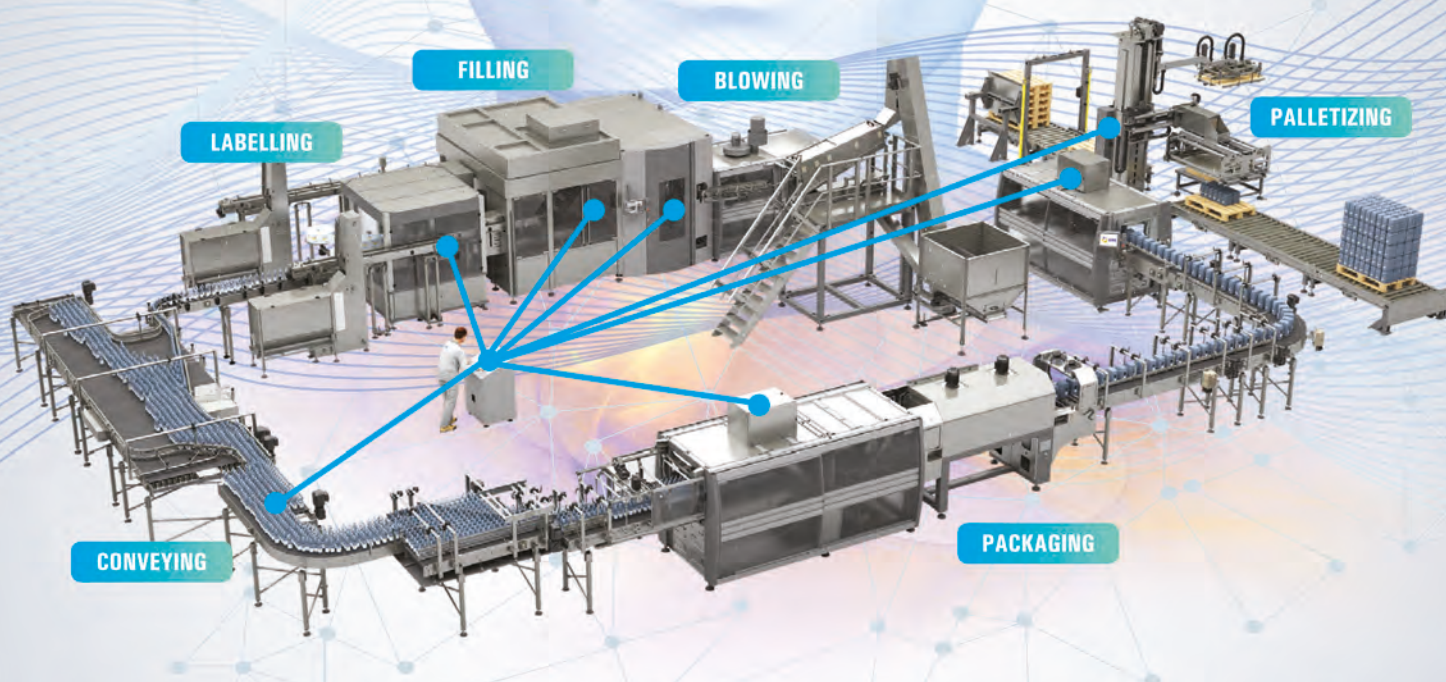
ing, filling and capping of rPET containers recently installed at Danone Group's Société des Eaux de Volvic plant. When we talk about purity and quality, it is the accurate work carried out by the bottling company Société des Eaux de Volvic that comes to mind. The whole bottling process undergoes careful



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



controls to satisfy the high levels of quality required by the French company and its owner Danone, a goal that is achieved by protecting the water source and safeguarding the natural environment all along the distribution chain, till the moment the bottled product is consumed. All of this is taken care of in minute detail, involving partners and suppliers, as with the recent investment for the purchase of a new bottling line, for 8L containers in 100% recycled plastic (rPET), which involved SMI for the supply of an integrated system ECOBLOC® ERGON. The project is the result of a strong synergy between Volvic-Danone and SMI; both companies shared goals and expertise from the design phase to the installation works, with every choice rotating around the necessity to get higher than average bottle performance and quality, safeguarding the final product, eco-friendliness and operational efficiency of the whole production process.



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

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

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

tests carried out by Volvic Quality Laboratory.

100% rPET bottles

Volvic natural, mineral water arrives at the consumers' table as pure as when it flows from the source and is not treated in any way that can alter the taste; for this reason the container plays a vital role towards maintaining the purity of the water, from the source to when it is consumed. The most widely used material for bottling water is PET (polyethylene terephthalate), an unbreakable, plastic material that is lightweight and 100% recyclable. Volvic's high regard of environmental issues led the French company to develop modern solutions for the recycling of PET, so that a new bottle can be produced from an old one. Volvic was one of the first companies to use recycled plastic (rPET) to produce containers and caps, slowly increasing the percentage of rPET, until it hit 100% with the new 8 litre bottle. The 8L container with a square base, in the same style as the smaller Volvic bottles, was studied by a designer at Danone to create an

extremely practical, home use, container-dispenser. Its shape, part of which is slightly tilted, ensures that the bottle can be easily positioned on a flat surface and, thanks to the special cap which is used as a tap, the supply of the product is convenient and easy. The new design of the maxi container was accurately reproduced by SMI, to create the moulds that are installed on the ECOBLOC® ERGON HC EV integrated system and which allow it to manufacture a harmonious bottle with a clean design, that perfectly mirrors the purity of the water that it contains.

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

8L bottle, bottled by the ECOBLOC® ERGON HC EV recently supplied by SMI.

SMI solutions for Société des Eaux de Volvic SA

To satisfy market request for bottled water, in 100% recycled PET (rPET) containers, the French company invested in the purchase of machinery from the ECOBLOC® ERGON HC EV range, supplied by SMI, the ideal solution to produce, fill and cap square based 8L containers in rPET, with a production capacity of up to 3,200 bottles/hour. The new investment was studied in detail, creating strong teamwork between the experts at Volvic and Danone and the designers at SMI.

The complete production process was designed so that every step of the bottling is kept under constant control; indeed, it is here that the water coming from the deep underground comes into contact with the external environment and is at a greater risk of contamination which would

compromise the sensory, chemical, physical and microbiological properties.

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

Main advantages of the integrated system:

- compact, flexible solution for stretch-blowing, filling and capping bottles in PET, with the advantage, in terms of reducing production costs, as the system does not need a rinser, nor conveyors between the blower and the filler or accumulation
- isolating system between the “dry” area of the blower and the “wet”

one of the filler, through a jet of high pressured, sterile air in excess of 5Pa, which guarantees a clean, hygienic filling system

- application of various accessories to guarantee that the filling system is extremely clean and easy to sanitise with advanced cleaning systems
- innovative preform suction system, situated on the oven infeed star, to remove any tiny impurities that could be on the inside of the preform itself. The air that is inserted into the suction system is filtered, and is part of the air recovery system that comes as standard on all the range of SMI stretch-blow moulders.
- machine integrated with sophisticated inspection systems with cameras to guarantee the quality of the bottled water, monitor the production process and avoid particles and/or impurities being deposited on the inside of the unblown preforms
- the preforms are blown with sterile air in a sterile environment; this sterility is maintained for all

the process of filling and capping

- precise and fast operation, thanks to the electronic, operation control, to motorised stretch rods and the use of high efficiency valves with flowmeters
- reduced energy consumption: the stretch-blow module is equipped with a double stage air recovery system, which allows the reduction of energy costs tied to the production of high pressure compressed air
- high energy efficiency, thanks to IR lamps fitted onto the preform heating module
- base of the filler area is made in stainless steel 316 and slightly sloped to ensure that any spilt liquids go down the drains
- electronic capping unit equipped with cap-orienting system during application, which controls correct positioning of caps, and a rejection system for over turned caps
- cap sterilisation through jets of ionised air on the cap channel
- washable cap accumulation table, in stainless

steel, equipped with an optional system to suction the caps to remove any impurities that might have deposited on them while moving along the hopper

- reduced maintenance and running costs of the machine

The second life of packaging in a circular economy

Designed especially to give families the possibility to enjoy the uniquely, precious, Volvic mineral water, in a way that respects the environment, the new 8L eco-bottle was created in 100% recycled plastic (rPET) and is 100%

recyclable! It is the first totally recyclable container launched on the market, thanks to the use of caps and labels that are also 100% recycled. For Danone the future of plastic bottles in the beverage industry will move towards rPET and therefore it is betting on this material. In fact, the water division of the French multinational is a great user of plastic bottles for its products under the Evian, Volvic, Badoit and Salvétat brands, and it is already thinking about bottling them in rPET made from 100% recycled plastics. The bottle created by the ECOBLOC® ER-

GON HC EV, supplied by SMI, will be the first 100% rPET water container on sale in France, seeing that 8L containers have already captured 10% of brand value sales, and with an important growth of 13,1% in 2018, the success of the new totally, recyclable format is guaranteed. Creating an 8L PET container in 100% rPET is the result of joint work between the specialists at Danone and at SMI.

SMI provided the French technicians with one of their own stretch-blowers, so that they could carry out a series of blowing tests while accurately testing the preforms and bottles; these tests allowed them to regulate the “top load” resistance and the material distribution, a step at a time, developing a specially made preform with a specific shape. The biggest challenge, when using recycled preforms, is to guarantee the constant resistance of the bottle when it is being blown, this operation is very difficult with preforms made from recycled material. 🏛️

www.smigroup.it



REALITY ACTIVE IN PROJECT AND PRODUCTION OF BOTTLING PLANT MACHINERY

In the beverage industry, the automatic washing of recycled bottles has now reached a high level of specialization. In this context, works AKOMAG, company located in Soragna (PR), able to offer a varied production, which includes bottle washing machine, rinsing machine, sterilizers for glass or PET bottles, crate washer and accessories to complement. Very large is the choice of the washer, the potential of which obvi-

ously varies in base at the model, and the ranges it is from 100 to 60.000 bph.

The modular structure of all installations allows to gradually increase the functions and the level of sophistication, including special washing sections and sanitizing, automatic control of process parameters, security systems, energy recovery, reduction of discharges and automatic sanitization of the parties most important from the point of view of hygiene.

Start the washing

At low production capacity, the range offer GENESI, available in very small dimensions in order to be inserted in any operating environment. Designed under the indication of the producers with low production capacities, the series has a simple but functional washing cycle, which lowers operating costs (water, energy, detergent) without negatively affecting cleaning bottles to recycle, the complete removal of the labels and their total evacuation outside. The particular ease of use and maintenance, increases productivity and reduces downtime.

The modularity of the GENESI series allows at the customer to "build a machine to measure", adapting it from time to time to different types of use (water, wine, oil, beer, soft drinks).

Constructed in accordance with the Machinery Direc-



SIRA

AKOMAG

AKOMAG



.... THE BOTTLE WASHER



AKOMAG S.r.l.

Fraz. Diolo, 15/D - 43019 Soragna (PR) Italy - Tel. +39 0524.599097 Fax +39 0524 599012
info@akomag.com - www.akomag.com

tive (CE), is equipped with all the accessories needed for the proper functioning: a heat exchanger built with stainless steel tubes arranged geometrically to prevent the deposit of mud or various precipitation that would compromise the performance or, alternatively, a combustion chamber built with direct burner operation. Safety guards and dust cover to protect the unloading of bottles; grouped grease; saving valve for the water network and automatic control of the presence of water in the last rinsing station; electronic speed control; electronic security on the main gearbox that

stop the machine in case of overload; spray pumps with casing and impeller made in stainless steel AISI 316 and protective filters; valves for emptying the waste water and spray tanks; control panel adjustable, made in stainless steel; IP55 electrical plant; gauges and thermometers in visual range of the operator; setting and control of all the machine by "touch-screen". This are the main amenities that characterize the series. The GENESI machine is also arranged for the introduction of detergent and liquid additives in the bath and in the detergent tank, disinfectants and other products in the spraying

tanks. Internal spraying (made with self-cleaning rotating nozzles) and external high pressure spraying are easily removable for routine cleaning and maintenance. The loading and unloading of bottles is completely automatic, and perfectly synchronized with the movement of the main chain.

Dry cycle

To streamline the washing cycle, the company has realized the HYDRA series, a series of fully automatic machines which comprise a first station for emptying the bottles followed by pre-washing spraying and first pre-maceration bath. This configuration



helps to reduce the pollution of the detergent bath and reduce fuel consumption. The triple station for labels extracting ensures their complete detachment from used bottles, while the rotating filter displaced over the entire width of the machine ensures the evacuation outside.

The bottle washing is complete with indoor and outdoor spraying, which occurs with high-pressure cleaner distributed with rotating nozzles self-cleaning and self-centering. To complete rinsing, however, ensure the phase abatement alkalinity followed by spraying with external and internal water network.

Built according to the Machinery Directive (CE) also, the series has a different predispositions that increase safety, including: sensors for slowing down and eventually stopping the machine in case of failure or obstruction of bottles on conveyor; detergent introduction and liquid additives in the bath and other products in spray tanks; the automatic loading and unloading of the bottles is perfectly synchronized with the movement of the main chain; the economizer valve for the water network and the automatic control of the presence of water on the last rinsing station. Other amenities are im-

portant, as: automatic resetting of the chutes for loading and unloading bottles from the control panel; grouped grease; electronic variable speed with remote control (inverter); setting and control of all the machine by "touch-screen"; self-centering and self-cleaning rotating spray at high pressure; external spraying easily removable for cleaning and maintenance; valves for emptying baths and spraying tanks; control panel made in stainless steel; IP55 electrical plant; gauges and thermometers in visual range of the operator. At the bottles unloading are arranged safety guards and dust protec-



tion. The electronic safety on every gearbox allows at the machine to stop in case of overload. The heat exchanger and pumps are always made in stainless steel. Very high productivity and automation in the wash meet in the HP model in the same series. Despite the sophistication, just an operator to remotely manage the entire wash cycle, verifying operation via control systems. The tubes of external washing are constructed so as to reduce maintenance to a minimum. But in case it will be necessary, the dismantling and cleaning are very simple. The regulation of the temperature in the tanks is automated through

a modulating proportional pneumatic system, which offers a guarantee of accuracy and safety of operation. The main motor, oversized, ensures a long lasting efficiency by minimizing the mechanical wear. The electronic variable frequency allows to manage the main engines installed in HYDRA HP series via remote control. The automatic press for the collection of labels evacuated from the detergent bath is full of a recovery system of the detergent solution that accumulates in the pressing phase.

AKOMAG has dedicated several years to the creation of bottle washing ma-

chines and the high quality standard achieved by all its production, advanced technology and timely after-sales service, has allowed at this company to come in several primary and manufacturing with the certainty of having created a safe machinery and Quality for Various needs.

This undertaking was given by all its facilities, from design to engineering, from the search for the most innovative materials to the constant testing of the products in the works.

With this AKOMAG mission, every day thought to be better and invest in quality, with the knowledge to do a good job. 🏭



TAURUS L

AKOMAG



Machines and complete plants for fruit processing

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

YOUR ITALIAN PARTNER SINCE
1936



CHILLED NFC JUICES: THE BERTUZZI APPROACH

The market of fruit juice is developing quite rapidly and the share of NFC juices is considerably increasing because of their high quality.

In Europe and the US (but also in whole world) 100% juice (not from concentrate) category is showing a strong growth potential.

Of particular importance, in this sector, are the chilled juice, fruit juices that are prepared directly from the fresh fruit and then are just chilled and filled or slightly pasteurized and chilled in order to retain all organoleptic characteristics.



The majority of the chilled juice found in the shops shelves is based on orange but other varieties like pineapple, grapefruit, carrots as well as blends (orange-carrot, orange-pineapple, carrot-lemon-pineapple etc.) are becoming more and more popular.

The main hints for the design of a plant processing fresh fruit into chilled juices are:

- Optimization of flow of fruit/juice
- Optimization of characteristics of process equipment
- Optimization of processing cycles in order:

1. Decrease processing times
2. Minimize oxidation of the juice
3. Keep high organoleptic characteristics

- Optimize CIP system to control the microbiology of the juice.

Some of the machines used for the application are dedicated for a certain type of fruit, for instance:

- Dedicated citrus juice extractors (orange, lemons, grapefruit), on order to minimize

the essential oil content in the juice and assure a good control of the pulp.

- Deshellers and dedicated presses for pomegranate to produce cloudy or clear juice which importance is considerably increasing for the beneficial health characteristics.
- Dedicated pineapple juicing in order to obtain high quality juice only from the edible part of the fruit without contamination with the peel.

These are some examples but few.

Extractors for juice/puree can be provided for apples, carrots, pears, passion fruit, banana, beets, mango, spinach, asparagus, berries, hawthorns guava.

The obtained juice is immediately (blended or not) slightly pasteurized (65-70°C) and chilled before filling.

All these examples of equipment have been designed, built and put in operation by Bertuzzi Food Processing Srl, an Italian Company that operates in this field since 1936 and that supplies plants and machines to process fruit and vegetables to produce juice, concentrates, baby food, jam, ready-made drinks etc... 🏢

www.bertuzzi.it



HIGH-TECH PALLET LABELLING SOLUTIONS



ALTECH is a leading European manufacturer of self-adhesive labelling systems for decorating, codifying and identifying products and materials in general.

Every day, the labelling machines built by ALTECH are used in over 50 countries, in

multinationals, big companies and SMEs mainly operating in the food & beverage, chemical, cosmetic, pharmaceutical and component industries.

Among the wide range of systems provided by ALTECH, ALcode P is the latest advance in the design of **pallet label application solutions** and is also suited to

codify shrink wrapped pallets of PET bottles. It can print and apply A5 labels to two adjacent faces of a pallet (even 3 sides on demand) at up to 120 pallets p/hr, while ensuring high quality and reliability.

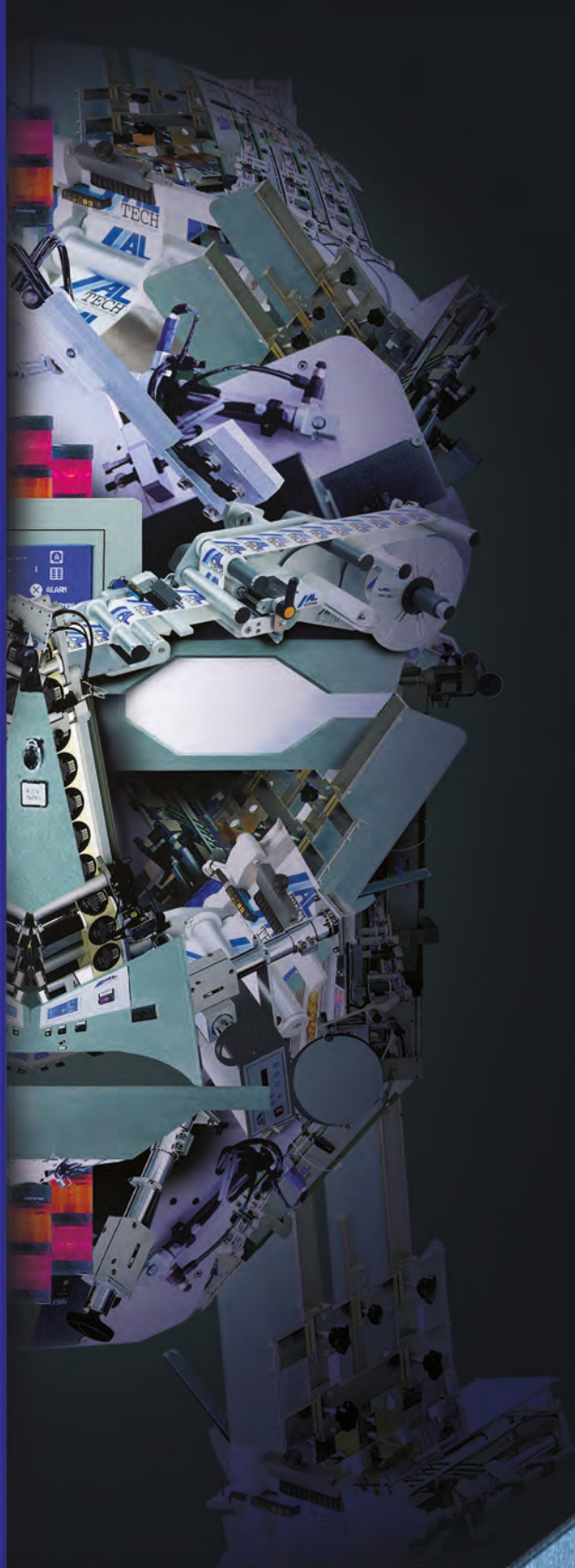
ALcode P is equipped with a SATO 84ex/86ex printing unit which can print high quality 152



INDUSTRIAL LABELLING MACHINERY MADE IN ITALY



ALTECH SRL
Viale De Gasperi, 70
20010 Bareggio (MI)
Tel. +390290363464
info@altech.it
www.altech.it





mm by 200 mm labels even in “difficult” industrial environments. It is also compatible with other printing units.

The applicator unit has been designed to apply both labels with only

one pallet stop. This is due to a roller bearing three axis movement system allowing for fast, accurate label positioning, even on pallets with slightly different dimensions, shapes and stopping positions.

The robust, compact structure of ALcode P integrates the printing unit, the 3 axial applicator system and the safety cabinet. It is also equipped with an array of accessories, such as a “fallen label” sensor (missing label detection system) and a scanner laser which checks that the barcodes are legible and both labels have been correctly applied. A second attempt is performed in the event of an error before generating an alarm to stop the line when necessary.

Drawing on its professional resources and industry-specific expertise, ALTECH can develop tailor-made projects to solve any labelling problem through tailor-made systems. ALTECH operates all over the world through more than 80 resellers and three subsidiary companies in the United Kingdom, the United States and South America. 🏠

www.altech.it

MODULARITY, FLEXIBILITY, PRACTICALITY



Labelling in the beverages, food, detergent and pharmaceutical sectors has always been our passion and our primary activity.

Innovative technologies, an international sales and after-sales network and configuration flexibility are our strong points.

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.



FROM MAKRO LABELLING, THE M.A.I.A. AND A.L.I.C.E. MACHINE VISION SYSTEMS

The evolution of the design capabilities of the Goito-based company

includes two new machine vision systems guaranteeing performance, less production waste and top quality finished products. While on one hand, faster bottling lines ensure production schedules can be met, on the other, they make it very difficult – if not impossible – for the line operator to accurately check every individual bottle. Only automatic quality control and bottle orientation systems can guarantee the precise characteristics of each finished product, preventing defective bottles from reaching the market. This is no news to Makro Labelling, one of the leading industrial labeller manufacturers,



always committed to taking account of, or anticipating, the market's requests, developing products, systems and patents able to guarantee

performance, lower costs, less production waste and top quality packaging. The choice for advanced technological skills, production process

rationalisation and the ability to anticipate the evolution of the market. “The machine vision system is the natural follow-through to the labelling process, as the procedure does not end when the label has been applied. It is necessary to check that the right label has been attached, positioned correctly and smoothed without defects. We at Makro Labelling therefore decided to create an in-house Vision Department and to invest heavily in developing two new vision systems: A.L.I.C.E. and M.A.I.A. We have recently launched them onto the market and they will guarantee perfect and complete integration with the machine automation and a flexible, intuitive, practical response to companies who know they need automatic systems”, says Simone Marcantoni, head of the Automation Department. Fruit of about 10,000 hours of software development, the two systems integrate with the labelling machines and



are also simple to manage for the line operator who can thus exploit the system to the full. In-house development and production of the two systems allows our

customers to interface with a single producer, able to guarantee rapid and direct technical assistance and above all to satisfy the market's diverse packaging needs,

once again confirming the concept of flexibility which has been a hallmark of Makro Labelling since the beginning.

A.L.I.C.E. - Advanced Label Inspection and Control Environment

A.L.I.C.E. is a quality control system able to assess the horizontal and vertical position and angle of the label, together with its alignment with respect to a reference point, whether the logo on the glass, a capsule or another label. The system also checks the label is correct and the overlap of a wrap-around label and can read barcodes, a data matrix or characters, or simply check for the label's presence.

M.A.I.A. - Makro Advanced In-line Analysis

M.A.I.A. on the other hand is Makro Labelling's bottle orientation system. It is based on use of Line Scan Camera technology

employing line scan cameras (also mounted on Makro Labelling's patented Follower system) able to take thousands of linear photographs (1x2048 pixels) which, pasted one after the other, produce a single image representing the full length of the bottle. When subsequently analysed, this indicates the position of the reference point to be used by the plate control system to position the bottle correctly and receive the first label in the right position. "A vision system must not be complex, otherwise the operator will not be able to use it easily, in practice limiting its use. We have seen production lines where the system has been turned off or bypassed because the operator is not able to manage

it and so decides to do without its assistance. Or the intervention of highly-trained but costly engineers is required in order to produce and obtain reliable checks. One of the reasons behind the success of Makro Labelling's machines and systems is precisely our ability to offer functional solutions which, although complex, are available to operators simply and intuitively, giving them hitherto unthinkable possibilities and flexibility.

A.L.I.C.E. and M.A.I.A. have once again been designed and oriented towards simplicity and user-friendliness, so the operator can master them completely, quickly and simply," says Simone Marcantoni. 🏠

www.makrolabelling.it

makro 
labelling

TAILORED TECHNOLOGIES

20°
2000-2020

www.pndsrl.it

EXHIBITIONS



PND SRL, THE GLOBAL MARKET REWARDS HIGH-QUALITY SPECIALISATION

Pnd srl, the global market rewards high-quality specialisation

Specialisation, customer care, continuous innovation, custom technology and extensive knowledge of international markets are just some of the features that have enabled

PND srl to be among the leading companies in the world in the construction and sale of machinery for the processing of fruit.

Alongside this quality is the conviction of having to insist on ever-increasing knowledge of the industry where we have gained such experience that we can be clearly

distinguished from our competitors throughout the world. This awareness means that PND is **not forced to yield to the urging** of some customers who would also like us to provide machinery for processing other products, such as **vegetables**.

PND is proud of its **strong identity**, which al-



lows it to avoid having to pursue success through contests or by undergoing **frenetic diversification**. The only recognition to which PND aspires is the satisfaction of its **customers**, who **choose PND machines without focusing on appearances or rumours** but rather on the substance of the proposed solutions.

This success can be easily seen in the figures racked up by the *strawberry de-calyx machine* (Mod. DF12 - DF24). This machine, only 24 months after its launch, is already present with more than 40 units in four continents.

Companies based in the United States, Mexico, Spain, South Korea, Poland and Egypt have chosen the features of the PND *strawberry de-calyx machine*.

Indeed, this machine makes it able to work with considerable volumes of fruit with great quality, reducing waste to a minimum.

Normal de-calyxing machines usually create product waste of about 30%. With the PND de-calyx

machine, however, **this waste is reduced to only 10%**. This means a **large amount of product is recovered**, especially if we take into account the fact that the models built and marketed by PND can respectively process 300 fruits per minute (Mod. DF12) and 600 fruits per minute (Mod. DF24).

Another feature that makes the PND *strawberry de-calyx machine* a winner is its ability to **work with all the various sizes of strawberry without needing to be pre-calibrated**, as well as its ability to **remove any type of calyx**. These features make it particularly popular in Mexico or wherever it is necessary to switch quickly from the field to production.

Without the need to intervene in the settings, the PND strawberry de-calyx machine is able to process a wide range of product with a **diameter ranging between 18 and 55 millimetres**, a range that, in practice, includes all types of strawberries.

It is a truly global machine, as PND srl is also truly global, being based in Italy, but with representative offices located in several different countries.

A team consisting of 30 people, including administrative and sales staff, technicians and engineers, based at its headquarters in Scafati, in the province of Salerno, in the south of Italy, works alongside **agents and technical offices all around the world**.



Indeed, the human element is one of the main resources of a company with these kinds of mechanical and technical strengths.

Despite the widespread presence of PND representatives on the various continents, when it comes to installing a new machine, **there is always an expert who travels from the parent company** and follows the process through to completion.

This assumption of responsibility is a **guarantee for the customer**, which knows from the very first moment that it is going to be accompanied constantly from the design phase to the commissioning of the system.

This constant attention to the needs of its customers is a **winning strategy** that allows continuous updating in the field and a swift response to customer needs means that **customised production lines** can be offered to them.

The ability to deal constantly with customers all around the world offers the technicians from PND the opportunity to tackle new challenges and properly understand the needs of their customers.

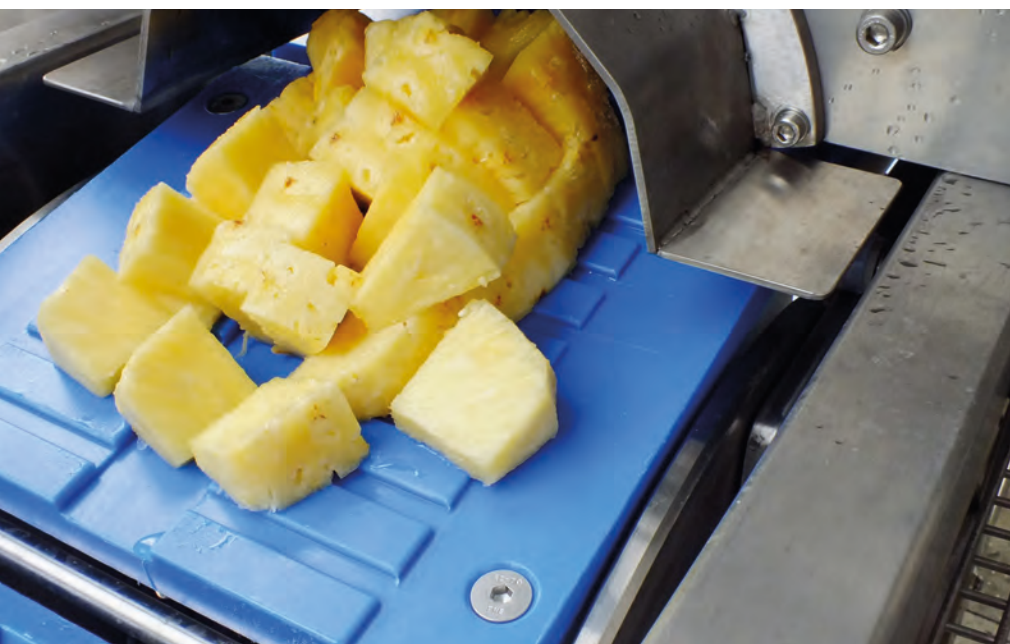
This situation has given rise to the **NEW coring - slicing machine mod. DRR**, which is able to chop and slice apples and peaches with low energy consumption.

The loading plate rotates at regular intervals, so that when the plate stops the three work operations are carried out at the same time: the operator loads the fruit and the two mechanisms perform the coring and slicing operations.

The machine has a stainless steel structure and is placed on wheels (with brake) for easy movement. If so desired, adjustable feet can be requested in place of the wheels. The coring tubes are available in different diameters as required.

All modifications can be made thanks to the competence and availability of PND technicians, making it possible to carry out **mechanical adaptations** to the machinery, tailoring the type of processing to your needs.

Another example of the versatility of the machinery manufactured by PND is highlighted by the changes that have allowed us to adapt our apple peeling machine to the needs of South Korean companies engaged in the processing of nashi apple pears. This



fruit has the consistency of a pear, the smooth shape of an apple and the diameter of a baby melon. This challenge was brilliantly resolved by PND. Relying on PND means having **personalised assistance anywhere** with skilled technicians able to speak different languages and enjoying the on-site support of offices in Europe, USA, Canada, Brazil, Chile, Argentina, Peru, South Korea, Egypt, Tanzania, Australia, China, Turkey, United Arab Emirates and Qatar.

Pears, apples, kiwi fruit, oranges, grapefruits, lemons, pineapple, lemons, mangoes, strawberries and peaches are the varieties of fruit handled, with all their possible variants, in

order to meet the needs of companies engaged in the production of **4th Range** fresh products, the **canning industry** (jam and canned peaches), and the **dried** and **frozen** sectors.

The food industry has always had a **need for innovation** and has different requirements and peculiarities depending on the different target markets.

For example, in the United States and Europe, the *Fruit Fresh Cut* is one of the main production sectors, unlike in Turkey, where the main operations are focused on dehydrated or dried products.

PND's main ability is always to provide successful solutions to make processing easy and economically ad-

vantageous, complementing the lines, for example, with a freezing tunnel or drying ovens.

Those wishing to learn more about the wide range of solutions offered by PND srl can do so easily on the website at **www.pnd-srl.it** where, besides being able to view the catalogue of machines and lines on offer, you can also see the full calendar of **international trade events** in which PND takes part with its own stand and **make an appointment** with the staff of the company, thus offering you the opportunity to receive the most suitable solution for your **business**. 🏠

www.pndsrl.it



WEIGHTPACK: CONSTANT INNOVATION

Weightpack's future outlook continues in the direction planned by the founder, Carlo Cormiani, by running ahead of its time and satisfying the new challenges in the field of filling sensitive and/or difficult products. The increasing speed with which technology continues with its development, demands a running investment and commitment towards research and development: a constant for Weightpack that favours a

run ahead instead of running after new innovations. Weightpack will move further in the coming year 2019 on the way of innovation and continuous research that seeks an improvement and simplification of the standard manufacturing process for the clients. Because of its well-developed ten-year experience, Weightpack is able to adapt its solutions to the special conditions of the clientele, whereby it gives special attention to changes that the market requires. Filling of a net

weight confirms the advantages of its precision work, lack of contact with the container, the optimisation of fluid mechanics for bottling outlet (the instrument is far beyond the valve and thus does not impose any restrictions on the design). In accordance with the advantages of a net filling, the tankless technology enables a quick product change and therefore an intensive production process and reduces idle time. This system pushes for an optimisation of the intermediate processes that are not directly





1979
we have
shaped
the past

RESEARCH & DEVELOPMENT

2018
we forge
the future

UNIVERSAL MODULAR SYSTEM

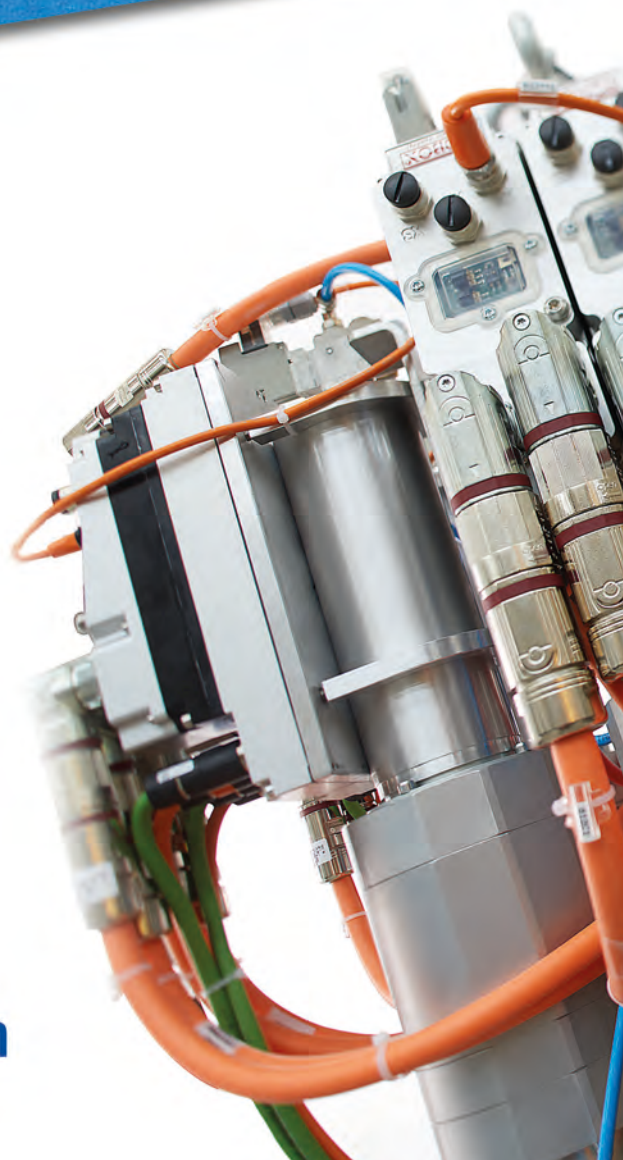
DIRECT DRIVE ROTARY TRANSFER DRIVE

24 BIT WEIGHING ELECTRONICS

SELF-ADAPTIVE PRODUCT FEED MANAGEMENT



WEIGHTPACK.com
i n n o v a t i o n f i r s t



connected with filling: the absence of a container transforms into another advantage for all companies that wish to operate typical time intervals for conventional systems flexibly, i.e., without being enforced by technical cleaning and hygiene processes.

In step with this everlasting filling progress Weightpack invested to a significant extent in technologies for sensitive food stuffs. For over ten years the company has been working on developing more comprehensive procedures that are required for using a higher net filling precision while packaging food stuffs with longer life time. The tested filling methods thus range from sour products distributed in a cold product chain to the less sour milk and cheese preparations that can be distributed without cooling.

The new challenge of the Italian manufacturing company lies in rationalising transitions while filling sensitive products that originate from any pre-forming of PET containers

combined aseptic system: one for the long life cycle market of already completed containers is thereby manufactured in an exclusive, compact, efficient and environment-friendly machine.

Weightpack is also careful about customer care and shall endeavour to ensure that the relationships proceed not just commercially but in collaboration: thereby resulting in a partnership that provides for a common growth and development in which the partners have a useful interaction. In this specific sense, Weightpack promoted the creation of a test area effective in its working space, that enables a continuous quality control as it is designed for long-term trials and review checks with maximum confidentiality (The room is shielded and protected by security systems, that is permissible only for responsible personnel).

Furthermore, it WP allows the clients to pursue processes themselves in the test area over a communication system, which guarantees an optimal, co-operative transparency for direct conversation with partners.

Realising these strategies puts Weightpack in the upper echelons of the companies that have provided innovations in the field and still show beat and rhythm in market development and the technologies dedicated to them.

The fascinating challenge lies in the opportunity to be able to offer the continuous and fluid development that the sector demands and entrusts itself to everlasting research that can always assure innovative and above all personalised solutions thanks to its rich experience.

www.weightpack.com



PRO FILE



Zambelli
Automatic Packaging Machines

1969-2019 #50YearsOfBusiness

zambelli@zambelli.it

+39 051 66 61 782

San Pietro in Casale, Bologna

VISIT US AT:

- **Interpack 2020**, Düsseldorf [Booth #11-C55]

FOLLOW US:

- **Website** www.zambelli.it

- **Facebook & Instagram** @ZambelliPackaging



ZAMBELLI: DIFFERENT PRODUCTS, SAME HIGH QUALITY



Zambelli, since 1969, designs and manufactures cutting-edge technical

solutions for the packaging industry.

50 years of business, 2 generations at work and hundreds of customers worldwide

50 years have passed since Flavio Zambelli decided to

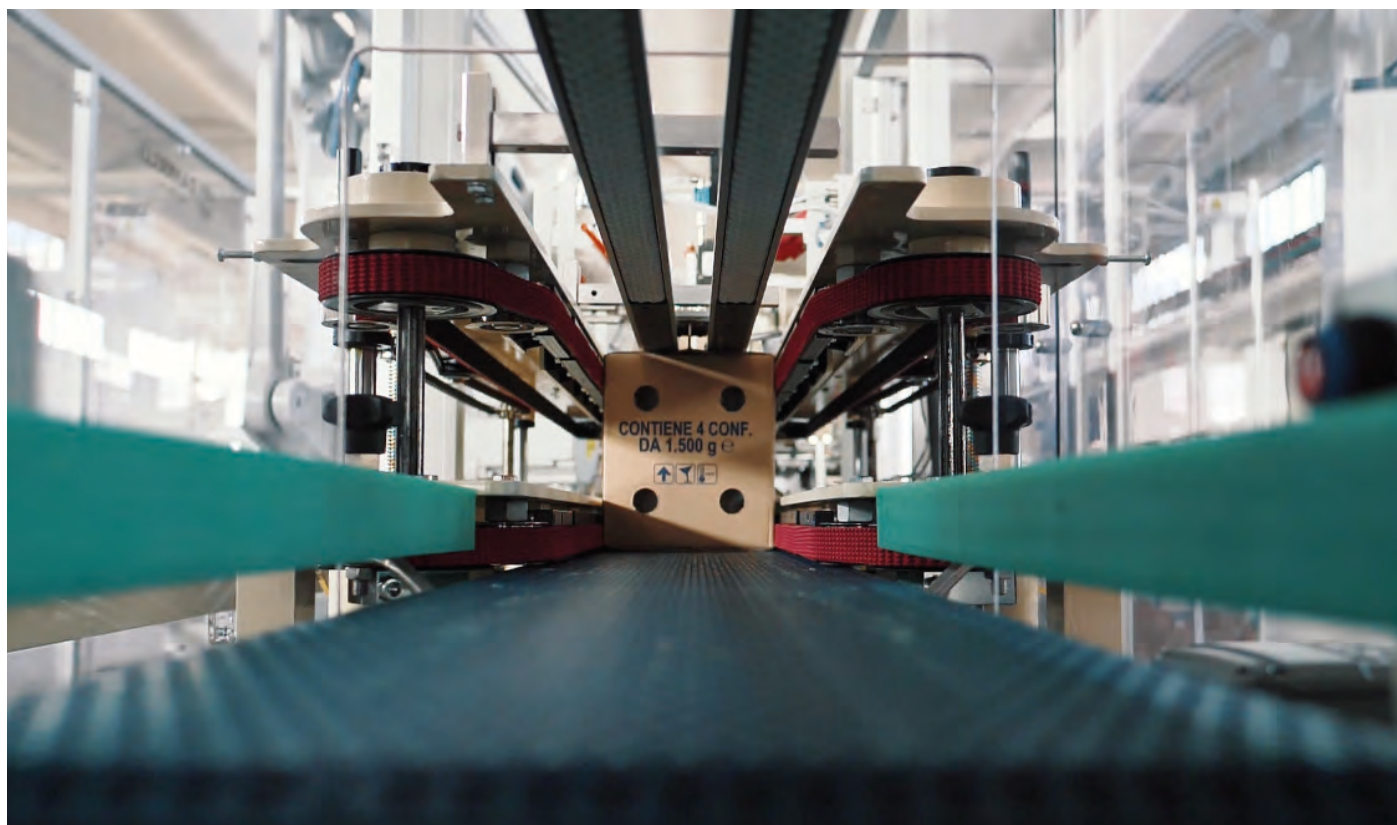
start his small business in Bologna downtown. Since then, thanks to his perseverance and the following generations, Zambelli continues to grow and proudly serve its customers all over the world.



Zambelli core values

Behind every machine supplied and every service rendered, there are people.

Working hard, sharing the joy of a successful project, this is what gives us the strength to grow and always



move forward.

Zambelli is a large family which includes relatives, colleagues and, above all, customers.

Zambelli business approach

- Market research & target identification
- Development of ideas & design
- Collaboration with customer to adapt to its specific needs
- Prototyping & test
- Manufacturing, installation & training
- Continuous exchange of information
- Planned maintenance, service & spares

Who we are and what we do?

We are #MarketOriented, because we are constantly reaching out to new horizons.

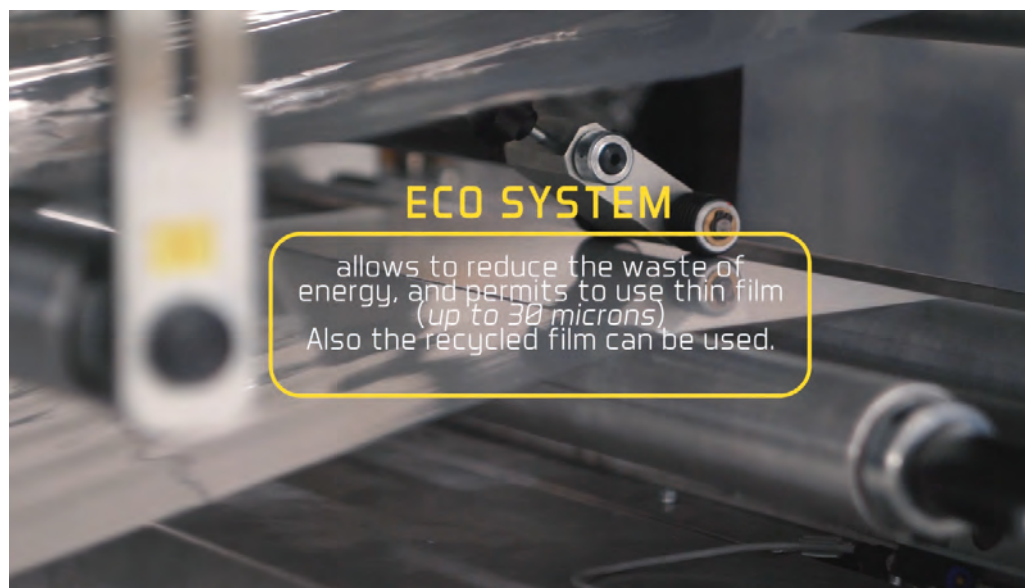
Starting from our core industry, Food & Beverage, over the years we have developed packaging machines also for pet food, baby food, home care & personal care, Industrial goods as bearings and consumables for the welding industry and many more.

50 years of perseverance and success, an ongoing

story for Zambelli and its friends.

We design #PowerfulSolutions, because thanks to our experience we design and manufacture packaging machines that fit the needs of our customer: if the requirement is to package products with LDPE (Low Density Polyethylene), Zambelli makes avail-

able its best Shrinkwrappers suitable for film only, flat pad + film, tray + film. If the request is for cardboard packaging of various sizes, Zambelli Cartoners and Case Packers – Wrap Around or preglued RSC – are the best solutions; if it's not enough, Zambelli provides Robotic System tailored to any application that requires specific han-



dling and Combi machines made by the combination of Shrinkwrappers and Case Packers.

Our solutions are versatile and customized, every project is different but our commitment remains the same.

We are #CustomerOriented, because for us most important is to find the best solution for customers needs.

Our attention is always focused on their production process and its needs. For this reason, to fully satisfy our customer, we are willing to provide various types of services pre and after sales:

- Design
- Installation
- Technical Documentation
- Service & Spare
- Upgrades
- Training for technicians & operator

What we can do for you and your project?

Three easy steps:

Meet up – contact us for a first meeting.

Talk & Plan – let's talk about your ideas and how we could develop them together.

Design & Collab – now the fun part: let's design! We work together to make everything perfect according to your needs. 🏠

Contact us:

- zambelli@zambelli.it
- (+39) 051 66 61 782
- Via Ferrara, 35/41
San Pietro in Casale,
Bologna (IT)

Follow us on:

- www.zambelli.it
- Facebook & Instagram:
[@ZambelliPackaging](https://www.facebook.com/ZambelliPackaging)

Visit us at:

- Interpack 2020
[Booth #11-C55].





**GREAT FLEXIBILITY,
HIGH PROFESSIONALISM**



Tunnel pasteurizers for any type of drink requiring pasteurization. Heat treatment, sous-vide cooking of cereals, legumes, sauces, continuous cooking or batch cooking.

OUR VISION, OUR MISSION AND PHILOSOPHY OF EXCELLENCE

Our philosophy is very simple: “give the best to people who expect the best. (D.Z.)”



Following its philosophy PIGO srl set a goal and became an initiating force in technological and consequently economical progress in food processing industry, a world-class leader in the design and manufacturing of high technology freezing, freeze drying and drying equipment, as well as fruit and vegetable processing machinery. PIGO srl can proudly say

that its machines achieve excellence, both from operating characteristics and energy efficiency point of view. Furthermore, they are user friendly, feature that together with the above gives many privileges to the Users.

The key advantages of PIGO Technologies that allow to the user a money saving process are:
FASTER PROCESS WITH LESS ENERGY – Our proprietary method

reduces process time up to 15-20% while consuming less energy

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

FOOD SAFETY FRIENDLY – great care and determination was put into designing a system

P i G o[®]

Food Processing Machinery

The Art of Freezing & Freeze Drying Drying & Processing

IQF FREEZERS



EASY Freeze

www.pigo.it



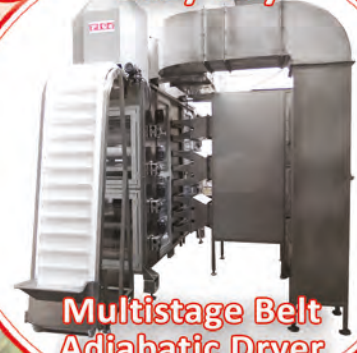
MADE IN ITALY

FREEZE DRYING



EASY Freeze DRYER /
LYOPHILIZER

Easy Dry



Multistage Belt
Adiabatic Dryer

PROCESSING



Vegetables
& Fruit Processing
Solutions

FRUIT PROCESSING



Complete Solutions
for Fruit Processing,
Destoning & Deaeration

INFUSION



INFUSED DRIED FRUITS

Dried Plums
Processing



SRIRAL SOLUTIONS:



Proofing
Cooling
Freezing

that makes accessing and cleaning every component very easy, ensuring that bacteria or residue will not get entrapped on any equipment or food surfaces. PIGO designs only machinery with fully accessible and cleanable machine interior.

OPERATOR FRIENDLY – all steps in the process are designed to facilitate the simple. Fast and efficient operations and maintenance.

Following the above guidelines PIGO srl manufactures EASY Freeze - IQF Fluidized bed freezers (Redefining IQF Tech-

nology with adaptable air flow), EASY Freeze SPYRO - spiral freezers/proofers/coolers, EFD – family of Freeze Dryers/Lyophilizers (introducing innovative design and establishing a new level of final product quality), Adiabatic Multistage Belt Dryers PG 135 (with separate temperature and humidity zones control), PG 103 / PG 104 Pitting Machines and complete fruit and vegetables processing lines.

EASY Freeze family is a perfect solution for IQF freezing of great variety of fruits, vegetables, sea, meat and cheese prod-

ucts while EASY Freeze SPYRO freezers are most suitable for the freezing of doughy products, meat, fish, pizza and much more. PIGO srl Freezers are built in modular sizes with all components entirely realized of stainless steel, with fully controlled fluidization method that keeps the product constantly suspended above the belt in a cushion of air, providing the perfect IQF product even when dealing with delicate products like cooked rice, raspberries, etc.

EFD Freeze Dryer allows to save delicate aromas while drying the frozen product under vacuum



producing a premium quality product. Freeze Drying technology allows to have the sensorial properties of the finished product perfectly superimposable to those of the fresh product.

Adiabatic Multi-stage Belt Dryer PG 135, with adjustable individual zone drying allows to dry the product with very low temperatures with up to 2-3 times shorter drying time, preserving the product color and quality. As all PIGO srl machinery the entire machine is realized of stainless steel and materials ideal and approved for use in food industry.

Besides the above mentioned machines PIGO srl also manufactures the PG 103 and PG 104 pitting machines. The PG 103 is the high-capacity automatic machine that has at least 50-100% higher capacity than any other pitting machine on the market, achieving this capacity with the optimal tact of

60 cycles per min. PIGO srl systems are designed to create a "High Tech" solutions that contain dozens of innovations allowing small and large improvements.

To get a better idea of what PIGO srl does please visit the website www.pigo.it or just send an e-mail to info@pigo.it. Some short video clips of

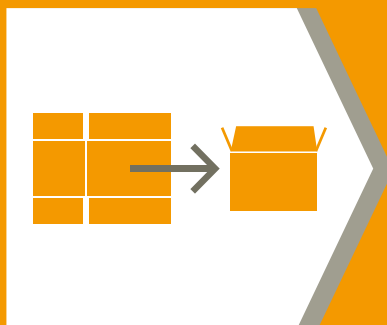
PIGO machines in operation are available also on: www.youtube.com, look for PIGO srl or follow them on social media for news. 🏠



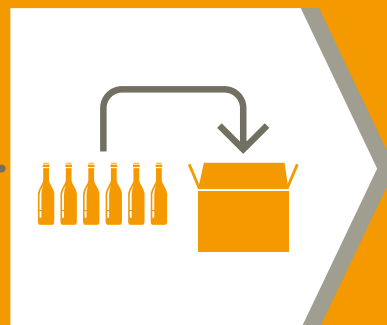
DEPALLETIZERS



CARTON FORMERS



CASE PACKERS



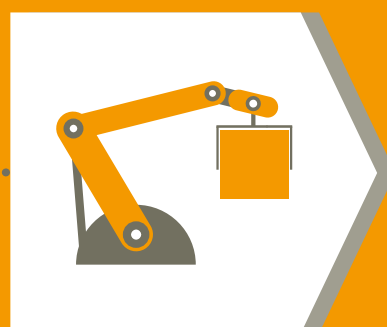
CARTONS CLOSER



PALLETIZER



ROBOT



WE ALWAYS FIND A SOLUTION



visit us:



THE PACKING SPECIALISTS.

If you need to move, pack, box your products and palletize for storage in your warehouse, we are your best choice.

That's what we've been doing, and doing it right, for 25 years.



BONDANI S.r.l.

Via Romanina, 3 43015 Noceto (PR) - Italy

Tel. +39.0521.621100 - Fax +39.0521.621101

info@bondani.it - bondani.it

BONDANI S.R.L: THE CUSTOMER AND HIS NEEDS AT THE CENTRE

Thanks to its long experience and great flexibility, Bondani S.r.l. 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 depalletizer 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 solution 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





ASSISTANCE & SALES CENTERS



SALES & TECHNICAL SERVICE AGENCIES



www.fbfitalia.it



FBF ITALIA S.r.l. Via Are, 2 43038 Sala Baganza (Parma) Italy
Phone: + 39 0521 548211 Fax: +39 0521 835179 info@fbfitalia.it





DJAZAGRO

LA FIERA PER LA PRODUZIONE
AGROALIMENTARE

06 ▶ 09 APRILE 2020

SAFEX Exhibition Park ▶ Algeri ▶ Algeria



DJAZAGRO.COM

COMEXPOSIUM





Tubi in PTFE per l'Industria Alimentare e Farmaceutica.

- Design Unico e Brevettato
- Sottostrato Non Igroscopico
 - Alta Igienicit 
 - Massima Flessibilit 
- Copertura Silicone "Platinum Cured"
- Resistenti Agenti Chimici e Alte Temperature
- Certificati FDA
- Prodotti Secondo Norma EN 16643.

Edizione Gennaio 2020



Since 1951.

Allegri Cesare S.p.A.

Via Venezia, 6 • 20099 Sesto S. Giovanni (MI) - Italy

Tel. +39 02.24.40.203/8 • Fax +39 02.24.05.781

info.comm@allegricesare.com

www.allegricesare.com

Saremo presenti al MECSPE 2020

Fiera di Parma, 26/28 Marzo.

Padiglione 6, Stand C18.



GEA HIGH PRESSURE HOMOGENIZATION TECHNOLOGY FOR BEVERAGE INDUSTRY

One of the most important goal of the homogenization process in the beverage industry is to reduce physical instabilities of the product to create stable emulsions and dispersions over time. Most of the beverages that can get advantages from high pressure homogenization are dispersions, in which the dispersed phase is made by solid/fiber content and the continuous phase by a liquid, in most cases water. Homogenizers are able to micronize and disperse suspended particles in beverages better than other mechanical processes.

For fruit juices in particular, the micronizing action is contemporarily used on particles of different kind, such as:

- Cells agglomerations
- Sugar or salt crystalline agglomerations
- Depending on fruits various structure can be



treated: pulpy, fibrous, woody, etc.

- Essential oils globules

How homogenization process enriches your products?

- By emphasizing of the organoleptic features, thanks to the dispersion of the aromatic elements
- By enhancing the velvet-like structure, its uniformity, and a typical "roundness" of taste of the obtained product
- By increasing digestibility and, as a con-

sequence, facilitating assimilation of the nutritional principles.

- By increasing stability of the suspension. One of the effects achievable through the process is to avoid the phenomena of separation: the elimination of the typical "collar" which can be noticed in certain bottles of fruit juices, is not only an improvement of the product outlook, but also a quality advantage. As a matter of fact, the suspended particles are protected



against the oxidation process, which, besides modifying the taste, causes a real alteration of the product.

GEA, your qualified partner

GEA manufactures dynamic high pressure homogenizers and plungers pump for all industries and applications. This is the result of specific know-how and a spirit of innovation that is constantly focused on innovation and process performances. Our company can offer highly specific and customized process solutions to always meet, ensure

and repeat over time product quality excellence.

Hand in hand with customers

The close collaboration with clients to implement innovative and tailor-made solutions lets us maintain continuous product development and guarantee efficient operations and excellent results on the final products. The Process Technology Center, just refurbished in November 2019 based in Parma (Italy) next to the production plant, is a unique resource to test the homogenization technology, refine receipts, develop high efficiency

core components and evaluate the performance of installed machines. Highly qualified staff can support customers in the development of new products, to test maximum process efficiency conditions and product scalability to industrial production processes.

Multiple Applications

The benefit of high pressure homogenization is well known in dairy, food & beverage applications in order to subdivide particles or droplets present in fluids and reduce them to the smallest possible size, down to nanometer range. Thus, the process creates a stable emulsion, which improves the product shelf-life, viscosity, colour and taste.

GEA can offer a complete range of high pressure homogenizers, from laboratory up to mass industrial scale and more than 300 options to satisfy market's needs. All GEA machines meet the most stringent hygienic requirements and quality control systems, they are CIP and



Power for nature

Discover homogenization advantages for natural juice and functional drink industries

- Optimized product composition, stability and shelf life
- Reduced process oxidation and taste alteration
- Improved viscosity and texture
- Improved mouth feeling and taste

SIP'able and are available with cGMP documentation.

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

Suitable for all industries, these machines are easily implementable in remote controlled systems and complete process lines.

GEA homogenizers are available in different configurations, conceived with specific liquid end design that allows to reach up to 1500 bar in order to be suitable for dairy industry and food & beverage, as well as biotech and chemical applications, with premium homogenization performances warranty.

Main advantages:

- Easy to use
- Highest reliability on continuous production (24/7)
- Reduced operational costs (water, lubrication oil, energy)
- Low environmental impact
- Fully automated and remote controlled

- High capacity at ultra-high pressure

One Series. The combination of convenience and quality to deliver unmatched benefits

Simple: One offers a simple design construction, complete with all the options needed to be easily integrated into the system, as ready-to-use and low maintenance units. Versatile: available in five versions, One homogenizers can meet any production need (from 300 l/h up to 10.000 l/h - 250 bar)

Reliable: constant engineering improvement, excellent quality standard of production and the competence of personnel are the winning drivers to guarantee long lasting machine.

The homogenizers from the One Series combine convenience and absolute quality to deliver unmatched benefits. These 3-piston homogenizers are manufactured to ensure easy maintenance and simple installation into

small-medium productions of dairy products, beverages and soft chemicals. The high-efficiency, abrasion-resistant homogenizing valve guarantees correct micronization for excellent quality and long physical stability.

Main advantages:

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

Materials selection, constant design innovation, excellent performances make GEA the ideal partner to find out innovative technological solutions for your processes. 🏠

Find more on **gea.com/homogenizers**

Tanks for all tastes. Yours.



Blender tank per resine da 100.000 litri, su gonnola autoportante, pressione esercizio + 0,5 bar/-0,005 bar.

Each tank is unique. Because it is designed to your requirements. Dimensions, capacity, design: everything is conceived to enhance the product and optimize your business processes. We are a solid and versatile company, able to handle complex jobs: this is why for over 40 years we have been the partner of many companies in Italy and abroad.

Some of our best customers:



INDUSTRIE  **FRACCHIOLLA**

Industrie Fracchiolla S.p.a.

S.P. 133 per Valenzano km 1,200 - 70010 Adelfia (Ba) Italy
T. + 39 080 4596944 F. +39 080 4596810

www.fracchiolla.it

Ideas, solutions and plants for the food and beverage industry

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

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

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

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

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

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



UHT Sterilization Plants

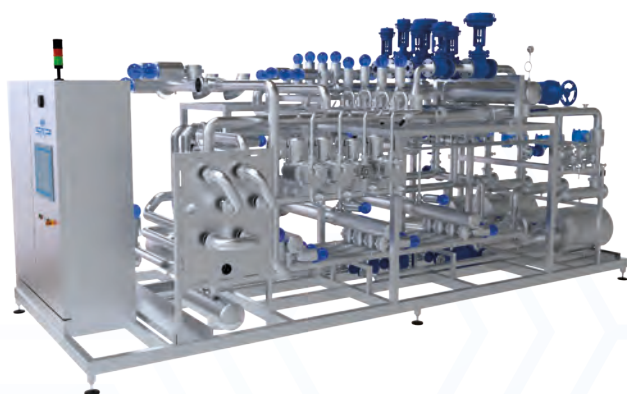
Mixing and Carbonating Units



Pasteurization Plants



Cip Cleaning Plants



Continuous Sugar Dissolvers



Syrup Rooms



Aseptic Tanks



Food Processing Plants

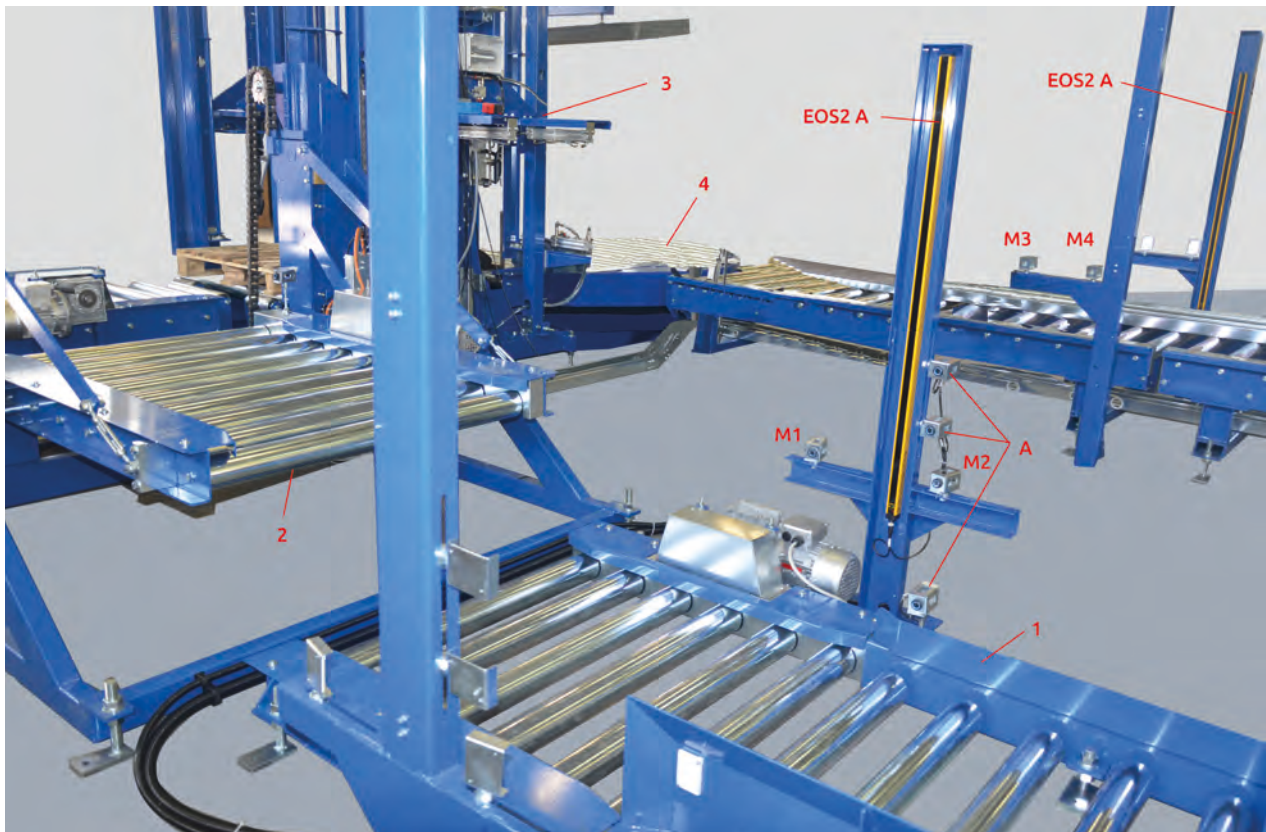


SAP ITALIA SRL
via S. Allende, 1
20077 Melegnano (MI) Italy
Tel. +39 02 983 867 9
Fax +39 02 9823 17 67
info@sapitalia.it

www.sapitalia.it

SAFER PALLET TRANSPORT LINES

1



Resulting from a fruitful synergy between two market leaders, the latest Zancaner pallet transport line with a multilayer palletizer and wrapper, for safety on machines using EOS barriers and Mosaic, the modular and configurable ReeR controller, which can manage all of

an installation's safety functions. Designing and producing safety equipment for complex machinery such as those used in materials handling often means considering economic factors and numerous flexibility requirements. A solution must first of all comply with increasingly stringent safety regulations, as well as adapt to the constant

evolution of product types. In order to offer a solution that meets these requirements, ReeR (a global leader in the production of optoelectronic sensors for industrial safety) has created the modular safety controller Mosaic, a configurable solution that brings together in a single solution complete management of safety functions



Your future's safe!

If safety in the workplace is essential, it becomes crucial in highly automated environments.

Thanks to the experience achieved by cooperating with the world leading companies in the machine tools, automotive, packaging and palletisation industries, ReeR is able to offer a wide range of safety devices, such as: light curtains, programmable controllers, photocells and interfaces able to meet each application demand.

ReeR has always been at the forefront also in the field of optoelectronic curtains for automation, measurement and control.

www.reersafety.com
info@reer.it



2

for a machine or installation.

Precisely thanks to its modularity and configurability, combined with high quality standards, Mosaic was selected by Zancaner (supplier of automation solutions for logistics and warehouse as well as machinery for the mechanical-textile sector) in order to manage the protections on a pallet transport line consisting in a multilayer palletizer and a wrapping system: an exemplary case in which flexibility and reliability are combined with planning in a state-of-the-art safety system.

The line in practice

The palletizer, which groups the boxes and moves them using a mobile platform (with stacking from above), can be configured to move different formats of boxes and pallets, with a layout that is variable according to the needs of the user, just like the onboard machine protection. Moreover, the specific case



where management of different safety sensors and packs of different heights must be moved, while protecting two passages of the machine, requires first of all that the safety installation is of tested reliability, in order to prevent unnecessary stops where no real dangers to the operator arise.

Successfully overcoming this challenge, ReeR then used EOS safety barriers on the Zancaner installation, as well as the Mosaic safety controller. The Mosaic Safety Designer software, the core of the system, enables

configuring multiple functional parameters (time cycles, number of inputs, outputs, etc.) in order to manage the barriers, photocells (muting sensors), e-stops and safety switches.

Protection of a transport pallet line with ReeR's EOS serie safety light curtains and muting sensors

1. The pallet transport line

Boxes of differing heights are loaded onto roller [1].

The photocells [A] measure the box's height.

Protecting the input to the dangerous zone of the machine before elevator [2], an EOS2 A safety barrier is in place, with 90 mm resolution and a two-way muting function (input and output). Two photocells M1 and M2 are used as muting sensors. The box, lifted and rotated 90°, is inserted into the multilayer palletizer [3], which stacks the boxes on the pallet. The completed pallet arrives at the wrapper [4], which applies packaging film.

An EOS2 A safety barrier protects the output passage, with a 90 mm resolution and one-way muting function (output only). Two photocells M3 and M4 are used as muting sensors.

2. The control box with Mosaic

The protection and onboard machine safety system consists in:

- two EOS2 A barriers (automatic start/restart) with 90 mm resolution, 1060 mm controlled height;

- 4 photocells
- Mosaic M1 safety controller + MI8O2 Expansion Module;

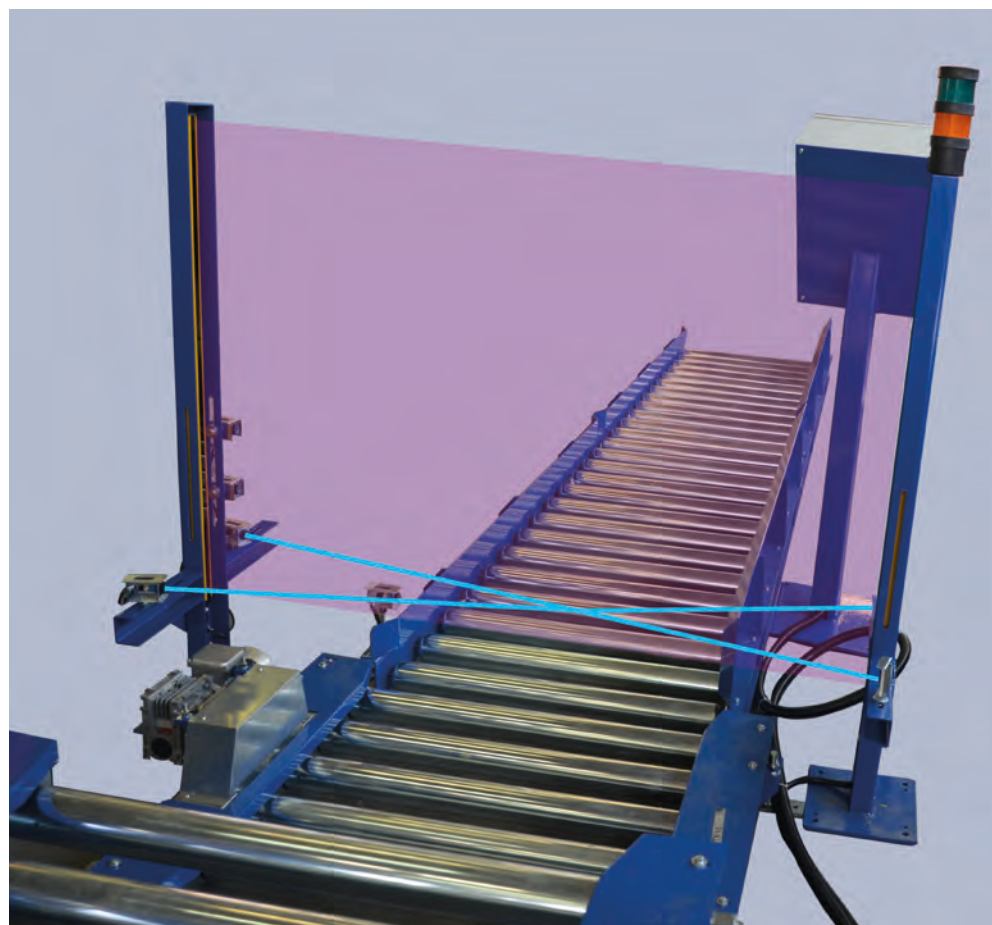
3. Input passage Muting: two-way protection

The two photocells functioning as muting sensors are placed on either side of the vertical light curtains. The muting function is activated when the two sensors stop at the same time,

within a set time (Mosaic parameter “Sensor Time”, from 2 to 5 sec).

The muting function stays active until both sensors are occupied and is deactivated when one of the two is freed. In order to enhance the system’s flexibility, the maximum duration of the muting function can be programmed (Mosaic parameter “Timeout”, from 10 sec to infinite).

3



4. Output passage Muting: one-way protection

The two photocells functioning as muting sensors are placed in front of the pallet output passage.

The muting function is activated when the two sensors stop at the same time, within a set time (Mosaic parameter "Sensor Time", from 2 to 5 sec). The muting function stays active until both sensors are occupied. When the first of the two sensors is freed, the transported material must leave the protected area demarcated by the barrier within a set lapse

of time (Mosaic parameter "Fine muting time", from 2.5 to 6 seconds). The muting function is deactivated as soon as the protected area is freed. If the barrier is still not occupied, the safety outputs are deactivated, and the machine stops. In order to prevent a machine, stop in case protruding parts or vibrations of the pallet re-enter the space of the barrier, following the muting sequence, Mosaic features the "Blind

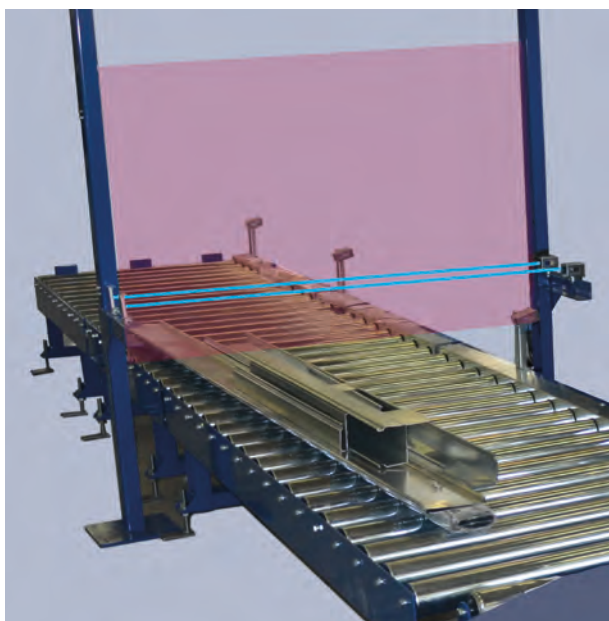
Time" function (from 250 msec. to 1 sec.). This parameter enables defining for how much time (up to 1 sec) after completion of the muting sequence the barrier can be re-occupied without setting off alarms. Also, in this case, the maximum duration of the muting condition can be programmed (Mosaic parameter "Timeout", from 10 sec to infinite). 🏠

www.reer.it

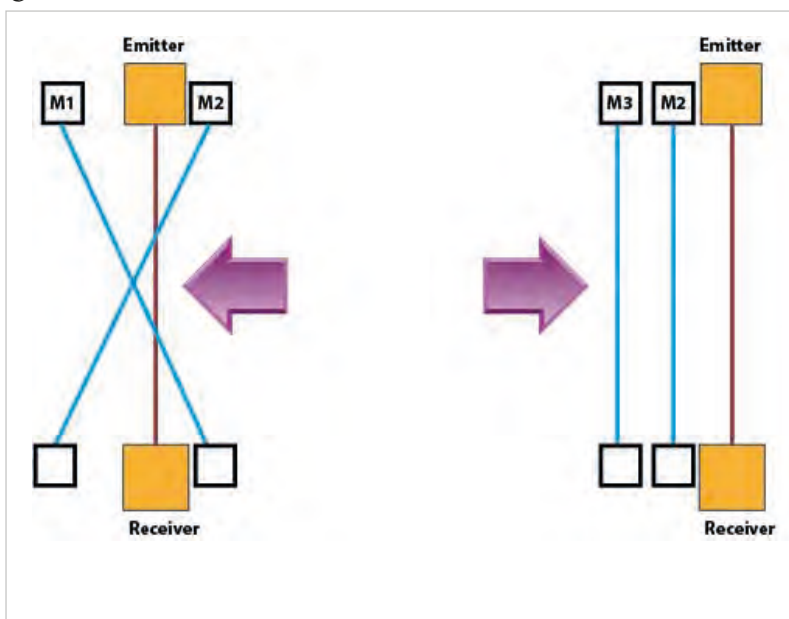


Your future's safe!

4



5



SENSORI INDUTTIVI

WASHDOWN



Certificati per funzionare in modo continuo e affidabile nelle dure condizioni dell'industria alimentare, delle bevande e farmaceutica, i sensori WASH-DOWN sono disponibili con tecnologia convenzionale Classics o Full Inox. Con approvazione Ecolab e grado IP 68 e IP 69K, sono resistenti alla pressione fino a 80 bar, adatti agli ambienti alimentari e resistenti alla corrosione. I modelli Full Inox hanno un involucro monoblocco totalmente in acciaio inossidabile (V4A / AISI 316L), inclusa la superficie di rilevamento. Sono quindi altamente resistenti alle sostanze chimiche corrosive utilizzate per processi di pulizia o di lavaggio.

VANTAGGI PRINCIPALI

- ✓ Resistente alla corrosione
- ✓ Applicazioni settore alimentare
- ✓ Grado di protezione IP68/IP69K
- ✓ Versioni estremamente robuste:
Realizzato in un unico blocco di acciaio inossidabile, fattore 1 su acciaio e alluminio, approvato Ecolab



Attrezzature per la produzione di birra

 IO-Link

Dimensioni custodia mm		M12	M18	M30
s _n mm	Full Inox	6 ... 10	10 ... 20	20 ... 40
	Classics	2	-	-

BECAUSE SAFETY CANNOT BE LEFT TO CHANCE

Consulting, Engineering and Training

Pilz as your preferred Partner for Machinery Safety and CE marking!

Based on our industry experience of over 30 years, we are a trusted provider of safety services to leading national and international industrial companies. We provide viable solutions to the most complex safety issues in a wide range of industry domains. With our international team of passionate people, we help companies apply best manufacturing practise to optimise the availability and productivity of their plants worldwide.

Our Experience in Machinery Safety

- We reduce risk by designing and implementing customised engineering solutions




PILZ

THE SPIRIT OF SAFETY

- Pilz GmbH & Co. KG, Ostfildern keeps an independent inspection centre which is accredited from the DAKkS and certified from TÜV, C&G, and other institutions
- We train your staff on the fundamentals of machinery safety in their local language
- We are expert in interpreting national regulations

and standards including ProdSG & BetrSichV, PUWER, AS4024, Brazil Norm NR12

- We take responsibility by conducting conformity assessments and signing as authorised representative
- Our technical documents are legally compliant and understandable. 

www.pilz.com



Fai goal con Pilz!

PILZ
THE SPIRIT OF SAFETY

Quando progetti la tua sicurezza entrano in gioco richieste diverse ma con un unico scopo: far vincere la tua squadra.

In campo ci sono le necessità della produzione, della manutenzione, dell'operatore e del Responsabile della Sicurezza.
Con Pilz nella tua squadra sarà più facile fare goal!

Mettiamo in sicurezza la tua macchina, al costo minimo e in breve tempo: le esigenze di tutti saranno soddisfatte.



Scan the QR code with your
smartphone to find out more about
service and consulting.

Pilz Italia Srl - Società con unico socio
Via Gran Sasso, 1 20823 Lentate Sul Seveso (MB) +39 0362 1826711 info@pilz.it www.pilz.it

ADVANCED TECHNOLOGIES SPA: SOFTWARE SOLUTIONS FOR COMPUTER VISION TASKS

Advanced Technologies SpA was founded in 1998 as distributor of technologies for computer vision. Since the beginning the company focus has been to select suppliers able to offer innovative and reliable solutions for computer vision industry.

Today, after 20 successful years of activity in the Italian market, Advanced Technologies is not just a component distributor but a solution provider. In fact, during the years the company gained a solid knowledge of markets and customers, which makes possible to offer every time the most suitable solution for the application.

One of the characteristics that differentiate Advanced Technologies is the internal R&D department composed by

people of extraordinary experience which supports customers and develops software solutions for computer vision tasks. Our technical team is constantly at customers' disposal for performing feasibility studies, pre sales analysis and post sales support.

Machine vision is a key technology in industrial automation that enables in-line products inspection and guidance of robotics systems. In the food and beverage industry quality and traceability

of products is driving the need to integrate vision system in manufacturing and packaging lines in order to ensure 100% inspection of products. When a beverage products is ready to be sold it must comply with many requirements and specifications, not respecting those requirements can lead to serious damages for companies in terms of reputation and in terms of legal issues. In addition to this, inspecting products in all the production stages





A CHANCE TO **CHANGE**



adv-tech.it

Da 20 anni un punto di riferimento nella Visione.

Perchè?

Soluzioni flessibili, supporto pre e post vendita con un team R&D altamente specializzato, studi di fattibilità, tecnologie e partner innovativi.

Crea il tuo Sistema di Visione con noi.

ADVANTECH
Building on Intelligent Vision

entaira
making intelligent vision

Azure
PHOTONICS

BASLER

BlueVision

computer

DELL

LEICA

FUJITSU

GOYO
OPTICAL

MATRIX
IMAGING

nerian
VISION TECHNOLOGIES

2
RESOLUTIONS

OPT
Machine Vision

Photonics
focused on 3D

photon focus

QUANTUM
COMPUTER

RICOH
imagine. change.

Schneider
OPTICS

SmartRay

SYS-VISITEK

VIEWWORKS
Imaging Expert

ZIVID



SVS-VISTEK



GigE
VISION

makes possible to further process only the good items discarding the bad one as soon as the defects arises, saving costs from processing a product that will be rejected later. Machine vision technologies can be used to inspect containers, final products and packaging. Some of the specific tasks that can be performed by a vision system are bottles inspection tasks in order to detect defects such as deformations or holes before the filling stage, check the filling level, inspection for detecting the presence of foreign objects, cap presence or absence, sealing inspection, label inspection,

code reading. Advanced Technologies, as a distributor for the Italian market, can provide support in choosing the best technologies for such applications thanks to a broad product portfolio of industrial cameras, lenses, lights, computers and imaging libraries. Basler ace cameras, distributed by Advanced technologies, are extraordinarily well-suited to the various applications found in the food industry thanks to their high dynamic range, high frame rates, excellent price/performance ratio, small form factor that allows for installation even in tight spaces and

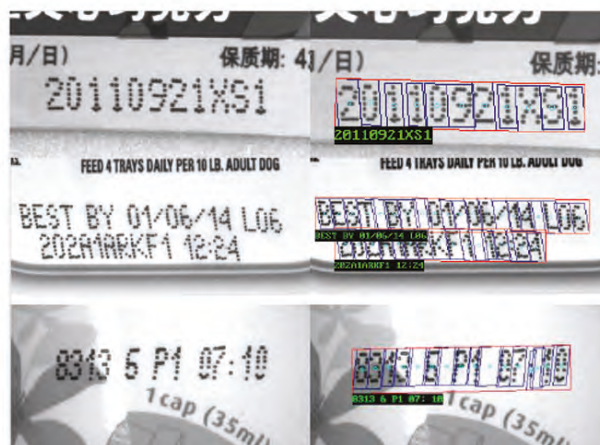
the possibility of having a single-cable solution via GigE with PoE, Camera Link with PoCL, USB 3.0 cuts costs and allows for simple cabling. Advanced Technologies also distributes SVS Vistek cameras, SVS Vistek is specialized in high resolution camera that can detect also the smallest defect, the 10GigE and GigE cameras of the HR series ensures a reliable, cost-effective transmission of the image data over a distance of more than 100 m with standard network technology. The clean design according to well established standards like GigE Vision, 10 GigE

Vision and GenICam ensure rapid integration into the final application.

In the food industry, cleanliness is paramount and frequent cleaning is the standard procedure. SVS Vistek offers camera with Industrial protection class up to IP67 (black-line). Cameras complying with defined standards of protection are resistant to dust, detergents and water jets.

Regarding imaging software, Matrox Imaging Library (MIL) is a comprehensive collection of software tools for developing machine vision and image analysis applications. MIL includes tools for every step in the process, from application feasibility to prototyping, through to development and ultimately deployment. OCR tools are among the most interesting MIL tools for bottling plant and beverage industry.

A key aspect of food and beverage production involves the mandatory marking and verification of manufacturing and expiration dates and lot




SureDotOCR



codes on the product packages. These codes are integral to identifying exactly where and when the product originated, and demand cost-effective systems that can report clear and reliable results to prevent packaging errors. Matrox String Reader module offers tremendous flexibility in terms of the code it can read.

Matrox SureDotOCR™ is another Matrox software tool specifically designed for the unique challenge of reading dot-matrix text. Its use is straightforward, requiring the user to specify dot size, number of charac-

ters in a potential text string, and dimensions—but not the location—of the text region.

SureDotOCR includes a set of pre-defined fonts but also accepts custom fonts for more precise matching. Capable of reading multiple lines of text, SureDotOCR can even read each line of text in different fonts. OCR tools are also available in Matrox Design Assistant, an integrated development environment (IDE) that allows developers to design a graphical web-based operator interface for the application. 

adv-tech.it

motion? plastics!

infinita libertà progettuale per le vostre applicazioni dinamiche



Un particolare speciale nel materiale iglidur® più adatto alle vostre esigenze. Resistente all'usura, senza lubrificazione e con lunga durata d'esercizio. A disegno, senza minimo quantitativo.

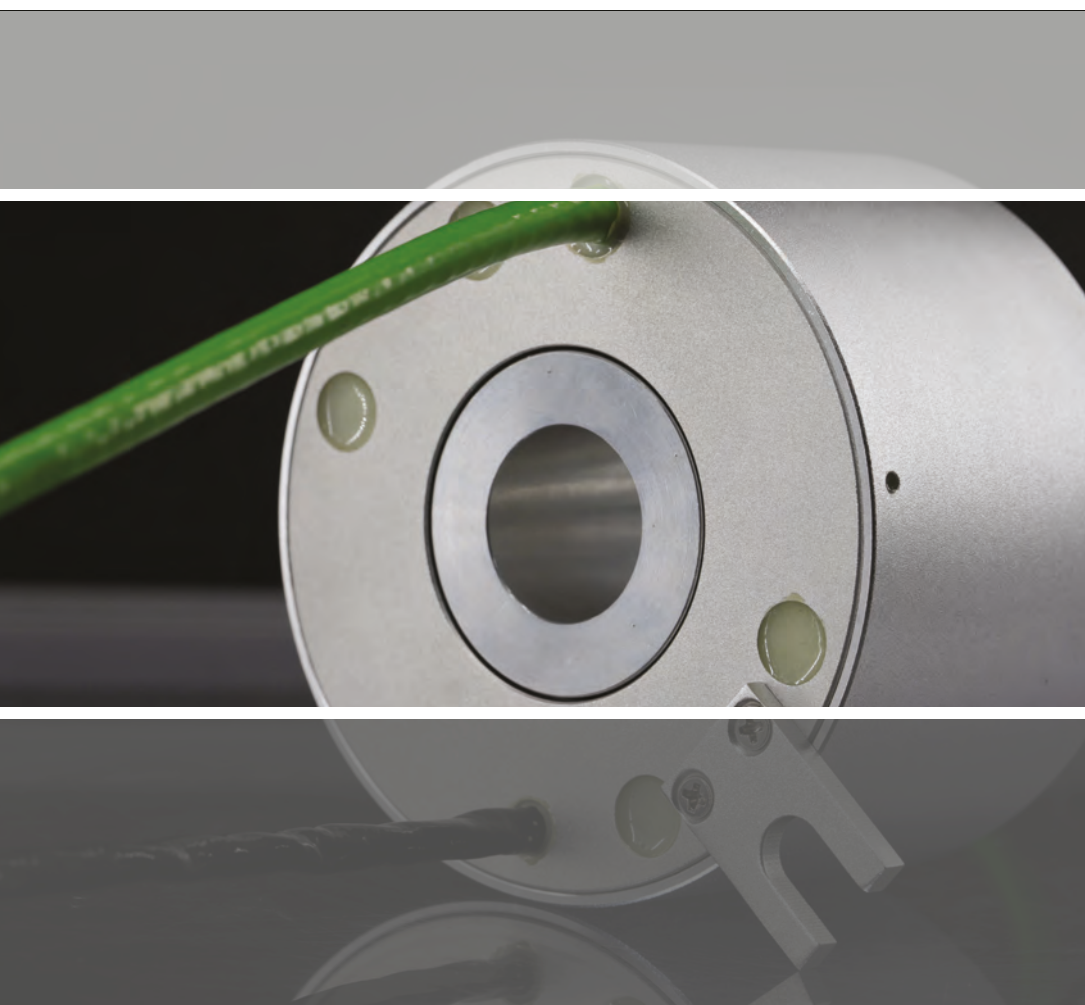


igus® srl
Via delle Rovedine, 4
23899 Robbiate (LC)

Tel. 039 59 06 1
Fax 039 59 06 222
igusitalia@igus.it

[igus®.it](http://igus.it)

PROFESSIONAL *SLIP RINGS*



pamoco®



Via Riccardo Lombardi, 19/6
20153 Milano - Italy
T. +39 02 3456091 | F. +39 02 33104342
www.pamoco.it



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.



mcT ALIMENTARE

08/04/2020

MILAN

Exhibition on technology for the food&beverage industry.



MACFRUT

05-07/05/2020

RIMINI

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



mcTER

07/05/2020

ROME

Exhibition on Energy efficiency.



INTERPACK

07-13/05/2020

DÜSSELDORF

Technology fair for packaging, packing, bakery, pastry.



CIBUS

11-14/05/2020

PARMA

International food exhibition.



MEDIO ORIENTE 2020

GULFOOD

16-20/02/2020

DUBAI

Fair for food and hospitality.



GASTROPAN

12-14/03/2020

ARAD

Fair for the bakery and confectionery industry.



DUBAI DRINK TECHNOLOGY EXPO

25-27/03/2020

DUBAI

Fair for the beverage industry.



DJAZAGRO

05-08/04/2020

ALGERS

Fair for companies operating in the agro-food sector.



GULFHOST

06-08/04/2020

DUBAI

GulfHost is the new home of hospitality for the Middle East, Africa and Asia.



IRAN FOOD BEV TEC

15-18/06/2020

TEHRAN

Fair for food, beverage&packaging technology.



PROPAK VIETNAM

24-26/03/2020

SAIGON

Fair for packaging, bakery, pastry.



PROPAK ASIA

17-20/06/2020

BANGKOK

Fair for packaging, bakery, pastry.



GULFOOD MANUFACTURING

03-05/11/2020

DUBAI

Fair for processing and packaging technology and food&beverage plants.



HOSPITALITY QATAR

10-12/11/2020

DOHA

Fair of Hospitality and HORECA



EXHIBITIONS - EXHIBITIONS

2020-2021

SPS/IPC DRIVES/ITALIA

26-28/05/2020

PARMA

Fair for manufacturers and suppliers in the industrial automation sector.



FISPAL

19-16/06/2020

SÃO PAULO

Exhibition for product from packaging.



mcT COGENERAZIONE

25/06/2020

MILAN

Exhibition for applications of cogeneration.



LATINPACK

12-14/08/2020

SANTIAGO CHILE

International packaging trade fair.



SUDBACK

17-20/10/2020

STUTTGART

Fair for bakery and confectionery industry.



POWTECH

29/09-01/10/2020

NUREMBERG

The trade fair for powder processing.



SIAL

18-22/10/2020

PARIS

Fair on food products.



SAVE

21-22/10/2020

VERONA

Exhibition on solutions and applications for automation, instrumentation, sensors.

BRAU BEVIALE

10-12/11/2020

NUREMBERG

Fair of raw materials, technologies, logistics for production of beer and soft drinks.



ALL4PACK

23-26/11/2020

PARIS

Exhibition about packaging technology.



SIGEP

16-20/01/2021

RIMINI

Fair for the artisan production of ice-cream, pastry, confectionery and bakery.



ANUGA FOODTEC

23-26/03/2021

COLOGNE

Fair on food and beverage technology.



FACHPACK

28-30/09/2021

NUREMBERG

International packaging trade fair.



IBA

24-28/10/2021

MONACO

Fair for the bakery and confectionery industry.



SIMEI

16-19/11/2021

MILANO

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



RUSSIAN-CHINA

UPAKOVKA

28-31/01/2020

MOSCA

International packaging machinery exhibition.



MODERN BAKERY

17-20/03/2020

MOSCOW

Fair for bakery equipment and food ingredients.



BEVIALE MOSCOW

24-26/03/2020

MOSCOW

International trade fair for the beverage industry.



BAKERY CHINA

06-09/05/2020

SHANGHAI

Fair for the bakery and confectionery industry.



INPRODMASH

08-10/09/2020

KIEV

International packaging machinery exhibition.



AGROPRODASH

05-09/10/2020

MOSCOW

Fair of machinery and equipment for agroindustrial industry.



WE'VE TALKED ABOUT...

ADVANCED TECHNOLOGIES SPA

62/65

Via Carducci, 35
20090 Trezzano S/N - MI
Italy

AKOMAG SRL

8/12

Frazione Diolo, 15/D
43019 Soragna - PR
Italy

ALLEGRI CESARE SPA

46

Via Venezia, 6
20099 Sesto San Giovanni - MI
Italy

ALTECH SRL

16/18

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

BERTUZZI FOOD PROCESSING SRL

13/15

Corso Sempione, 212bis
21052 Busto Arsizio - VA
Italy

BONDANI SRL

41/43

Via Romanina, 3
43015 Noceto - PR
Italy

COMEXPOSIUM

45

70, Avenue Du Général De
Gaulle 92058
Paris La Défense Cedex
France

CONTRINEX ITALIA SRL

59

Viale Gandhi, 7
10051 Avigliana - TO
Italy

FBF ITALIA SRL

44

Via Are, 2
43038 Sala Baganza - PR
Italy

GEA MECHANICAL EQUIPMENT ITALIA SPA

47/50

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

IGUS SRL

66

Via delle Rovedine, 4
23899 Robbiate - LC
Italy

INDUSTRIE FRACCHIOLLA SPA

51

S.P. Per Valenzano Km. 1,200
70010 Adelfia Canneto - BA
Italy

MAKRO LABELLING SRL

19/22

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

PAMOCO SPA

67

Via Riccardo Lombardi, 19/6
20153 Milano
Italy

PIGO SRL

36/39

Via dell'Edilizia, 142
36100 Vicenza - Italy

PILZ ITALIA SRL

60-61

Via Gran Sasso, 1
20823 Lentate Sul Seveso - MB
Italy

PND SRL

23/27

Via Brancaccio, 11
84018 Scafati - SA - Italy

REER SPA

54/58

Via Giulio Carcano, 32
10153 Torino - Italy

SAP ITALIA SRL

52-53

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

SMI SPA - SMI GROUP

2/7

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

TECNINOX DI A. NAMAZIANO SRL

35

Via Costa, 27
43035 Felino - PR - Italy

ZAMBELLI SRL

31/34

Via Ferrara, 35/41
40018 San Pietro In Casale
BO - Italy



A close-up, vertical photograph of a woman with long, wavy brown hair, wearing a dark blue dress with silver polka dots. She is holding a large glass of red wine and smelling it. The background is plain white.

ENOMET
IMPIANTI ENOLOGICI

PIÙ **VALORE**
AI VOSTRI VINI!

Enomet Impianti S.r.l.
Via Dei Laghi, 18/E / Calcinelli
61036 Colli al Metauro / PU / Italia
t. +39.0721.897527 / f. +39.0721.876108
www.enomet.it / info@enomet.it

BevialeMoscow2020

Trade fair for beverage production.

Beer | Juices | Water | Wine | Spirits | Dairy

Sokolniki, Moscow, Russia | 24-26 March

beviale-moscow.com



Global solutions.
Local success.

Member of the **Beviale Family**

Beverages – from production to marketing

Very exciting markets, tremendous potential and all the right contacts: Beviale Moscow is probably the only place you can find this kind of access to the beverage industry in Russia and Eastern Europe. Meet the key players and the most important decision-makers and benefit from this unique event!

Enquiries/Learn more:

T +49 9 11 86 06-86 84 | beviale-moscow@nuernbergmesse.de

NÜRNBERG MESSE