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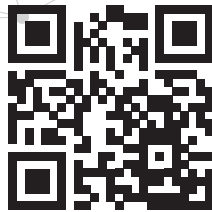


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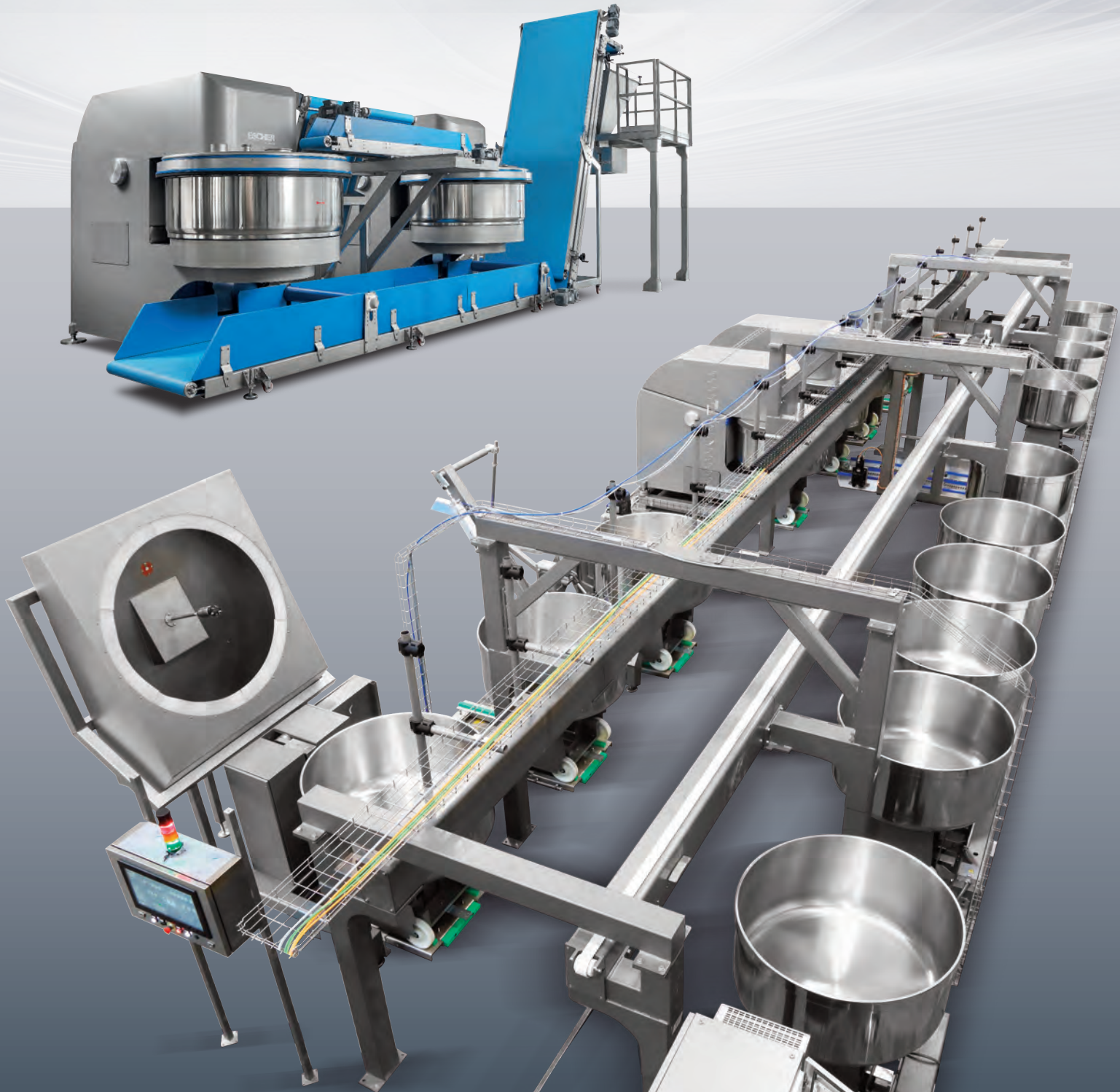
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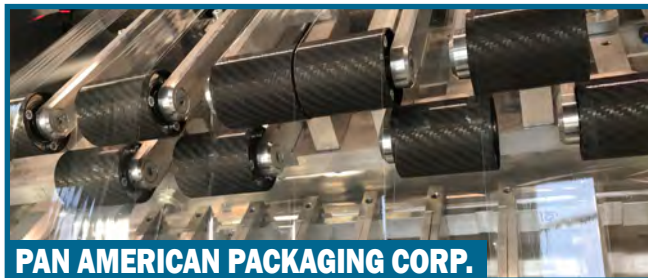


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## DRINK TECHNOLOGY MAGAZINE

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](http://www.drinktechnologymag.com)





**NAVATA GROUP FOOD PROCESSING SRL**

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**MACFRUT**

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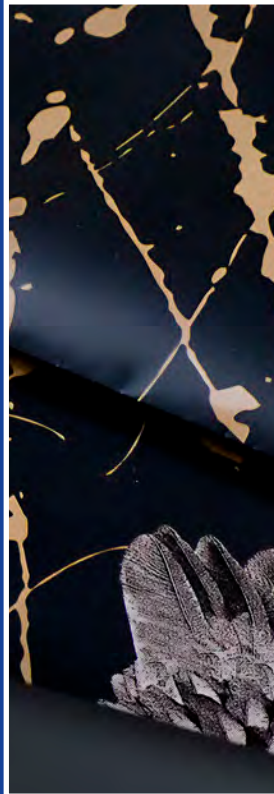
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# OROGRAF, PERSONALIZED SLEEVES AND SELF-ADHESIVE LABELS



**O**rograf 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.

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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





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2, 3, 4, 5, 6, 7, 8  
1, 2  
1-ottanolo, 1-ottanone, 2-naptil-1-etano-1-one, Cumarina, heptamethyl indeno-1,2-acetate, Veratral-1-yl produce an allergic reaction.

**IT** Pericolo. Tossico per gli organismi acquatici con effetti duraturi. Provoca irruzione oculare grave. Liquido e vapor facilmente infiammabili.

**FR** Si è necessario consultare un medico, mostrare l'etichetta o il flacone. Mantener l'etichetta del contenitore. Evitare l'uso in presenza di animali e in prossimità di fonti d'acqua.

**EN** Danger. Toxic to aquatic organisms with long lasting effects. Causes serious eye irritation. Liquid and vapour easily flammable.

**DE** Gefahr. Giftig für Wasserorganismen, mit langfristiger Wirkung. Verursacht schwere Augenreizung. Flüssigkeit und Dampf leicht entzündbar.

**NL** Gevaar. Giftig voor in het water levende organismen, met langdurige gevolgen. Veroorzaakt ernstige oogirritatie. Licht ontvlambare vloeistof en damp.

**DA** Fare. Giftig for vandlevende organismer, med langvarige virkninger. Forårsager alvorlig øjenirritation. Nemt brændbar væske og damp.

**ES** Peligro. Tóxico para los organismos acuáticos, con efectos duraderos. Provoca irritación ocular grave. Líquido y vapor fácilmente inflamables.

**PT** Perigo. Tóxico para os organismos aquáticos com efeitos duradouros. Provoca irritação ocular grave. Líquido e vapor facilmente inflamáveis.

**SV** Farligt. Giftigt för vattenlevande organismer, med långvariga effekter. Orsakar allvarig ögonirritation. Flytning och ånga lättantändliga.

**FR** Si è necessario consultare un medico, mostrare l'etichetta o il flacone. Mantener l'etichetta del contenitore. Evitare l'uso in presenza di animali e in prossimità di fonti d'acqua.

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ESPRIMO POTENZA ED EQUILIBRIO VITALITÀ E MORBIDEZZA GUSTATIVA CON TEMPERAMENTO FORTE E ARMONICO, TIPICO DEI GRANDI VINI MEDITERRANEI

**GIORDANO**

**GIORDANO**

**GIORDANO**



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. 🏠

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# IMA STRATEGIC PARTNER FOR CONFECTIONERY COMPANIES

**T**hanks to its wide technological offer, ranging from processing to primary, secondary and end of line packaging solutions, IMA is a strategic partner for confectionery companies, able to design and manufacture complete and customized lines. A knowhow recognized around the globe, which is enriched today by new solutions, ensuring higher sustainability, easy to use and production flexibility. We deepened this topic with Daria Lolli and Fabio Tozzi, who follow sales respectively at IMA Active division, processing side, and at IMA GIMA division, packaging side.

**The world of technologies is constantly evolving. According to your experience, which are the new must in this sector?**

**Fabio:** Without any doubts, sustainability is becoming a central factor; and, in some cases, even influential in purchasing decisions. Today consumers are more and more informed and aware: they select products whose packaging is easily disposable. This leads manufacturing companies to look for solutions able to reply to this new requirement, while preserving the quality of their products.

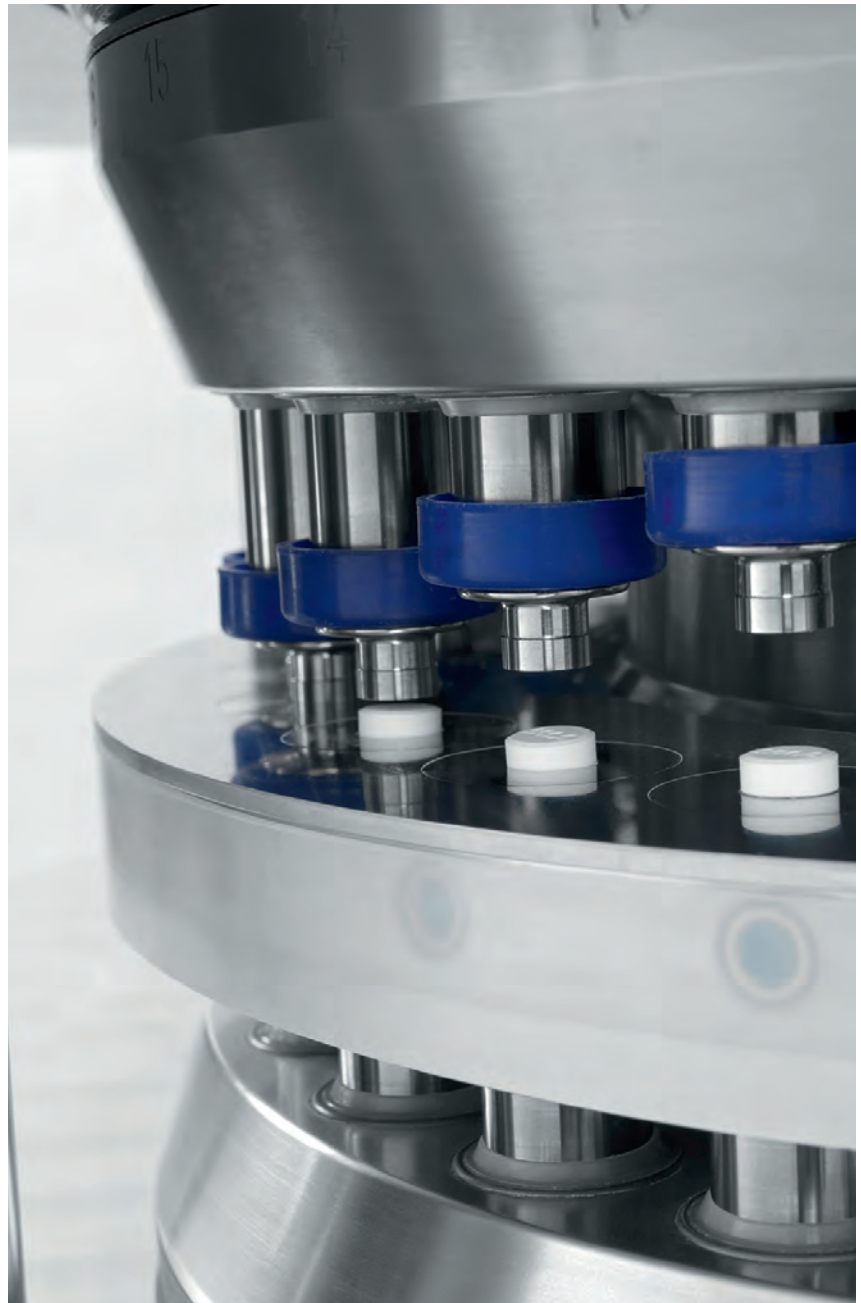
**Daria:** Not only is this trend valid for the packaging: also the product itself must respect the environment. Let's think about chewing gums case. The downward sales trend recorded in the last few years may be due to the fact that the raw material, they are made of, requires almost 5 years to biodegrade. Nevertheless, some confectionery producers have found a solution to overcome this: they have replaced synthetic rubber with organic one, which makes the chewing gums 100% biodegradable in

a few months. Besides protecting the environment, another central topic for this sector is the personal well-being. Just think about the increasing use of food supplements. Confectionery products, when enriched with functional ingredients, like vitamins, minerals, ginseng or hyaluronic acid, become an alternative way to take these elements in a shape different

from pharmaceutical tablets and capsules.

**Which packaging solutions do you offer to customers looking for more eco-friendly technologies?**

**Fabio:** IMA GIMA has always worked with their customers in the design of specific packaging, finding the right combination of marketing and





applicability on technologies. In collaboration with manufacturing companies, our technicians test each new material on the machines, identifying those that best adapt to the different technologies. In this way, we assist our customers with our experience, to help them in creating sustainable packaging made with recycled, recyclable or biodegradable material.

#### **Can you make us a few examples?**

**Fabio:** As far as primary packaging is concerned, we propose containers with different shapes and functionalities made of carton, PET or hybrid materials, all of them achievable on our vertical platforms. These types of packaging help in renovating the image of the product on the shelf or in replacing injection molded containers, significantly reducing packaging ecological impact. IMA GIMA range of vertical fillers includes several models able to reach a speed of up to 500 ppm.

According to the product to be handled (dragées, candies, mints, liquorices, jellies, dried fruit, chocolate, chewing gums and others), our machines can be equipped with dedicated feeders such as mechanical or electric counting systems, volumetric dosing systems and multi-head scales. News also in the difficult field of over wrapping.

A pack of chewing gum, candies, dried fruit or other, needs to be over wrapped for protection, preservation of the aroma and/or for multi pack. On the basis of the level of the barrier effect that we want to reach, different types of material can be used. We have already tested successfully on our over wrapping machines alternative materials like biopolimer, compostable transparent material, paper based material which can be recycled together with paper, and mono-material easily recyclable.

**Going back to chewing gums, which are the new processing**



#### **technologies proposed by IMA Active division?**

**Daria:** Chewing gums are traditionally produced by preparing a dough, which is then extruded or flattened with rollers, cut in single units, cooled and eventually coated. Such an equipment needs space and it may require a huge investment for who is willing to start from zero. Besides, a lot of functional ingredients, which more and more often are added to recipes, are vulnerable to thermo-mechanical stresses: their beneficial effects risk to fade away before the product reaches the mouth of the consumer. Therefore, IMA Active



proposes an alternative solution for the manufacturing of these new generation of chewing gums, which is cheaper, more compact and flexible: PREXIMA tablet presses, for the direct compression of powders.

#### How does PREXIMA work?

**Daria:** The different ingredients, after being mixed, are fed into the PREXIMA, where the direct compression occurs. The process is quick and the mechanical stress of the product is minimal, so that the effect of functional ingredients is not activated unless it is the right moment, that is while chewing.

Also ingredients which are vulnerable to high temperatures are safely treated, thanks to PREXIMA high yield motorization. The ventilation system alone is enough to keep under control the motors temperature and heat is not transferred to the process area.

#### Which level of flexibility does this tablet press ensure?

**Daria:** Huge flexibility. The shape of the final product depends on the shape of the punches tip and of the die hole. It can be simple, round or rectangular, but it can become more complex, like the shape of the heart or of the

teddy bear face, just to mention a few. It is easy and fast for the operator to change the tooling on PREXIMA. Furthermore, it is possible to obtain bilayer chewing gums with PREXIMA 800, using powders with different colors and consistency, each one with its own specific function. A technology which ensures maximum reliability, process repeatability and minimal waste of raw material and energies.

#### Very innovative technologies. Are they also easy to use?

**Daria:** "High" innovation does not mean "more complicated". In fact, our machines aim to be simple to use and quick to clean. Without forgetting that we have a laboratory with technologists expert on processes and raw materials, and equipment available to carry out tests with our clients: we are ready to support them in the development of new products or in the optimization of current processes. It is not rare to see customers willing to proceed with a technology transfer, making some manual phases of the manufacturing process automatic.

I think Fabio agrees with me, our experts in processing and packaging are looking forward to having the

chance to work side by side with our clients to make their dreams come true. 🏠

**ima.it**

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

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





# Make the most of every sweet.

**Processing and packaging solutions for gums, candies, coated sweets, choco & bars.**

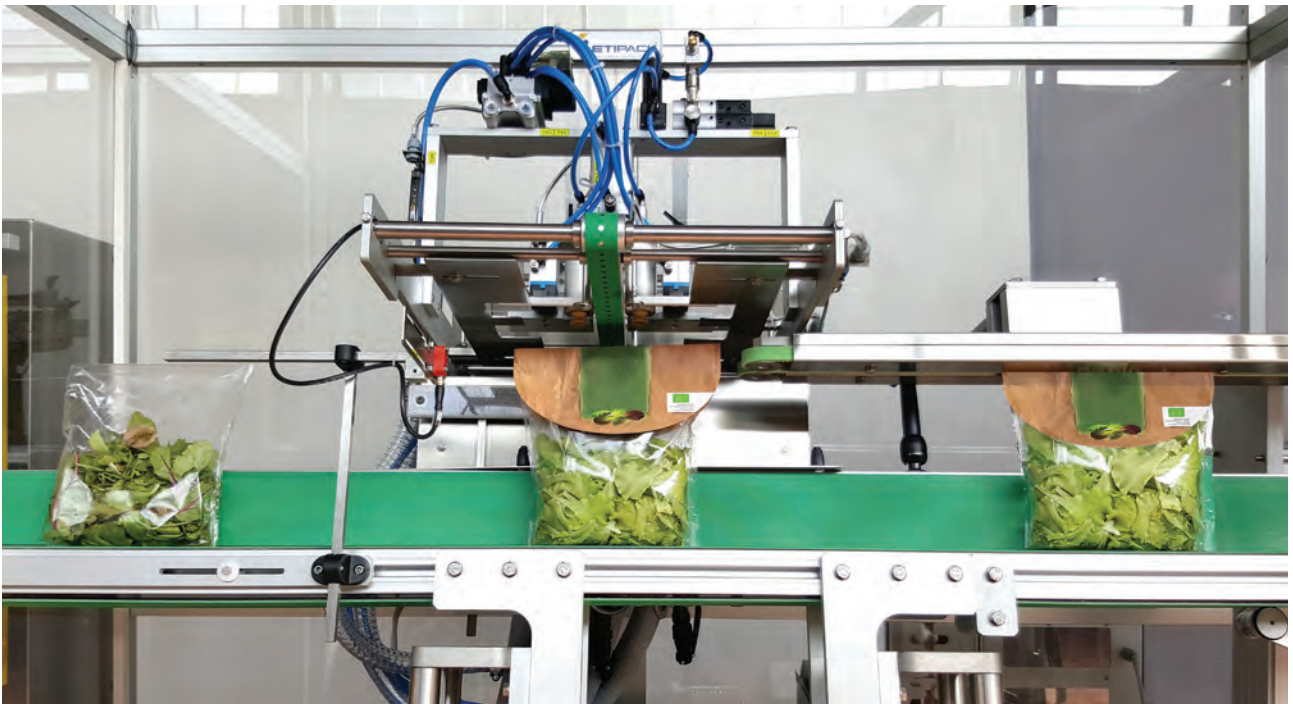
With the ability to respond to the most diverse confectionery manufacture requirements, flexible and customised solutions, such as stand-alone machines and specific, complete lines conceived to handle gums, candies, coated sweets, choco and bars, from processing to palletizing.

**Make the most, with us.**

**May 27, 2021 - Do not miss IMA virtual event!**  
[ima.it/makethemost/confectionery](http://ima.it/makethemost/confectionery)

**IMA**   
Sustain Ability

# CARTON-HEADER PACKAGING: THE ETIPACK SYSTEM FOR FLEXIBLE PACKAGING CUSTOMIZATION



**I**deal for the packaging of all products in bags, the folded cardstocks are the most widely used solution when it comes to conveying values that are today increasingly important for the consumer, such as the artisanal nature of the product and the production process, as well as attention to environmental sustainability.

## **The project: customization of bags containing fresh salad**

The customer - a producer of fresh vegetables - involved in this project was looking for an automatic system to conveniently and appropriately complete the packaging of a fresh and delicate product packed in transparent pre-sealed bags. The goal was to customize the package with all

the necessary brand and nutritional information, while at the same time preserving the product.

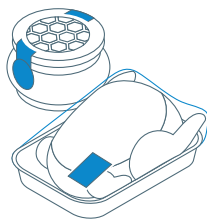
## **The solution: Automatic Fold & Fix Carton-Header machine for picking up and applying folded cardstock**

The system proposed by Etipack was an automatic device for picking and applying cardstocks that are picked up, folded and fixed on the top of any flexible packaging, from flowpacks, to bags with 2, 3 and 4 seals, to pack many types of bulk food products such as pasta, rice, confectionery and baked goods, cereals, etc..

The standard configuration of the Fold & Fix carton-header machine consists of several stations. A pair of

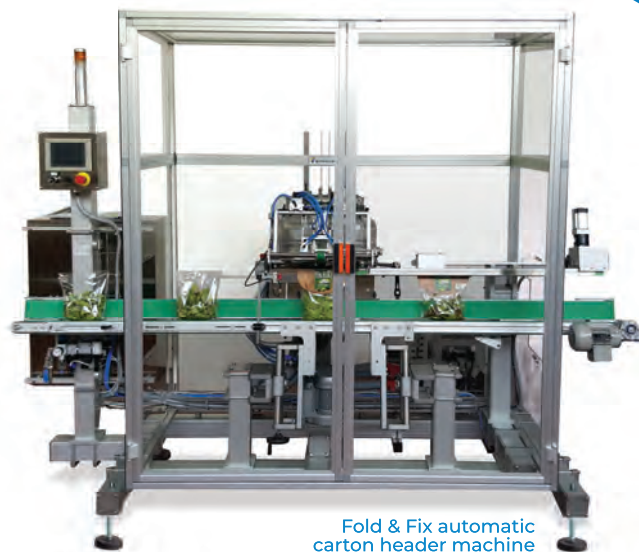
conveyor belts allows the product to slide up to the point of application, keeping it constantly in a vertical position. A pick and place device, or alternatively, a feeding device, picks up and distributes the cardstocks, which are folded and welded with a specific applicator unit on the bag





## etipack FOOD

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FOR **LABELING, CODING,**  
**PACKAGING** DESIGNED  
FOR THE **FOOD INDUSTRY.**



Fold & Fix automatic  
carton header machine

that was previously coated with glue by a hot melt device. Finally, the product stabilizing device (DSP) group with opposing tapes, finishes the application by conveying the package towards the outlet, allowing the glue to adhere perfectly and solidify. The machine can also be implemented with devices suitable for Industry 4.0 networks.

### Customization and details of the solution designed to meet specific needs

Standardization is for Etipack the starting point of every project, being synonymous with reliability since it is based on consolidated solutions proposed to the customer with the certainty of offering the best. In the customized production, designed to meet special needs, specific needs are identified and met, but where possible, always considering a customization of the standard. This allows to always propose solutions of proven effectiveness and stability. In order to meet specific customer requirements, the standard system has been customized both to inte-


grate into the line, and to allow additional control levels.

The configuration includes a Whizzy 350 model feeding device, with brushless motor, positioned at 90° with respect to the direction of bag advancement, for the horizontal distribution of the cardstocks. The feeder device is equipped with an adjustable product loading magazine, with stop sensor and minimum load control, which allows the loading of products even while the machine is working. There is also an auxiliary loading unit to feed the standard one in order to increase the production capacity. On the conveyor station is installed a photocell group that allows to intercept the bag and stop the belt when the bag is in position.

The cardstock applicator unit features a double pneumatic 90° hinge

gripper that allows the application of the cardstock with full closure on the bag at 180°, equipped with gripping suction cups with solenoid valves operated by a vacuum generator.

The Fold & Fix carton-header machine has also been designed to be integrated with a rotary table installed on the customer line to facilitate the distribution of the outgoing product.

For the control of all functions has been installed an electric control panel with PLC Omron with stainless steel control panel that allows to set the speed and control functions: automatic speed adjustment, distribution of more promotions with a single start, control of failure to take the product with automatic block of distribution. 

**WWW.etipack.it**



# THE EVOLUTION NEVER STOPS

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# WRAPPING UP QUALITY WITH TAILORED PACKAGING SOLUTIONS

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

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

In addition to the different varieties of bread and pizza made with differ-



ent types of flour, the Valdarno brand boasts a rich pastry production that also includes the typical traditional pastries from Siena produced by the historic company Fiore 1827, acquired by Dolcezze Savini in 2017. Among these specialities there are three important IGP products: two of them are from Siena and they are Panforte and Ricciarelli, while the almond biscuits named Cantuccini are linked to the Tuscan territory. For a long time, Dolcezze Savini has focused its activity on a production that pays particular attention to the importance of some elements such as natural ingredients, reduced glu-

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



**Tecno Pack**  
PACKAGING MACHINES

**iFP**  
PACKAGING

**SP**  
general system pack

ten products, palm oil-free products and a clearer labelling system.

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

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

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

of two new semi-automatic lines for the production of partially baked bread, the new investment has opened more space for artisanal production with the strengthening of the production of handmade pizza dough. The company has also developed a complete electronic manage-



ment system, making it part of the world of industry 4.0. This innovation process has found full achievement in the strengthening of its packaging sector, for which Dolcezze Savini has called upon the group Tecno Pack, a leading company in the supply of packaging technologies.

For over 30 years Tecno Pack has been designing, manufacturing and distributing horizontal packaging machines and automatic packaging systems for the food industry and other sectors.

Tecno Pack is a group of companies including Tecno Pack, IFP and GSP. Based in Schio, in the province of Vicenza, Tecno Pack stands out for being a pioneer and innovator in the packaging industry, developing cutting-edge solutions, increasing the digitalization of machines and plants, offering its customers excellent results with limited investments. The partnership between Tecno Pack and Dolcezze Savini has resulted in the development of three packaging lines, specifically designed by

the group for the bread sector of the Tuscan company. These, in detail, are the new packaging lines implemented in the production system of Dolcezze Savini:

- Monopiega Diamond 650 wrapper. This is an innovative and







high-performance shrink wrapping machine, designed to wrap small, medium and large-sized items as well as thin solid products;

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

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

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

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

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

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



# DUETTI PACKAGING INNOVATION FIRST AND FOREMOST

**D**uetti packaging was founded in 2008 in Galliera Veneta (PD) Italy, immediately moving towards the design and construction of end-of-line packaging systems.

The years following its foundation are characterized by a gradual affirmation of the company throughout the Italian and foreign territory, through the creation of a young and professional sales network.

Our production range includes depalletizers, form and close cartons units with adhesive tape / hot melt glue,

vertical / horizontal carton packers, pick & place, wrap-around, traditional / robotized / Cartesian palletizers, handling and supervision systems.

Duetti designs projects by studying the best solution in terms of flexibility, productivity, and footprint.

The attention given at every stage of production, together with an efficient after-sales service, ensures successful installations all over the world.

Duetti Packaging has many years of experience, above all in the beverage, canning and glass industries,

especially meat and fish sauces, pickled vegetables, fruit juices, soft drinks, water, etc.

Special attention is given to technological development in every department, from electronics to electromechanics, from mechanics to programming, allowing Duetti Packaging to present itself with innovative solutions in the field of secondary packaging automation.

Advice, collaboration, and trust are the corner stones on which the company's success has been built with our machines designed and built to



*Robotic layer depalletisation of jars*



*Wrap-around of honey jars*



*Multiple wrapping of cans containing milk powder*

achieve performance, be functional and reliable over time. The structure of the machines allows easy cleaning and maintenance by the operator guaranteeing the quality. Duetti's commitment to research and development allows it to offer

the market increasingly advanced solutions, not only from the technical point of view but also in terms of service quality, optimization of the production process combined with simplicity of use and maintenance. The process of growth and transfor-

mation, albeit very rapid, has always been accompanied by careful and intelligent production and marketing planning, which has allowed Duetti to establish itself as one of the most dynamic and innovative companies on the market, an essential condition for becoming one of the most recognized partners.

To guarantee the quality of production and services, Duetti Packaging with Industry 4.0 standard and is ISO 9001 certified. 🏢

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



# AMF BAKERY SYSTEMS NAMES ROSS SANDLIN DIRECTOR OF SALES FOR AMERICAS TEAM



**R**oss Sandlin has joined AMF Bakery Systems, the leading global supplier for best-in-class bakery equipment and complete system solutions, as Director of Sales for the Americas. Sandlin will work alongside Guillaume Joly, both as sales leaders, to support sales of AMF's growing portfolio of bakery solutions for soft bread and bun, artisan bread, pizza and flat-bread, cake and pie, as well as pastry and croissant production.

Reporting to Jason Ward, President of AMF, Sandlin will be responsible for leading the Company's efforts to provide automation solutions to bakery customers in the Americas across all AMF product group technologies, including dough systems, makeup

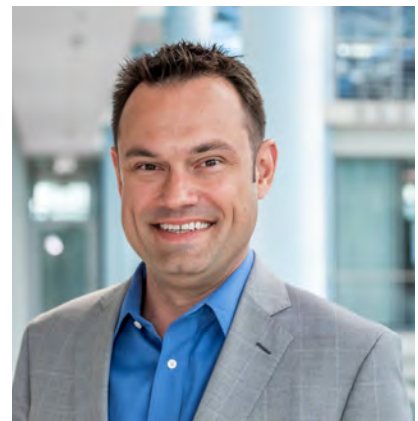
systems, proofing, baking, cooling and freezing solutions, product and pan conveyors, as well as packaging and post-packaging automation.

"Ross is a highly experienced and effective sales leader with an exceptional track record of cultivating customer relationships and developing high performance sales teams," said Ward. "We are eager for him to join our leadership team as we better position AMF as the automation partner of choice for commercial bakeries."

Sandlin earned a B.S. in Chemical Engineering from Georgia Tech and an MBA from the University of Colorado. He brings over 20 years of engineering, sales, and sales leadership experience in industrial manufactur-

ing companies. He spent the last thirteen years at Festo and was most recently a Sales Director in Europe focusing on food manufacturing and packaging for end customers. 

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





**Pan American Packaging Corp.**

GERMANY - ITALY - SWITZERLAND

*Your best partner in packaging!*

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

[info@panamericanpackaging.com](mailto:info@panamericanpackaging.com)

# A NEW MANUFACTURING FACILITY IN SARDINIA FOR PAN AMERICAN PACKAGING ITALIA



**Pan American Packaging Corp.**  
GERMANY - ITALY - SWITZERLAND

**A** new development for Pan American Packaging Italia. As part of the company's process of expansion, which is permeating European markets with special products in the field of stretch wrap and packaging in general, Sardinia now transforms from an ambitious project to a concrete reality. Furthermore, the selected industrial area of Macchiareddu, just outside of Cagliari, demonstrates a particular focus on the region, acknowledged with great satisfaction by the Regional Authorities, with the intent of contributing to the local recovery by relocating workers from the rubber/plastic industry who have been negatively impacted in the recent past by the offshoring of multinational corporations.

The industrial block extends across an area of approximately 82 km<sup>2</sup>, of which approximately 37 are occupied by manufacturing activities controlled by more than 130 companies. An excellent context within which to initiate commercial collaborations, given the cross-sector consumption of packaging products.

Antonello Morello, sole administrator, explains the group's strategy, which identified the Sardinia Region as a valid partner and strategic location for serving central-southern Italy and introducing itself to the emerging markets of Northern Africa. He also explains how the Sardinia Region alone, which currently has no local manufacturing companies in this



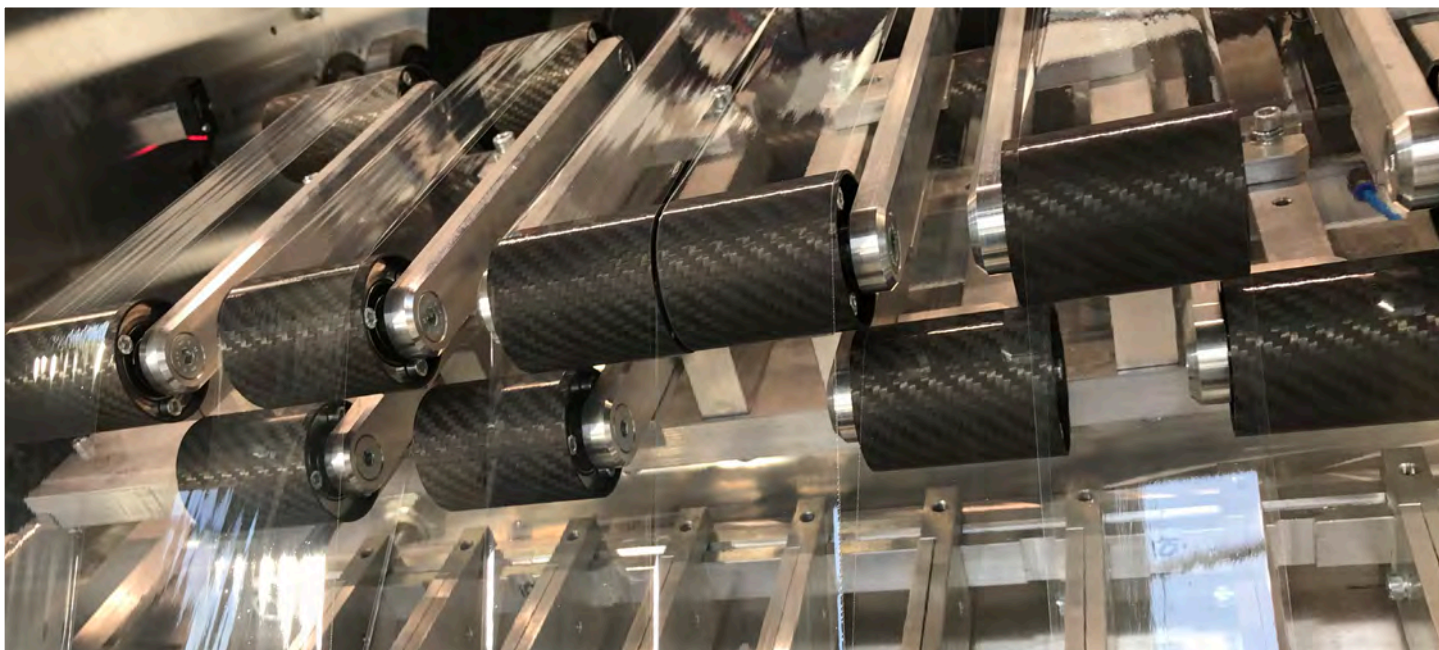
specific sector, has a need for packaging wrap that absorbs most of the production from Pan American Packaging Italia's new facilities.

By moving its headquarters from the centre of Milan to Cagliari, while keeping its current manufacturing sites working at full capacity, the company has, with determination and enthusiasm, demonstrated its commitment to the southern expansion project.

In July, Pan American Packaging will move into the new warehouses, which have already been set up to accommodate the extruders and re-

winders that will be powered by solar energy by the local Sardinia Green Island consortium.

In addition to standard wraps the following will also be manufactured on-site: Eagle Force Stretch ribbed technical wrap, manufactured with a patented process that produces thick longitudinal bands, making the wrap exceptionally resistant to tearing and giving it an outstanding containment capacity, characteristics that make it particularly well-suited to the packaging of irregularly shaped products; Eagle Air Stretch macro-perforated ribbed wrap, specific to food companies, which meets the most various



ventilation requirements; sterilised wraps like the revolutionary Steril Stretch which drastically reduces bacterial and viral load, thus preserving products and people's health and adhering to increasingly stringent hygienic practices; Fire Shield Stretch flame retardant wrap, which is very useful in large warehouses for reducing the risk of fire and keeping the merchandise, structure, and personnel safe; Antirust Stretch wrap, also delivered in practical mini-rolls, to wrap and preserve metal profiles that are subject to oxidation; Fresh Fruit Stretch ethylene absorber, to make fruit ripen slower; and Green Leaf Stretch, a wrap featuring time-controlled decomposition for clients who wish to help reduce pollution caused by plastics accidentally littered in the environment.

Pan American Packaging Corp. has always focused on research, working hard to find innovative solutions aimed at producing avant-garde products with a conscientious and respectful use of plastic and providing high level services to its clients. The company continues to invest in research and, at its laboratories in Switzerland, certifications and other new developments are currently underway which will soon be presented

on the market. Thanks to this approach, the company was not caught off guard by the new challenges presented by this unique historic and economic moment, but rather got to work to create added value for its clients. It's because of these aspects

that the company is considered one of the most reliable and efficient players on the market in terms of service and post-sales. 🏠

**Visit the website:**  
**[panamericanpackaging.com](https://panamericanpackaging.com)**



# PIERREBI: END OF LINE PACKAGING AND MUCH MORE

**P**ierreBi announces to have completed the development of new products that widen and integrate the range of packaging machines proposed, acting as a high-level supplier with interesting and customized solutions for the most demanding customers.

The entire historical range of end of line packaging machines, which have made PierreBi very successful, including bundling/over wrapping, side-top loading and tray packing machines, has been updated and upgraded in line with modern technological requirements.

The peculiarity of PierreBi's offer is represented by machines that provide high performances with an extremely small footprint, which is still a highly appreciated and requested feature by customers.

The new range of secondary packaging machines includes: the horizontal intermittent and continuous cartoner, the horizontal case packer for medium and large formats, the special vertical case packer for large formats with a very reduced footprint and the wraparound machine suitable for various packaging combinations such as fully wrapped carton, tray only and tray + lid.

All the secondary packaging machines can be combined with the palletizer of modern conception



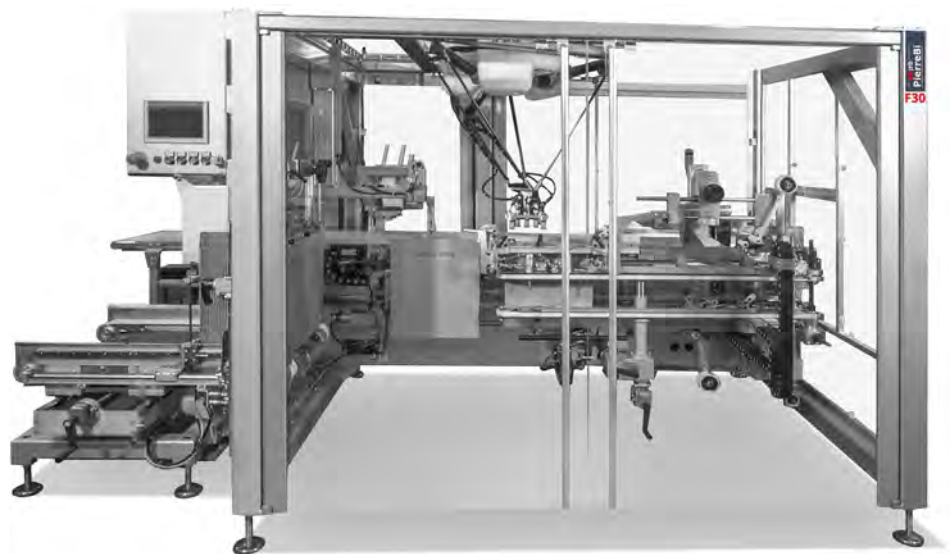
recently redesigned and updated in the technical contents.

Thanks to the activity of a specialized team of technicians, with a long experience and expertise know-how, PierreBi has realized many lines all over the world and is now ready to support the new market challenges with versatile and personalized solutions, that can be set up from the single machine

to the complete line; a particular attention is paid to the feeding systems of the machines tailored to the product, that more and more frequently become the real heart of the line.

The PierreBi railway continues to run, it will be a pleasure to have you on board and share the journey with you. 🏠

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



Top loading case packer



# Shaping the future of **ECO-PACKAGING**



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

Some **eco-laminates** our machines can package:

- **PP** - Polypropylene
- **PLA** - Polylactic acid
- **PAP** - Paper
- **BIO-PE** - Bio-based polyethylene
- And many more...



## **APPLICATIONS**

- ✓ Powders
- ✓ Liquids
- ✓ Tablets
- ✓ Granules



# #ROADTOCARBONZERO

# HENKEL ON FOOD CONTACT PACKAGING:

Sustainability and food safety are two sides of the same coin



**T**he importance of food safety in packaging remains paramount for consumers. At the same time, the sustainability of packaging is becoming ever more relevant as a factor in the purchasing decision. Legislators are increasingly acting on these demands, introducing relevant regulation. A few examples: starting January 2022, France is likely to ban the usage of mineral oils in packaging all together, in its 'Loi relative à la lutte contre le gaspillage et pour une économie circulaire' (AGEC). Meanwhile, Germany is working on new stricter threshold guideline for mineral oil when it comes to the reuse of recycling paper for food contact applications.

For those working in the packaging value chain, sustainability and food safety cannot be viewed independently. One cannot be compro-

mised on for the sake of the other. Yet, changes made for one purpose may very well have implications for the other: new, more sustainably sourced materials can have different food protection properties, for example. This is a complex challenge that makes it necessary for the entire packaging value chain to work

together. The industry needs to develop innovative solutions that help to align sustainability and food safety requirements in packaging with the focus of upcoming regulations. As a leading global manufacturer for adhesive solutions, Henkel is committed to share its knowledge about these various dimensions with its



partners, customers and suppliers via webinars as well as white papers. Henkel's goal is to catalyze these developments within the industry and, consequently, in society.

### Supporting the value chain to keep up with complex regulation

"This year we will see very far-reaching changes for our customers, with strong implications for the entire packaging industry," comments Dr. Monika Tönnießen, Head of Food Safety Compliance - Global Food Safety, Product Safety and Regulatory Affairs at Henkel. Tönnießen explains: "Among these changes the final implementation of the 15th Amendment to the European Plastics Regulation is of particular importance. This regulation further specifies the permitted level of certain potentially migratable substances like primary aromatic amines (PAA) in food significantly." The legislation includes a two-year transition period for materials that comply with the old legislation and were placed on the market before 23rd March 2021 allowing for the exhaustion of existing stocks. The transition is facilitated by more elaborate testing methods such as chromatographic techniques which will be required for every converter to prove harmlessness. "As our teams, especially in toxicology and analytics, anticipated such changes, we are able to offer our customers active support and state-of-the-art testing capacities for these substances of concern," says Dr. André Weiss, Manager Instrumental Analytics, Food Safety, Henkel Corporate Scientific Services. "Furthermore, we can provide them with even deeper insights in the form of our newly revised white papers on related topics and our constantly updated Food Contact Statements," Dr. Monika Tönnießen concludes.

### Henkel's digital knowledge transfer webinars


Building on high demand for these

formats in the recent years, Henkel's upcoming series of webinars will focus particularly on the subject of sustainability and share the company's expertise in this area. The 2021 webinars will therefore bring together information on subjects that have already changed the packaging industry over recent years: latest developments in the field of mineral oil components, with insights on regularity environments and a special focus on sustainability, for example. The webinar series will be accessible on Henkel's recently-launched online platform Henkel Adhesives Forum:

- June 16, 2021: "Single use plastics in the EU – From regulation to implementation and impacts"
- June 23, 2021: "From plastic to paper straws – Challenges & Solutions"
- September 15, 2021: "Recycled materials in food contact – Regulations and current status in Europe and North America"
- September 23, 2021 "Migration analytics basics - Adhesives in food packaging"
- October 5, 2021 "Mineral oil components in food packaging - What you need to know about adhesives"
- November 3, 2021 "Updates of global legislation for adhesives in food contact"

### Production chain adaption and regulation complexity require in-depth information

With its food contact statements, Henkel is providing its customers with a further valuable tool: They include in-depth insights into possible presence of substances of concern such as metals or potentially genotoxic substances as well as PAA. The necessary testing to identify these critical substances is executed by in-house experts at the Henkel's analytical department and gives customers the confidence and insights needed

to prove along the value chain that the produced food packaging is compliant with latest regulations. The documents are constantly kept up to date to ensure they provide accurate information. In addition, Henkel's expert group is also providing updated white papers. These provide readers a holistic overview of the most important topics in food safe packaging. The white papers cover topics such as primary aromatic amines, mineral oil components in food packaging or food contact legislation with focus on the European Union. 

Henkel operates globally with a well-balanced and diversified portfolio. The company holds leading positions with its three business units in both industrial and consumer businesses thanks to strong brands, innovations and technologies. Henkel Adhesive Technologies is the global leader in the adhesives market – across all industry segments worldwide. In its Laundry & Home Care and Beauty Care businesses, Henkel holds leading positions in many markets and categories around the world. Founded in 1876, Henkel looks back on more than 140 years of success. In 2020, Henkel reported sales of more than 19 billion euros and adjusted operating profit of about 2.6 billion euros. Henkel employs about 53,000 people globally – a passionate and highly diverse team, united by a strong company culture, a common purpose to create sustainable value, and shared values. As a recognized leader in sustainability, Henkel holds top positions in many international indices and rankings. Henkel's preferred shares are listed in the German stock index DAX. For more information, please visit [www.henkel.com](http://www.henkel.com).



# Sarchio: when organic and gluten-free is synonymous with goodness



by  
*Gabriele De Luca*



*Cesare Robert*  
CEO of Sarchio



**E**ven before ecology and “healthy eating” became topics of current interest and received wide attention from the media and companies, Sarchio made environmental sustainability and food wellness its mission. The first Italian company to offer organic and gluten-free food, Sarchio has been committed since 1982 to the production and marketing of organic, healthy, and natural food. Starting from the typical foods of the initial traditional Italian cuisine - which have remained within the range - Sarchio has specialized in more innovative products, dedicated to those who follow particular eating styles or are intolerant to certain ingredients, with a focus on gluten-free and vegan.

To learn more about this innovative company, we interviewed Cesare Roberto, CEO of Sarchio.

**Your company has been committed to sustainability since its origins, at a time when attention to ecology and respect for the environment was not yet as widespread as it is today. Where does this attention come from?**

Respect for nature and the environment and the spread of the culture of a correct and healthy diet have always been our company mission, to which we add a careful selection of the best organic raw materials, for safe and healthy products.

**Talking about the introduction of regulations related to organic products, you touched on a fundamental point: how did the introduction, in 1991, of the EEC Regulation regulating organic farming methods influence your reality?**

Before that date, there were several agencies in charge of verifying that foods called organic met certain requirements in the production, processing, and transformation of raw materials. The introduction of a Community Regulation that regulates the method of organic farming and defines univocal “rules of conduct” has allowed to spread a real culture of “organic” and to define a set of univocal rules to be followed by everyone.

**Another important date for the development of Sarchio is 2004, the year in which the company began the process of**



**obtaining authorization from the Ministry of Health for the production of gluten-free dietary foods. Even more decisive was 2006, when with the arrival of the authorization Sarchio became the first Italian company to produce organic and gluten-free foods. Where does the attention to gluten-free come from?**

Sarchio has always promoted a healthy, balanced diet with a high nutritional value. The research and the intention to offer innovative products with a high health and nutritional content has spontaneously translated into the development of a line of organic products suitable for those who follow special diets related to food intolerances: today an entire production area of the company is dedicated to the production of gluten-free products.

Researching goodness and ensuring a high standard of quality remains the guiding principle of the entire range of products. All products are designed to be good and suitable for the whole family because they are produced first of all with strictly selected organic raw materials. Our motto is "Good for everyone because they are organic and also... gluten-free".

**What are the main markets in which the company operates? Do you also export abroad? Is there a typical customer?**

As far as our distribution is concerned, today we are 90% in Italy and 10% abroad.

Sarchio's "typical customer" is certainly the consumer who supports a lifestyle based on health, wellbeing, and sensitivity to environmental issues, who prefers organic food and its natural and simple flavours as an alternative to conventional food. The entire range includes almost 180 organic products, including a gluten-free line (about 90 items) refundable by the National Health System and a vegan line: a complete range ideal for coeliacs, vegetarians, vegans, adults, children, and anyone who wants to make a healthier and more balanced diet a real lifestyle.

**So far we have talked mainly about the choice of raw materials, but committing to the environment and ecology is not limited to the choice of sustainable products, it is a complex process, made of different stages. It starts with production, goes through transportation, packaging,**





**distribution, and sales. How does Sarchio take care of these different aspects?**

The use of "clean" energy with a perspective of energy saving and environmental sustainability has been a priority that has conditioned the plant choices. Our company headquarters is built according to innovative building criteria, energy efficiency and low environmental impact, also from the point of view of the systems: we have a photovoltaic system with a total power of about 110,000 kWh/year that covers almost all the energy needs of the structure, and thanks to special compressors we recover hot water for the production areas.

**Packaging is an extremely important and controversial issue, as it is closely linked to the production and disposal of plastic materials. How does Sarchio reduce the impact of its product packaging on the environment? Do you use particular technologies in this area?**

We have been working for some years on gradually replacing the external plastic present in the packaging of our products with paper. We have eliminated 60% to 70% of plastic from the wrapping of cookies and breakfast cereals and this change will involve a large part of the Sarchio range. We pay particular attention to the packaging phase of the products where recyclable materials such as cardboard and paper tape are used, trying to limit the use of non-recyclable materials to a minimum.

As far as the packaging of our products is concerned, our partnership with Tecnopack, a company that produces machinery for the packaging and preservation of products with which we have been collaborating since 2012, is fundamental. It was together with Tecnopack that we accepted the challenge of trying to minimize the impact of packaging, making it 100% recyclable. A challenge that today, thanks to this strategic partnership, we can consider won. 🏠



# SUSTAINABLE SLICING AND PACKAGING OF PRODUCTS WITHOUT INTERLEAVING FILM

**S**licing and packaging cheese, ham and vegan products sustainably: With its innovative spray system, MULTIVAC Sustainable Liquid Interleaving, MULTIVAC is introducing a sustainable solution for packaging thinly sliced or highly sticky products. This means that there is no requirement for the conventional interleaving film between the slices of these products – and the consumption of plastics during packing can be reduced to the bare minimum. Thinly sliced cheese, ham or vegan products are presented very attractively in the pack, and the individual slices can be removed cleanly by the consumer. The new system can be integrated into existing slicer lines, and it is available with immediate effect for individual tests and product development in MULTIVAC's new Center of Excellence for Slicers & Automation Solutions. Precision nozzles on the spray system atomise a liquid interleaving medium, which is both odourless and tasteless and can be tailored to the particular properties, e.g. fat content, of the sliced product. It is applied evenly to the underside

of the slices. The adhesion between the individual slices is therefore reduced, but the product itself (taste, smell, colour) however is not altered. This procedure is common practice in the food industry, e.g. with bakery products or sweets.

## Customised applications in the Center of Excellence

Food producers can now convince themselves of the benefits of the new solution: "We want to offer Sustainable Liquid Interleaving to our customers as another innovation for the sustainable processing and packaging of their products. They are therefore invited to get an impression of our innovative solution in our new Center of Excellence for Slicers & Automation Solutions," explains Manfred Achenbach, Senior Vice President of the Slicing Business Unit. "There we will be conducting customised tests with their sliced products in order to develop a bespoke system, which is designed perfectly for the particular product characteristics and the requirements of their slicing solution." At the beginning of the year, MULTIVAC put its new Center of Excellence

for Slicers & Automation Solutions into operation as part of the so-called Training and Application Center (TAC) at the company's head-quarters in Wolfertschwenden. There it is possible to view practically all the solutions from the MULTIVAC product range, which are used in the food industry. This includes the presentation of complete lines from product infeed to end-of-line, and these are tailored precisely to the needs of customers. The visitors get a feeling for the complete process chain, which is then reproduced later in their own production environment. The process chain ranges from a demonstration of the various slicers, through to the presentation of the different loading solutions downstream of the slicer, and right up to the actual packaging process itself. Working together with the customer, MULTIVAC's experts conduct customised tests with the particular product, while also examining the eventual solution for feasibility, output, give-away and yield – as well of course as the return on investment. 🏢

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





# 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 20<sup>th</sup> century has brought a dramatic acceleration. The world 'does it' now at least 320,000 times per second and this is causing substantial environmental concerns. Packaging will only keep it's societal licence to operate if these concerns are properly addressed.

## ABOUT THE MANIFESTO

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



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



# THE PUMA MODEL

## THE VOCABULARY

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



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



## ADDRESSING THE ENVIRONMENTAL ISSUES

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



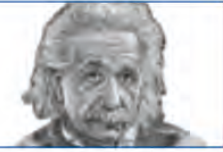
	FE	P-U-E	C-C	BE
Litter			✓	
CO <sub>2</sub>	✓			✓
Inadequate pack optimisation <div style="font-size: small; margin-left: 20px;"> <span style="color: red;">Product</span>  <span style="color: blue;">Packaging material</span> +  <span style="color: green;">Total environmental impact</span> </div>				
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](http://www.nvc.nl/puma)**



NVC NETHERLANDS PACKAGING CENTRE

*Sharing the future in packaging*

+31-(0)182-512411

✉ [info@nvc.nl](mailto:info@nvc.nl)



# PRODUCTION AND INSTALLATION OF FRUIT AND VEGETABLES PROCESSING LINES

**N**avatta Group emerges on the market as a valid global partner of equipment and lines for the integrated processing of fruit and vegetables, providing proven and innovative solutions for a complete range of lines with capacities ranging from 3 to 120 t / h of fresh incoming product.



Complete receiving puree extraction line for mango, soursup, pineapple, watermelon concentrate juice – final packaging in aseptic bags



Tomato Mix, Ketchup and Jam Processing line with ingredient feeding and mixing system pre-built and FAT tested before shipping

## MANUFACTURING RANGE

NAVATTA GROUP manufactures and commissions processing lines, systems, equipment for fruit, tomato, vegetables such as:

- Peeled / diced / crushed tomatoes, tomato sauces and purees, tomato paste, all filled into any kind of package or in aseptic;
- Diced, puree, juices (single strength or concentrated) from Mediterranean / tropical fruit, all filled into any kind of package or in aseptic;
- Fruit crushing lines from IQF, frozen blocks and frozen drums;
- High yield patented fruit puree cold extraction, fruit purees / juices equalized in aseptic;
- Wide range of evaporators to produce tomato paste, Mediterranean

and tropical fruit concentrates puree, multi-function evaporator, falling film and forced circulation;

- Evaporators for coffee and milk: evaporation before spray driers, freeze driers or other driers
- Evaporators for cogeneration industry (waste treatment);
- Aseptic sterilizers;
- Aseptic fillers for spout bags/ spout-less bags from 3 to 20 liters, Bag-in-Drum 220 liters, Bin-in-Box/ IBCs 1.000 – 1.500 liters;
- Spiral pasteurizer and cooler;
- Formulated products productions (jam, ketchup, sauces, drinks) starting from components unloading to dosing, mixing, mechanical/

thermal stabilizing, to filling into any kind of package or into aseptic mini-tanks;

- Processing pilot plants;
- Vegetables processing as receiving, rehydration, cooking, grilling and freezing.

Navatta Group's headquarters and the two production units are located in Pilastro di Langhirano, Parma, with a total production area of 10,000 square meters.

Navatta Group's VISION (Passion drives us towards higher targets in terms of technologies, products, services) and MISSION (To constantly increase Client's levels of satisfaction and fidelity) summarize Navatta Group's roadmap. 🏠

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

# ZANIN F.LLI SRL IS SYNONYMOUS WITH QUALITY, RESEARCH AND CUTTING-EDGE PRODUCTS



**ZANIN MALTING SYSTEM**

**F**lexibility, customisation and ad hoc services complete the qualities of this all-Italian excellence.

#### **They specialise in:**

- Cereal maltings (beers and malted flours),
- Flour mixing silos,
- double suction stainless steel sieve cleaners for food use
- air filtering systems
- **DUST STOP**, the patented ZANIN hopper for product loading without dust dispersion and without suction.
- innovative sieve and drum cleaners complete with new generation suction systems for cereals
- seed sorting lines,
- energy saving and low environmental impact dryers,
- refrigeration systems
- silos for controlled grain cooling.

#### **In the industrial sector**

they are specialised in the handling and storage of fertilisers, they design and produce made-to-measure COAT-

ING, they are experts in cleaning and control during the rail and ship unloading phases, they design and produce port hoppers, belt and chain conveyors, large bucket elevators for port handling.

Founded in 1956 by Giuseppe and Arcangelo Zanin, it is now run by Oscar and Nicodemo who continue to research and develop new solutions for the market. Among their proposals are machines for the food sector, given the ever-increasing demand, thanks also to this extensive experience in different fields, it is considered an important company in both the industrial and agro-industrial sectors.

In recent years there has been a lot of talk about **malting**

The art of malting is no longer relegated to large-scale industrial production. Now it is possible, thanks to Zanin f.lli srl, to produce excellent and customised malts starting from 500kg batches. The 60 years of experience in drying combined with 60

years of experience in air handling completely satisfy the need to produce large varieties of malted seeds. and thus offer millers special flours, new bases for bakery products, preparations for the intolerant or allergic. In beverage, master maltsters can customise malts and distillers can improve their secret recipes.

**flour's solutions**, The Zanin brothers have developed a system that receives, weighs and mixes the different flours homogeneously to allow users to guarantee better products and customisable recipes. Offering a tailor-made product is no longer a problem. With an ISO 9001 TÜV SÜD certified production process, Zanin F.lli supplies quality machines and systems, **designed** with the best 3D graphics programs, **created** with the latest generation of laser cutting, bending and punching machines, **tested and produced** by Zanin's modern workshops under the careful supervision of Oscar and Nicodemo. and their exceptional knowledge of the industry



that over 60 years of experience can guarantee.

Zanin f.lli srl is also environmental quality; machines are designed to reduce electrical and burner consumptions and above all to reduce impurities in the air. The patented DUST STOP is the flagship of this more eco-sustainable vision of the world, no dust during the delicate phases of product unloadings.

**Food sector**

- CEREAL MALTING plants
- Flour treatment, mixing and weighing plants

- Stainless steel machines for the treatment of products for human use

**Agro-Industrial sector**

- Cleaning
- Drying
- Mechanisation
- Storage and Ventilation
- Customised Solutions
- Accessories and Components
- Turnkey Solutions for Cleaning, Drying, Cooling and Storage

**Industrial sector**

- FERTILIZERS, cereals and minerals treatment plants
- Logistics and intermodal conveyors

for port and rail facilities

**Their solutions:**

- Bucket elevators, with capacities up to 650 t/h
- Belt and chain conveyors, with capacities up to 1000 t/h
- Ship unloading plants, 1000 t/h
- Weighing hoppers for wagon and truck, and hydraulic tipper for trucks unloading
- Receiving systems with rapid dispatch to warehouse
- DRUM COATING
- Rotary pre-cleaning drum for unloading from ship, 1000 t/h. 🏠

**www.zanin-italia.com**





# Sustainable packaging: why IPI's caps employ bio-based polymers

**N**ow more than ever sustainable packaging plays a major role within the industry. As of today, 99% of plastics comes from fossil fuels[1]. The carbon footprint from burning them is the fastest growing part of humanity's global ecological footprint - accounting for 60% of the total[2]. To reduce mankind's reliance on fossil fuels is not simply a moral imperative: it is the only way out of the climate crisis. That is why sustainable packaging initiatives, such as IPI's bio-based caps, are paramount.

IPI's openings are the latest introduction in IPI's sustainable packaging offer. Built out of biopolymer packaging materials, IPI's bioplastic caps have a lower carbon footprint than traditional alternatives based on fossil fuels. First, since they derive from sugarcane they have a smaller carbon footprint, with lower cradle-to-plant-gate greenhouse gas emissions than petroleum counterparts[3]. Also, their manufacturing process and disposal is more eco-friendly, as they do not contribute to the ever-growing fossil fuels' carbon footprint and are 100% recyclable as well as fossil fuel-based biopolymers.

Renewable, recyclable, bio-based caps are a peculiarity of IPI's offer. To best understand them we then proceed to explore and measure the sustainable packaging trend.

### How important is sustainable packaging for consumers?

When it comes to sustainability, there's been one major change in recent years: the general public cares about it. Not only that: consumers are paying more attention and are willing to pay more.

There is convincing evidence by Nielsen [4] and McKinsey [5] that sustainability is not simply the concern of a small niche market. On the contrary, it is now a mainstream sentiment that cuts across all ages and is especially entrenched in gen zers[6] and millennials[7]. Consumers demand the adoption of corporate sustainability practices[8] in the spirit of sustainability, economic equality, and social responsibility.

This attitude has grown even more powerful during the initial aftermath of the COVID-19 crisis. A survey conducted by McKinsey [9] shows that the engagement





from customers with sustainability has deepened as a result of the pandemic. Two third of consumers state that it has become even more important to limit impacts on climate change.

### What does it mean for a packaging solution to be sustainable?

To talk the talk and not just walk the walk, any packaging solution that aims at being sustainable must abide by these three principles: Renewability, Recyclability, Responsibility. A packaging is renewable if it comes from renewable sources. IPI's aseptic carton packaging, for instance, is renewable up to 90%. Precisely, it is 72% paperboard, plus bio polyethylene made from sugar cane, which IPI employs to manufacture caps and material layers. What's more, IPI has recently launched a line of paper straws and aims to provide its customers with a completely renewable packaging, with no trace of fossil fuel materials - a roadmap IPI has strongly committed to and which has also included the introduction of bio-based openings made from sugarcane biopolymers.

Recyclability, on the other hand, refers to the possibility of converting packaging waste into new materials and objects. In this regard, IPI is proud to say that its packaging is fully recyclable. By separating the paperboard of aseptic bricks from aluminium and polyethylene, raw materials are given a second life, being enabled to enter the production cycle once

again. This is what is called a circular economy. Last but not least, responsibility is about choices. IPI's aseptic carton packaging represents a responsible choice at an environmental and societal level. Environment-wise, IPI's aseptic carton packaging reduces CO2 emissions when compared to other packaging solutions. All this translates into a lower carbon footprint compared to alternative materials. On this line, bio-based caps truly stand out, as they produce fewer CO2 emissions than petroleum-based plastic caps. Also, IPI is Forest Stewardship Council®- certified as well as certified against Aluminium Stewardship Initiative (ASI) Performance Standard. As part of its enduring effort to fight deforestation, IPI has invested in tree planting in Petén, the northernmost department of Guatemala, close to the Mayan Biosphere Reserve and the famous Mayan archaeological site of Tikal. Petén has experienced the world's most rapid deforestation of any country over the last five years[10]. To make things right, all fruit trees financed by IPI will be donated to the farming families of Petén to sustain their livelihood.

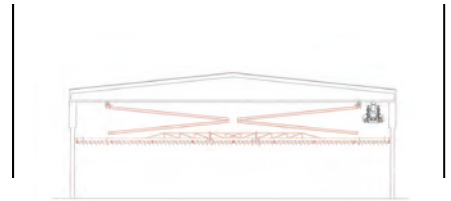
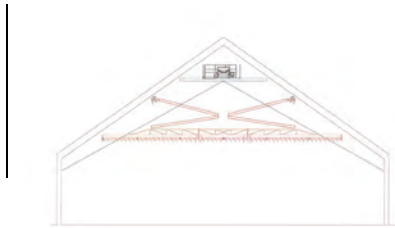
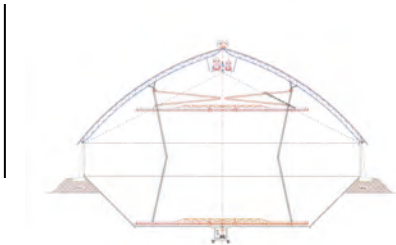
### Why IPI's caps employ biopolymers: taking advantage of biogenic carbon

As regards sustainability, IPI is at the forefront of the packaging industry, as it is among the first companies to feature bio-based caps in its aseptic carton packaging solutions. Using biopolymers into openings is crucial to IPI's sustainability roadmap. Thanks to biopolymers, not only do IPI's solutions produce less carbon dioxide than the alternatives, they also reduce carbon dioxide from the atmosphere through biogenic carbon. In fact, IPI's biopolymers are plant-based - precisely, they are sourced from Brazil, i.e. an area different from the Amazon rainforest, which is therefore preserved. As a matter of fact, plant-based biopolymers are equivalent to plant biomass in every way. Because of this, they "store" carbon dioxide. In fact, through photosynthesis, biomass stores CO2 and releases oxygen. Once the biomass is transformed into a cap, it retains any carbon dioxide stored inside it, actually removing it from the atmosphere.

Respect for the environment is maximum in everything IPI does. IPI is among the first suppliers to offer bio-based caps and, also thanks to this, IPI's packaging solutions are up to 90% renewable, responsibly sourced, and fully recyclable. IPI fights deforestation and supports rural and indigenous communities through its initiatives in Guatemala. To offer carton packages made only from renewable or recycled material, 100% recyclable and able to support circular economy: that is IPI's goal. 🏠



# BORGHI SRL: CEREAL STOCKING AND TRANSFORMATION PLANTS



One of man's dreams is immortality, a concept bound indissolubly being healthy, which implies eating healthy.

In view of the fact that a large quantity of products, composing our daily diet, derives from cereals transformation (wheat, corn, barley, etc.), it follows that modern politics considers them as strategic products, as well as fundamental resources for a country's economy, so their conservation is a social target, as well as agri-food. Storing a cereal for longer or shorter periods, in a rational and safe manner with the minimum cost of operation, is the task of a silo.

In order to choose the type of a silos to be adopted, many factors are involved, such as annual passing number, storage capacity, conveying capacity, conditioning and non-conditioning systems, possible treatments and other factors.

In any case, the work cycles in a silos must be rapid, having the possibility to collect and to return the product at the same time, where the man must only check.

The silo capacity is a too subjective factor to allow practical suggestions, it depends on the purpose of the plant and the local market conditions as well as on economic-financial calculations.

However, we could state, in the first analysis, that a silos plant with:

a. many cells, of modest capacity and with different grains, is used to make quality.

b. few cells with large individual capacities and few varieties of cereal, serves for convenience exploiting the market prices for supplying goods speculating on the cost (e.g. cereal purchase and storage during the harvesting period)

**The silos are divided into two above mentioned large categories:**

## Vertical silos

Normally circular, polygonal, with hopper and/or flat bottom.

They can be made of metal, where they can reach a diameter up to 30-35 m, with capacity up to 15.000 tons/each one or in concrete, generally with a diameter from 6 to 8 m with inter-bins and heights of 60-70 m (e.g. port silos).

However, we will deal with this type of silos in a special section.

## Horizontal silos

Consisting of flat warehouses, today they represent the most economical system (ratio between cost and stored tons) for cereal storage and conservation (energy and labor necessary for the plant optimal functioning). Generally made of metal or reinforced concrete and/or pre-

fabricated with variable dimensions: width 20-30m up to 50m and length over 100-150 m with storage height (side wall) ranging from 6 to 11 m, where the unit capacity is generally over 10.000 tons (finding in this situation an economic reason for the choice).

This type of silo is widespread in Brazil and Australia where, in the latter, it covers more than 10% of national storage with warehouses reaching up to 60.000 tons (133 m length, 54 m width, with 11 m average height storage).

The types of horizontal warehouses that we can meet are many, where the best known are the following: As already above-mentioned, the horizontal silos (warehouses) can be made with reinforced concrete walls directly cast in place or with lateral pillars supporting the lateral curtain wall made of reinforced concrete slabs (prefabricated). The flat warehouses can also be made with metal side walls where normally their walls are realized bending ( $\Omega$ -shaped) steel slabs directly bolted to pillars, always in steel, placed at a constant pitch (from 3 to 5 m ) on the warehouse perimeter.

The covering can be realized by means of prestressed concrete trusses or in metal where for impor-

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



Aseptic Tanks



UHT Sterilization Plants



Mixing and  
Carbonating Units



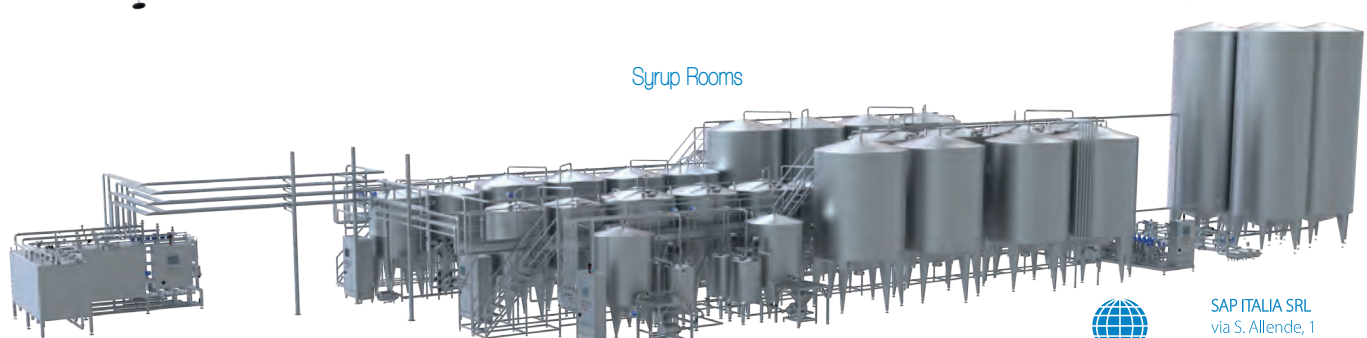
Pasteurization Plants



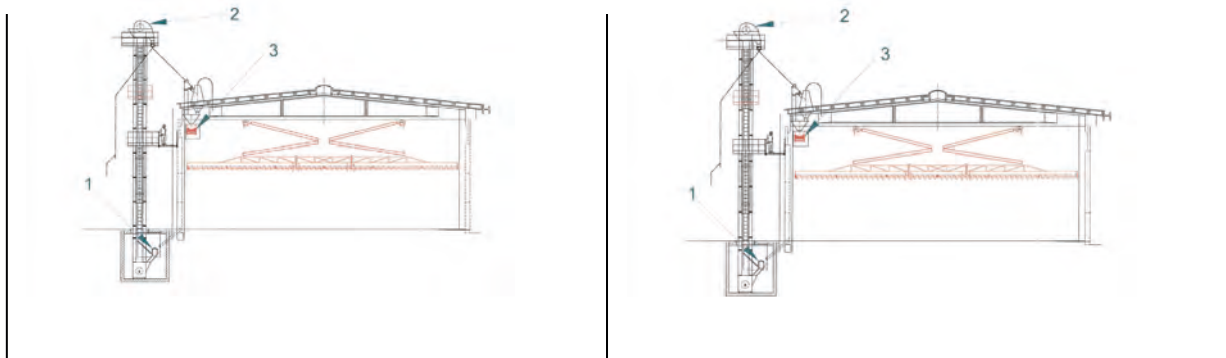
Cip Cleaning Plants



Continuous Sugar  
Dissolvers



Syrup Rooms



tant lights (over 30m) it is an obligatory choice. The theory used to calculate the pushing on the walls (a fundamental element for calculation and design) is the one best known as “land pushing”.

In the past the use of flat warehouses for the cereal storages aroused some perplexity due to the difficulties that could be encountered in the management of the stored grain, such as:

- 1) difficulty in ensiling uniformly and constantly
- 2) difficulty in intervening in case of non-conditioning
- 3) difficulty of cereal return in compliance with health and hygiene rules
- 4) difficulty of cereal conditioning
- 5) difficulty in stocked mass temperature and humidity monitoring.

The new technologies and financial market trend (banks finance more willingly a flat warehouse than a vertical metal silos) represent an excellent alternative to storage in vertical silos. Take into account the company's type of activity choosing the unit capacity or the type of silo to be adopted, horizontal or vertical.

#### DESCRIPTION OF A FLAT WAREHOUSE MECHANIZATION TYPE

A chain conveyor (1) is mounted in one side of the warehouse (normally the longest) for cereal loading and unloading destined to the warehouse storage, in fact:

the conveyor is mounted on the bottom of a reception pit regularly covered by a self-supporting truckway grating along the entire length of the conveyor or only where it is strictly necessary (e.g. near the point of unloading of the vehicles and/or in other points, where it is deemed necessary, depending on the activity to be carried out).

The uncovered part is normally closed with reinforced concrete slabs or steel of suitable shape and thickness. The vehicle will discharge the cereal inside this pit which, through the chain conveyor (1), will convey the cereal into the elevator (2).

The elevator will raise the cereal and load the warehouse loading belt (3). The belt conveyor (3) will be equipped with a tripper (4) with a motorized advancement, able to discharge the cereal inside the warehouse on time.

The warehouse loading and unloading robot is positioned at the tripper discharging. This robot is substantially able to run along the whole length of the warehouse and it can rising and lowering for the whole height of the flat warehouse.

A screw conveyor system is installed on the lower part of the robot to move the cereal from side to side of the warehouse.

As it is easily understandable, once the cereal is discharged from the tripper and it touches the robot wormthreads, the same is pushed on the opposite side.

When the cereal reaches the opposite side, a special rocker system will indicate that the cereal has reached the desired position, so it will drive the tripper to move in a predetermined measure; consequently the loading robot will move and repeat the same cycle up to the total filling of the warehouse.

Some shutters (5) incorporated into the wall, which obviously can be manual or motorized, are installed on the side where the reception pit is located, so the chain conveyor (3). The robot will be placed at the point where you want to unload the warehouse and the correspondent discharging shutter will open.

It follows that before the cereal will fall down by gravity, after by means of robot and then it will be pushed towards the discharging shutter.

In this way the cereal will reach the discharging conveyor which, in turn, will convey the product to the elevator (2) placed generally at the head of the warehouse, under which a valve is able to carry out the following operations:

- return
- recirculation
- another operation (e.g. cleaning)

As shown in the operation description, the loading and unloading robot is the main performing element of mechanization. 🏠

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# NUTRITIONAL CONCEPTS LAB

Innovative open R&D facility for the fruit and vegetable sector and the food industry at Villa Flora Venlo

**Mi** Food has developed a new R&D facility for the food sector and agro-industry at Villa Flora in Venlo. The Nutritional Concepts Lab uses a patented process in the vacuum coater as the basic technique for processing vegetables and fruit quickly and at core temperatures up to 35°C. Subsequent processes such as puréeing, mixing, drying and spraying are also carried out at the Nutritional Concepts Lab. The facility is suitable for the development of innovative dry and liquid products.

**Retention of bioactive substances and vitamins thanks to low temperatures**

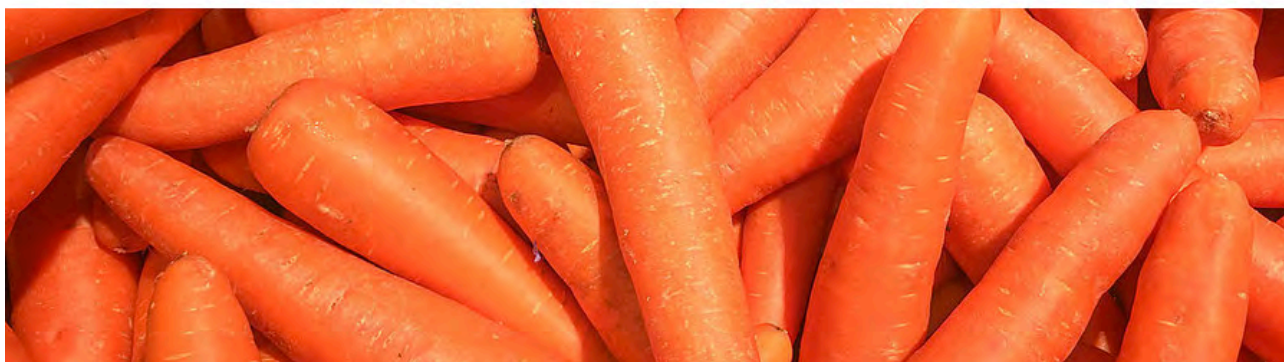
MiFood developed its Nutritional Concepts Lab specifically for prepar-

ing innovative vegetable and fruit-based products. Fruit, vegetables and waste flows from industries that work with these products can be processed here for a short period and at low core temperatures (up to 35°C). The patented process in the vacuum coater is key to this. Products boil at a lower temperature in a vacuum. The bioactive ingredients, flavour and vitamins remain fully intact due to the short processing time and the low core temperatures. This makes the new R&D facility particularly suitable for the development of healthy pearls, soups, sauces and mixed drinks. Fresh fruit and vegetable mixes can also be processed or dried quickly in the vacuum coater. Products can be mixed or puréed in another process unit at the R&D facility.

**Suitable for the development of new liquid and dry products**

The vacuum coater incorporates a twin-shaft mixing mechanism that mixes, fluidizes and aerates the products quickly and efficiently. During this mixing process, liquids such as juices, concentrates and oils can be added to liquid and dry products. The finely atomized liquid droplets mix homogeneously with the products as they are sprayed. Dry products such as powders, pearls, cereals, croutons and extruded pellets can be coated during this spraying phase, without clumping or sticking. The vacuum function used by the Nutritional Concepts Lab ensures that liquids applied in this way can then be sucked deep into dry products. It is even possible to add multiple lay-





ers around each product particle, and to vary the vacuum during the process.

### **Brightlabs and expert network of food and technology specialists**

Companies active in fruit and vegetables and food producers can book half-day sessions at the Nutritional Concepts Lab for testing and product development.

Small-scale production runs are also possible. In addition, these activities can be supported by the new R&D facility's network of food and technology specialists. Batches from 10 to 500 litres can be processed. Furthermore, customers can use Brightlabs to determine the constituents, quality and food safety in vegetables and



fruit. The Nutritional Concepts Lab obviously maintains strict confidentiality when working on projects. For more information about the Nutritional Concepts Lab and product

innovation, please contact Raymond Nolet, +31 6 10322186, send an email to [info@mifood.nl](mailto:info@mifood.nl) or browse to [www.mifood.nl](http://www.mifood.nl) 

# TROPICAL FOOD MACHINERY STRENGTHENED ITS PRESENCE IN COSTA RICA

**L**ast year was a tough one for no other, but that didn't stop Tropical Food Machinery from working hard and getting things done. Indeed, the company has strengthened its presence in Costa Rica by opening a new office in the country's capital San José.

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

The goal is to improve the company's product offering across the Central American, Caribbean and Mexican areas. "We see a lot of opportunity to shore up our commercial presence in these growing markets, and they can benefit from working with a partner with over four decades experience in the field," said Stefano Concari, Tropical Food Machinery's general manager.

Costa Rica is strategically located to help the company expand in the region. Despite being a small country compared to other tropical fruit producing ones in Central America, the nation is the largest exporter of pineapple and the fourth largest banana exporter in the world – two fruits making up ever larger shares of our daily diets.

Tropical Food Machinery has also set up shop in the Ashanti region of Ghana, where it opened a new multi-fruit facility built last December. The event was attended by the President of the



CERERE6000, The New Banana Peeler



The goal is to improve the company's product offering in Central American, Caribbean and Mexican areas





Forced Circulation Evaporator

Republic of Ghana, Nana Addo Dankwa Akufo-Addo and the King of Ashanti Otomfuo Osei Tutu II, as evidence of a mutual interest in developing a strong relationship between the two countries in the agribusiness sector.

The new plant will process no less than 72 tons of fruit – mango, pineapple, tomato and watermelon – per day in order to meet the domestic market needs, but also to exports to West Africa and beyond. The facility also boasts a 240-hectare orchard as well as a network of suppliers between the regions of Ashanti, Bono, Volta and Ahafo that would lead to the creation of over 100 new direct and 1000 indirect jobs. The project is part of “One District, One Factory,” a government-backed initiative whose goal is to set up at least one industrial plant in each of the region’s administrative districts in partnership with the private sector.

More recently, the company has been awarded the International FoodTec Award for pioneering development in terms of innovation, sustainability and efficiency by the Deutsche Landwirtschafts-Gesellschaft – German Agricultural Society and its specialist partners. The renowned technology prize was awarded to 20 innovative projects from the international food and supplier industry. Tropical won the Silver category thanks to its recently patented automatic banana peeler Cerere 6000.

The prize further demonstrates Tropical Food Machinery’s growing com-

mitment to advancing sustainability through research and development. At the company, every line is designed in-house and then built and tested before every and each delivery. This makes for a complete control over the process, enabling the creation of cutting-edge solutions aimed at the reduction of the environmental impact across the entire supply chain. The effort aligns with the firm’s own green manufacturing practices and dedication to helping its customers make their products without hurting the planet. 🏡

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

**TROPICALFOOD**  
M A C H I N E R Y

# FUTURE OF FOOD

**I**FE Manufacturing Solutions (IMS) Connects, is pleased to announce Future of Food. Our year-round, deep-dive programme of engaging content exploring the latest issues, trends, innovations and chal-

lenges facing food & drink manufacturers and product developers.

If you're an expert, offering solutions in technology, sustainability or supply chain management then get in touch

to be part of our upcoming series. All content will take place within IFE & IMS Connects, our brand new on-line community providing advice and inspiration on the latest trends and product innovations.



## SUSTAINABILITY SOLUTIONS



The race to zero is on! As the world grapples with reducing our carbon footprint, consumers are demanding food manufacturers do much more to create a sustainable food system. Compostable or recycling? What is stopping vertical farming from being the magic solution? Are meat substitutes here to stay as a mainstream consumer choice? How is technology transforming sustainable utility management slashing the overhead as well as the utility wastage.

## TECHNOLOGY SOLUTIONS



The future of food technology is here. Find out how technology is transforming tomorrow (or not) as we show you the fact and the fiction around traceability, that digitisation is vital but not everything, and how digital twinning is shaking up the way you sort.

## SUPPLY CHAIN SOLUTIONS



The use of technology to drive sustainable supply chains has transformed the way we get food from the farm to the fork. Find out which new startup disruptors are leading the way, and how industry leaders maintain agility in the face of Brexit and Covid-19 through ensuring supply chain resilience, getting smart on contract manufacturing, and keeping pace with fast changing packaging and labelling requirements. 🏠

**IMS CONNECTS, DELIVERED DIGITALLY. ALL YEAR ROUND. GET INVOLVED.**



# 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

**I**n 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](http://www.s4esystem.it)). This company had been working for some time with





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

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

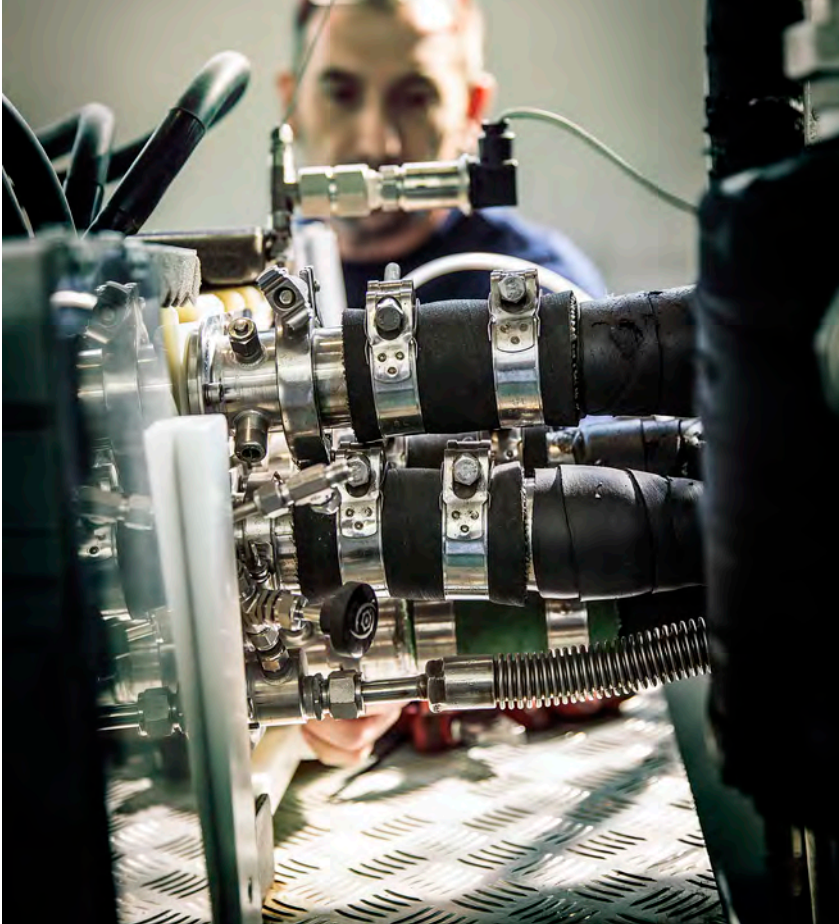
and versatile know-how it is possible to create a truly efficient and functional system. In the specific case of Rummo, the challenge was to continue to improve the quality of its production, reducing both energy costs and the company's environmental impact. Making use of each other's expertise, ICI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

#### Interventions and results

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

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

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



three pasta production lines in Room 2 produces at full capacity about 50% of the nominal power. This translates into a methane consumption saving of 200,233 Sm<sup>3</sup>/year, corresponding to about 58,000 € /year. The new system configuration also eliminates the diathermic oil circulation pump (diathermic oil pump Q=400mc/h H=35mt c.l. Pel ass= 45kWel) with a consequent electricity-saving equal to 356,400 kWh/year, about 28,500 € /year.

The energy efficiency path has thus produced the expected results: lower costs and reduced environmental impact. Overall, the intervention conceived by S4E System and carried out through the introduction of an ICI Caldaie boiler has led to saving about 234 TOE/year, a cost reduction of about 86,500 € /year and a decrease of about 520.86 tons of CO<sub>2</sub>. The energy improvement process is not limited to this but has involved other sectors with excellent

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



TOTAL ECONOMIC SAVINGS

**154.100** €/year



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

**800** Ton/year



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



TOTAL POWER SAVING

**1.202.359** kWh/year





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 disconnecter to work

at the same temperatures as the cooling tunnels of 14°C. The electricity saving is equal to 282,972 kWh/year, equivalent to about 22,600 €/year, i.e. 93 tons of CO<sub>2</sub> less released into the atmosphere. As for the compressed air power plant, the ex-ante situation was based on fixed speed compressors. These were replaced by 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 CO<sub>2</sub>. Finally, in the vacuum plant, the vacuum pump has been replaced by a liquid ring pump cooled by the chilled water produced by the Fridge Units with an air-cooled pump.

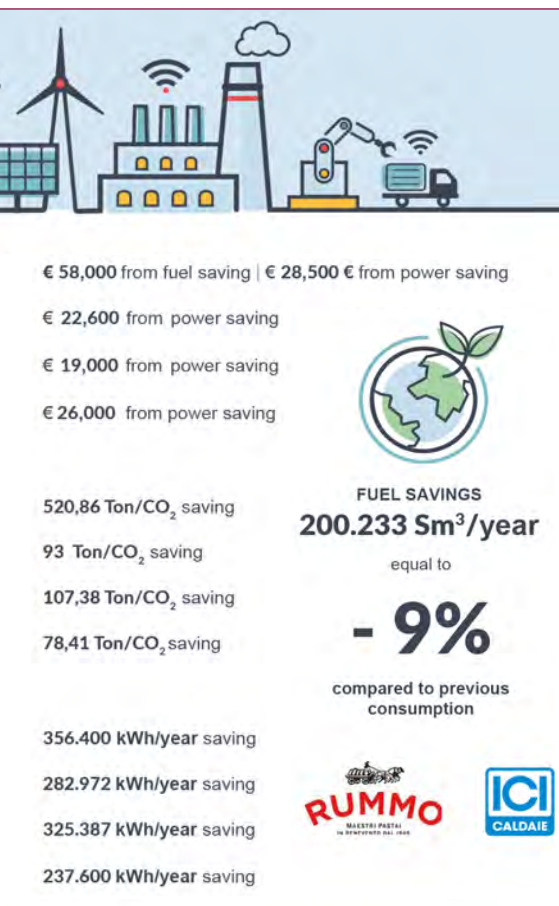
**From a critical situation, the right partner helps rise to success**

When the client's initial needs are fully met, there is no question of success. Success is made possible by the vision of those companies that no longer think themselves in terms of simple producers, from an individual perspective, but see the project on a larger scale. Only if driven by the desire to achieve a comprehensive solution one can establish partnerships with other companies that have different specializations and bring together multiple skills to develop complete projects.

With this ambition in mind, a company like ICI Caldaie collaborated in the energy improvement process of another company, in this case Rummo, not simply offering its boilers, but participating in a design process that involved many other areas. Starting from a specific urgency, making useful energy-saving actions, it has been possible to create a condition of saving in a wider sense, making the company sustainable while maintaining the high-quality standards of its efficiency and productivity.

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

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



# “I’M GOING TO AUCTION. AND NOW?” THE BENEFITS OF WORKING WITH AN ONLINE AUCTION COMPANY

**M**ore and more companies are choosing to work with an online auction company, a neutral intermediary, that helps them sell their machines due to a relocation, innovation or bankruptcy for example. In other words; the current inventory, goods and machines should be sold, preferably as soon as possible.

*How and to whom? How do I do that safely? How do the machines get from a to b? Who are the bidders? How do I reach them and where? How do I market my inventory? How do I get the most out of my auction? How do I arrange everything after the sale? I don’t even have time to arrange transportation after the sale.. Those are just some of the questions that arise when setting up an auction.*



**Industrial Auctions BV**

An auction company serves as an intermediary, a platform that can sell machines as quickly and safely as possible and with the greatest possible return. Safe, that is sometimes difficult in practice. Not infrequently, clients have to wait too long for their money or, in the worst case, they are never paid, because the online buyer ultimately is not paying at all. On top of that, clients often pay start-up costs to an auction company.

Industrial Auctions understands that it can be exciting to offer your goods online or it can simply take too much time to handle the entire process

and thus the company guides clients carefully throughout the entire process: from accepting the assignment, the assessment of the project, the auctioning itself, the financial settlement and storage and transport of the machines which are sold.

Bidders are screened by Industrial Auctions before they can bid on the auction and the auction company does not charge start-up costs to sellers: two things which are valued highly by their clients.

Fortunately, there are also many reliable buyers who bid on auctions and with whom Industrial Auctions has a good relationship. The auction company has a worldwide network of potential buyers and is able to reach them through tailor-made marketing campaigns for the auction concerned. Thanks to their many years of experience, specifically in the food and beverage industry, they are able to reach exactly the right target group worldwide.

When the auction is closed, the client has no headaches either; Industrial Auctions does not only take over the financial settlement, but also all questions the seller would otherwise receive from the buyers. They offer a total concept; both to the client – the seller- and the buyer. After







all, the buyer is also assisted throughout the entire process; think of dismantling of the machines and arranging the transport. Transparency, optimal service and a personal approach are the core values of the online auction company. Short lines of communication with a designated project manager who has in-depth knowledge of the food and beverage industry and the online auction process contribute to this.

The process of an extensive and transparent assessment of the auction, marketing and selling of the lots and reaching the right buyers for a relevant auction ensure that higher returns are achieved more often than the client himself had estimated in the first place.

This is the value of working with an intermediary such as Industrial Auctions, a transparent auction company with optimal service and not to mention; a personal approach. 🏠

**www.Industrial-Auctions.com**



**Professionals in online auctions for the food and beverage industry**

Online auction machinery and inventory due to discontinuation of business activities Vion - Otto Nocker GmbH in Gernaringen (DE)



Online auction machinery for the food industry in Emmeloord (NL)



Online auction machinery for the food industry on former location Geertsen Vlees in Tegelen (NL)



Register for free Find and bid Win Pay and pick up

**www.Industrial-Auctions.com**

# CLEANING CONTROL UNIT FOR PH MEASURING POINTS



**W**ith the EXmatic 470 cleaning control unit, Exner offers its customers the option of controlling all pneumatically operated retractable probe housings of the EXtract series fully automatically.

Compared to conventional, permanently installed measuring points, retractable housings offer the system operator many advantages. Used correctly, for example in pH measurement technology, maintenance work at the measuring point is significantly reduced, the service life of the sensors used is extended and the reliability and availability of the measured value are increased. An efficient cleaning control is of essential importance for the safe and economical automation of the retractable probe housings.

Operation of the EXmatic 470 is very easy for the user thanks to a clear menu structure and the use of a touch-sensitive color display. Option-

ally, a wireless network connection together with a mobile device can also be used for parameterisation.

Another special feature is the openness of the system, that means the cleaning control unit is not tied to a specific manufacturer of sensors or transmitters. The EXmatic 470 is used in a wide variety of areas. For example in the paper and sugar industry, water and wastewater treatment and in power stations.

Exner Process Equipment GmbH  
EXNER Process Equipment GmbH, based in Ettlingen, is in the middle of the Karlsruhe technology region. The medium-sized company has operated as an international provider of high-quality process holders for pH measurement and optical sensors for the determination of cell growth and turbidity for over 15 years. The owner-run company is characterised in particular by its accurate and long-lasting products, its agile and flexible way of doing things,

and customer-specific solutions. The products developed and produced by the ISO9000-certified business offer the highest degree of variability and can therefore be configured to meet almost any requirement. Customers from the chemical industry, in the bio and food technology sectors, and the pharmaceutical industry all benefit from their consulting and support services, as well as their innovative research and development division. Thanks to the combination of their expertise gained over many years and the use of new technologies, their products are being continuously developed and optimised for each area of application. So, the processes become safer, more efficient, and more accurate. In addition, EXNER products are being supplied by distribution partners and OEM customers all over the world. 🏠

For further information, please visit: [www.e-p-e.com](http://www.e-p-e.com)



# COLUSSI ERMES

Advanced Washing Systems

COLUSSI ERMES is a worldwide leader in the design and manufacture of tailor made washing systems in various food sectors, such as the bakery, confectionery, chocolate, meat and dairy, and also in logistics, pharmaceutical, hospital and automotive Industry. Every project is extensively studied, customized and developed by Colussi Ermes specialists in order to ensure the absolute hygiene fully satisfying the most severe and rigorous international standards HACCP.

## Inline Tunnel Washers and Spin Drying Systems for Plastic Totes and Pallets



Colussi Ermes will propose the best solutions for manual and inline pan washers with variable capacities up to over 30 items/minute, bottom down loading and introduction height up to 4". These pan washing systems ensure maximum hygiene, eliminating any bacteria, even the most aggressive, according to pharmaceutical-hospital hygiene standards. Continuous innovation over the years has led not only to the creation of ever more powerful spin drying system with increased performance levels, but also to the birth of the "super-compact" spin dryer; a machine able to combine large drying capacity with a minimum footprint.



Colussi Ermes  
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Casarsa della Delizia  
(PN) Italy  
Tel: +39 0434 86309  
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Colussi AWS Inc.  
9520 Chesapeake Drive,  
Suite 606  
92123 San Diego USA  
+1 858w 384 2222  
info@colussiaws.com

# EXPERTS IN CREATIVITY, INNOVATION & SUSTAINABILITY



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

Since the beginning Lawer has always implemented the strategic decision to invest on people, research and new technologies. Thanks to the analysis and development of the technical department the company

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

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

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

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

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

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

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

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



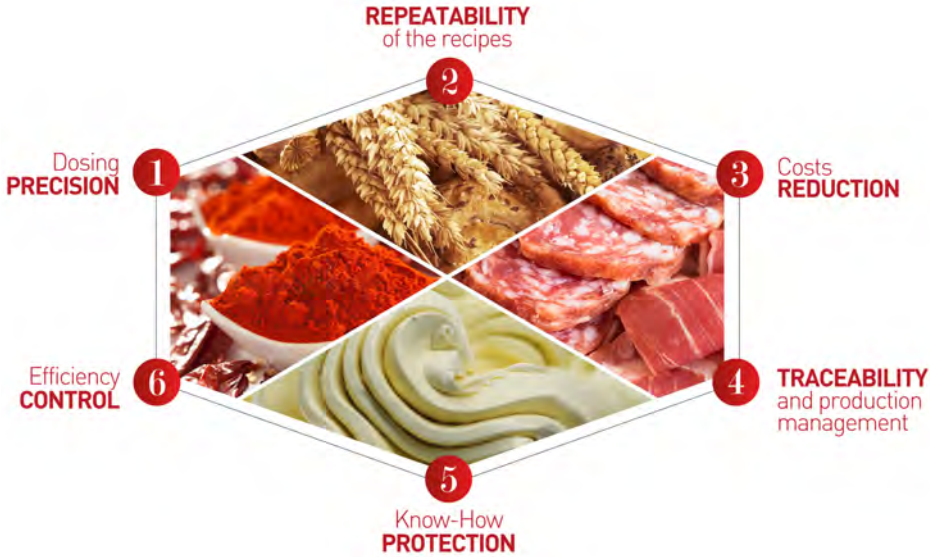
single raw material or each single recipe accessing to a protected area.

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

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

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

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



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

gle, double and multi scale technology (**mod. UNICA TWIN, UNICA HD & SD** and **mod. 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. 🏭

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



# PROSEAL SUPPORTS CHEFGOOD'S RECIPE FOR SUCCESS

**A**dvanced tray sealing technology from Proseal is supporting the continuing expansion of Chefgood, one of Australia's leading producers of high-quality, nutritious, home-delivery ready meals.

Established in 2014, Chefgood was born out of the desire to make affordable higher quality and healthier ready meals than those typically available on the Australian market. The company uses local ingredients, portion control and great taste to help customers sustain healthier, more balanced diets.

Two Proseal GTOe tray sealing machines have now been installed at the Chefgood factory in Moorabbin, Victoria, replacing the company's original tray sealer from another supplier. The greater efficiency and higher speeds of the Proseal machines – some three times faster than the previous unit – have enabled Chefgood to achieve a much greater throughput, handling around 35,000 trays every week.

As well as the speed and efficiency of the two GTOe models, Chefgood cites the machines' excellent reliability as a key factor in their selection. In addition, the company says the tray

sealing machines extensive reporting features are a valuable benefit in the setting and assessing of KPI measurements.

"We have had fantastic support from Proseal throughout the project," comments Jared Simeti, General Manager Operations of Chefgood. "The installation went flawlessly, and the machines have continued to perform without any issues."

Just as important, we know the Proseal service technicians are always there to help if we do experience any problems. In particular, our Proseal



account manager remained in close contact with us during the Covid-19 pandemic when we had to adapt our working practices, looking for ways to help us during this difficult time.”

The Proseal GTOe has the flexibility to perform any type of heat seal to a pre-formed tray, including atmospheric, Modified Atmosphere Packaging (MAP), Vacuum MAP, Skin, Skin Plus and Skin Deep, and can handle all the latest tray formats and materials.

Proseal Australia’s local manufacturing of tooling means the company is able to respond quickly to requests for new sets to meet changes in market demands.

Another significant benefit of the Proseal GTOe and all of the company’s tray sealing machines is that features can be added or removed as required.



This offers users valuable future proofing with the ability to adapt to new packaging trends. Equally essential, machines are designed so that new features which further increase speed and sealing capabilities can be easily retrofitted when they are developed. Proseal tray sealing machines deliver consistent and accurate throughput thanks to unique features such as Promotion™, which regulates the feeding of trays into the machine, and its ProPosition™ tray positioning system. Seal strength and integrity are ensured by the company’s pioneering Eseal® high-force electric heat seal system. The GTOe’s compact, rugged and hygienic food industry approved construction provides full washdown protection. A user-friendly menu driven control panel with step-by-step prompts, error and status displays, and batch pack counter, ensures ease of set-up. Chefgood’s continuing success and growth has now led the company to develop a range of retail products, which will be launched in May.

“We have had a great response from businesses which have confirmed our supply,” says Jared.

“Our products already have the highest consumer rating on the market, and we are continuing to build our brand.

The future looks very positive and indeed, we are in the process of looking for a new site, having outgrown our current one.

“With such growth plans, we are sure Proseal will continue to play a major role in regard to our packing room equipment.”

Founded in 1998, Proseal designs and manufactures high quality tray sealing machines, conveyor systems and sealing tools for food industry markets worldwide.

Proseal is part of the JBT family, and together they remain committed to continually supporting customers’ needs. 🏠

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

# THE TOP QUALITY INDUSTRIAL MIXERS

**E**scher 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.



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



# ESCHER

mixers

20  
2000  
2020  
ANNIVERSARY





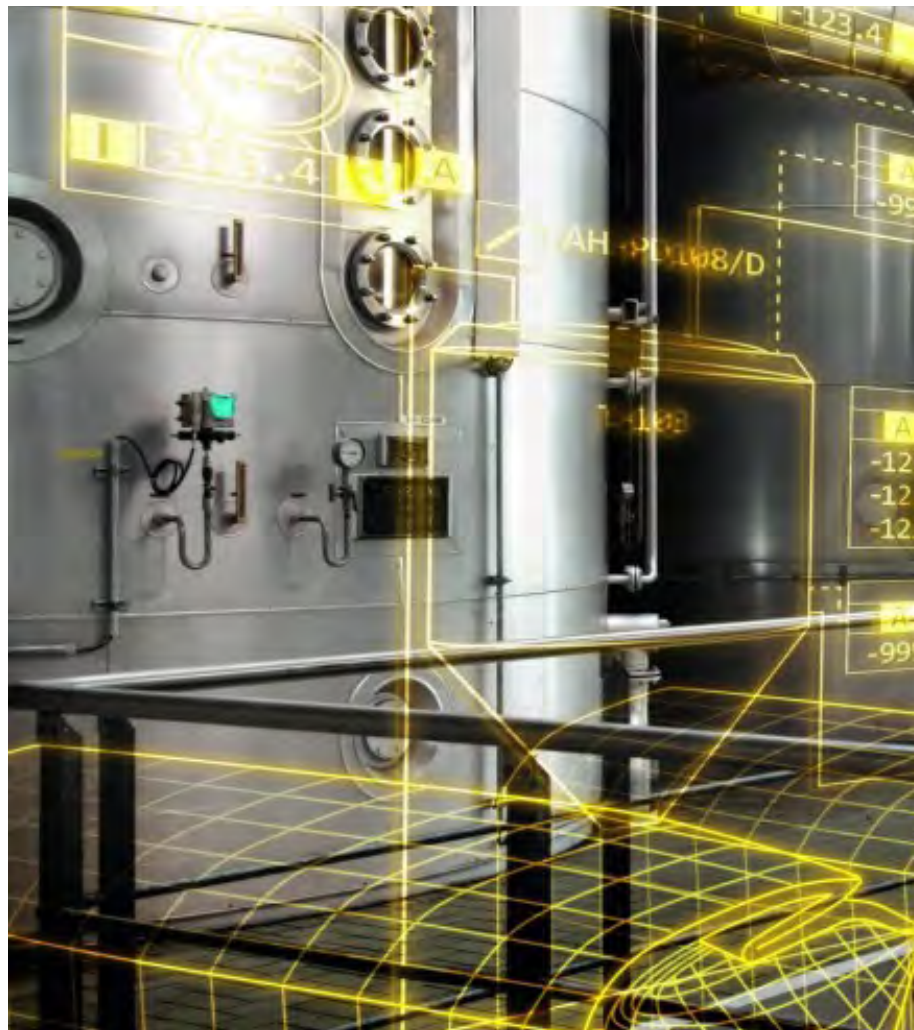
# Made in Italy in favour of Ukrainian food processing

**U**kkraine is one of the countries that, since the beginning of 2020, has most increased the volume of imports from the European Union. This is revealed by the latest report on trade in agricultural products prepared by the European Commission. Defined for centuries the granary of Europe, Ukraine is famous for having one-third of the richest soil in the world and for being among the top ten major producers of soft commodities. These are considerations not to be underestimated when you start thinking about internationalization.

Choosing this country as the recipient of an export action in the food processing sector, means contributing to the development of the mechanization of a territory with a strong agricultural vocation, in which definitely stimulating scenarios are outlined and in which there is huge space for Italian exports' placement. In fact, the Made in Italy of food processing offers highly innovative systems and pioneering equipment, able to meet the needs of Ukrainian SMEs, always looking for Italian business partners, also facilitated by an important and consolidated import-export, which is constantly growing. We recall that there are more than forty types of products meant for the food processing industry in Ukraine, including the sector of processed vegetable oils, vegetable and fruit processing, with the production of tomato and apple concentrate, flour products, confectionery and dairy products. From all this, a high demand for food processing equipment and machinery comes, which some Italian entrepreneurs have already begun to fill, gaining benefits. According to data provided by the Ukrainian Statistics Service, Italy is in first place for the supply of dryers. Currently, most of those used in the country are obsolete and do not cover the needs of Ukrainian users, so the market will be increasingly receptive to such facilities. This is also true in the agri-

cultural machinery sector, in which local producers point out the lack of new technologies. For this reason, the need for these tools is met by imports, in which Italy ranks fourth as a supplier. The opportunities that arise from this scenario are therefore several and push more and more Italian companies to approach Ukraine, but a failed planning of a correct strategy of action does not always lead to the achievement of the fixed goals.

For years, the Italian Chamber of Commerce for Ukraine has supported companies in establishing business relationships with companies in the country of destination and promotes informed internationalization





processes. For 2021, the Chamber Institution has designed the Food Processing Ukraine program which, in addition to training through a course about internationalization of sales, aims at three main goals, which mark the phases of the project: promotion, web contact and definition. Subscription to an online platform by all participating companies will be a window for the products and services that will be internationalized. It will give business managers the opportunity to get in touch with Ukrainian realities with whom they will be able to dialogue, maximizing the opportunities of concluding business, thanks to the online trade expo, which will be held from 2nd to 5th March 2021. Four days in which participants will be engaged in enjoying B2B meetings, conferences, exhibitions and seminars, just like they did at physical expositions. This event will open doors to following digital events with the aim of providing entrepreneurs with right tools for achieving success. With the arrival of summer and the hoped decrease in infections, the Chamber of Commerce will be happy to guide the protagonists on a business mission in Ukraine, with personal meetings with the companies with which they have come into contact in the preliminary phases of the project: the deserving conclusion of this rich program. 🏠



ONLINE EXHIBITION / 2 - 5 MARZO 2021

# HEADS FOR INDUSTRIAL WASHING OF CONTAINERS




MACCHINE PER LAVAGGIO INDUSTRIALE DI INTERNI

L'Officina Meccanica Bolondi Ivano sviluppa negli anni '80 e '90, grazie ad un processo di ottimizzazione della produzione nato da un attento e puntiglioso feed-back con i loro maggiori clienti, una grande quantità di innovazioni tecnologiche nel settore della produzione di testine di lavaggio.

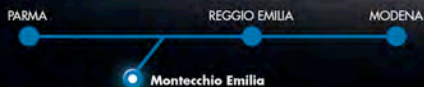
Una completa gamma di prodotti per bassa ed alta pressione in grado di soddisfare la richiesta di tutte le aziende che necessitano di un prodotto ideale alla sanificazione e alla pulizia, dal piccolo contenitore fino ad arrivare al grande ambiente.

Particolarmente curato è stato anche l'aspetto dell'integrazione con macchine e impianti industriali soprattutto nel settore alimentare, farmaceutico, chimico, analogico, dei trasporti, della nettezza urbana ed edile, con un impiego di materiali compatibili con i più svariati prodotti.

Non può essere tralasciata la particolare rifinitura di ogni singolo aspetto, che caratterizzati da un vero e proprio design innovativo sono veri e propri gioielli, tecnologicamente avanzati in tutti i singoli componenti.

Officina Meccanica Bolondi Ivano

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



HEADS FOR INDUSTRIAL WHASING OF CONTAINERS

Thanks to a programme of product optimisation, resulting from a careful and meticulous client feedback process, the 1980s and 1990s witnessed the development, by the Officina Meccanica Bolondi Ivano, of a large number of technical innovations in the washing head production sector.

A comprehensive range of low and high-pressure products designed to meet the needs of firms looking for products that are perfectly suited for sanitising and cleaning, from the smallest of containers to the largest of spaces.

Particular care and attention has been devoted to the aspects of integration with industrial systems and machines, above all in the food, pharmaceutical, chemical, wine producing, transportation sectors, and in the urban and building cleaning industry, by using materials that are compatible with a large variety of products.

It is impossible to overlook the detailed finishing touches that are applied to each and every aspect, hallmarks of truly innovative designs, and that are veritable technological treasures in each of the individual components.




rotojet®

MACCHINE PER LAVAGGIO INDUSTRIALE DI INTERNI  
HEADS FOR INDUSTRIAL WASHING OF CONTAINERS

**T**hanks to a programme of product optimisation, resulting from a careful and meticulous client feedback process, the 1980s and 1990s witnessed the development, by the Officina Meccanica Bolondi Ivano, of a large number of technical innovations in the washing head production sector.

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

# YOUR EVERYDAY WORK IS TOUGH ENOUGH



Understanding the market's needs is the most important part of creating the perfect product.

**T**he first step to achieve this is to recognize the threats and demands of the industry. Food processing workplace is a very specific one - constant necessity of quality control, contact with sharp and dangerous tools, food parts and liquids is the everyday struggle of the people working in food processing environment. And yet, the last but not least component - time. Every producer strives to combine these elements in order to achieve the high quality product manufactured in the shortest period of time possible.

Everyone who struggles with this challenges sooner or later realizes that the final score depends on every component of the process - it is highly important to use only the tools which were created especially for this kind of jobs. That's what OHAUS company takes for its first priority - creating the tools that will help their customers become the leaders in their class. When asked about the company's main foundations in creating new products, Zbigniew Pobocho, General Manager, says: "For more than 100 years OHAUS is trying to make people's job easier. The first question that we ask ourselves while creating a new product is, who is going to use them. Then we gather information about those people line of work. Creating the scale for Food Processing Industry is one of the most difficult tasks. We have to think about every possible situation that can threaten our scales' operability. But in the end it's really satisfying to create something that will make Customers work faster and easier - their everyday job is tough enough and they should not have to worry about damaging



their scale simply by spilling the liquid on it. I trust that after all the years we have finally succeeded - our Customers are highly satisfied with our new Valor 2000 and 4000 scales, created especially for food processing jobs." OHAUS latest proposal for food industry jobs are Valor 2000 and 4000 Compact Bench Scales, certified and highly resistant. Looking at their features it is clearly visible that they are the perfect tool for the food processing.

The designers of the scales have considered the need of Valor's 2000 and 4000 resistance to the sharp objects, commonly used in the food processing activities - the scales are equipped with polycarbonate knife proof keypad. It prevents damage from knives, repealing stains, moisture, corrosive fluids and food contaminants.

The scales' Flow Thru Design protects the scales from fluids and condensation that may form inside the scale from constant temperature changes

in typical food processing environments. The Valor 2000 and 4000 scales are NSF Certified and have OIML/EC Type Approval.

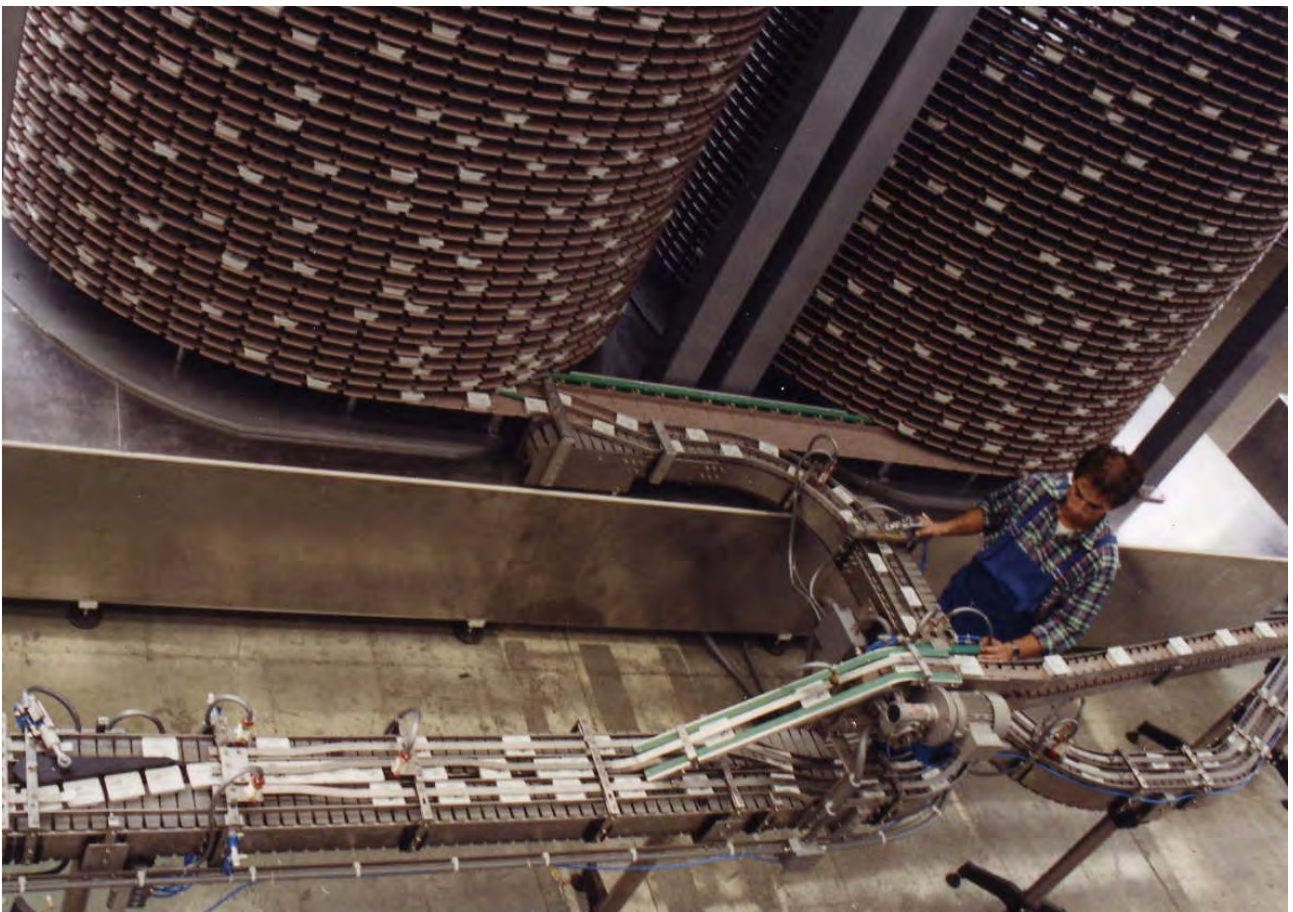
All those combined features make the Valor Compact Scales safe, fast and highly durable. Designed especially to endure in the harsh food processing jobs, they are certainly the right tool for the toughest jobs. 🏠

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

OHAUS manufactures an extensive line of high-precision electronic and mechanical balances and scales that meet the demands of virtually any weighing need. The company is a global leader in the laboratory, industrial, and education channels as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. OHAUS products are precise, reliable and affordable, and are backed by industry-leading customer support.

# CONVEYORS FOR COOLING APPLICATIONS

Cooling and Freezing of food products is in most cases an integral and final part of the processing line just before the primary packaging.



**T**he typical machine in these cases is a spiral conveyor that can work either in ambient temperature or in air conditioned or refrigerated cabinets, even if some straight freezing tunnels are still sold, they are not even closely as popular.

In this article we are going to concentrate on the main conveyor technologies used for these applications, spirals conveyors are not all the same and each technology has its ups and

downs that should be taken into consideration for the overall machine selection. All the systems are based on a sideflexing chain and what we have been seeing is polymers constantly replacing steel, now not only for the body of the chain but also for the connection pins. Modular chain give huge advantages for maintenance and sanitation and new materials are increasing the versatility in terms of temperature range and properties for direct contact with food products.

The first technology on our is the **side drive**, in this case the chain is pulled by pinions placed on each spire on the outer edge of the spiral conveyor. These pinions are connected with the same shaft and joint; depending on the configuration and speed multiple shafts with pinions may be needed on different sizes of the spiral. The downside of this system is immediately evident due to the complicated mechanics and extra safety enclosure needed, but on the up side the side drive gives



almost unlimited flexibility in terms of layout and configuration allowing oval tracks and intertwined spires that give great benefits in terms of space occupation. This technology has been available for quite a long time now, so it's mature but far from fading and the switch to plastic modular chain promise interesting developments.

The introduction of modular chain is what drove the development of the **drum drive** technology that allowed to use normal sideflexing modular chain for the longest conveyors section without any special reinforcement. The whole concept of the drum drive is to have a rotating drum (either continuous or a cylindrical cage) inside the spiral on which the chain is pulled. The drum will move at a little bit higher speed compared to the one required by the conveyor (called overdrive) and doing so will pull the chain applying low tension. The advantage of being able to drive many meters of chain, filled with products, with just two motors (one of the drum and one

to help the chain to get out from the drum) is significant even if balanced with the complication of the chain tensioning system as well as a control system that allow to finely adjust the speed of the drum to the correct overdrive speed. Another downside is that the configuration of the spiral is pretty much fixed to a cylindrical shape with just the possibility to choose the position of in and out.

Kind of a middle way between the two solutions above there is the **direct drive** system, also thought for a modular chain, this uses a rotating drum too, but this one acts as a giant sprocket, actively engaging the inner side of the chain. It retains the same low tension capacity of the drum drive as well as simple mechanics and low number of motors, but its limit is still the circular configuration only, while resolving the issue of the control system for the overdrive speed.

Last but not least, **M.H. Material Handling** has another quite unique

solution that can be used only after the primary packaging but is extremely compact and allow many meters of conveyor even with products in a single row. The **Heliflex System** is a special table top chain that uses double rotating drums with direct drive concept (so the drums act as pinions), that uses a single motor. It is suitable for a niche of applications, mainly the cooling of melted cheese after the wrapping and of ready-made dishes in open or sealed trays. While being limited to the packed product and to one or two lanes, the Heliflex still is a great deal after primary machines allowing to make the cooling in a compact footprint with competitive costs. 🏠

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



# XNEXT® INTRODUCES XSPECTRA®, THE MOST ADVANCED FOOD INSPECTION TECHNOLOGY

In 2018 there were in the European Union 136 alerts for dangerous foreign bodies (FBs) contained in the food products, with an increase of about 35% compared to the previous year.

This data is the reason why Xnext® was created to respond to the new industrial and commercial challenges of our time, introducing an extremely capillary and effective control system that saves companies time and money, and drastically reduces the number of products that are recalled from the market due to consumer complaints.

No matter how much care is taken in choosing healthy and organic food, no matter how much attention is given to the production chain, this initial data highlights how far there is still to go in the field of food inspection.

Given that the most frequent contaminant found in company analyses is plastic, which is highly harmful to the body and increasingly common in organic raw materials, new solutions to the problem are required, namely relying on more efficient methods using more detailed multi-level analysis.

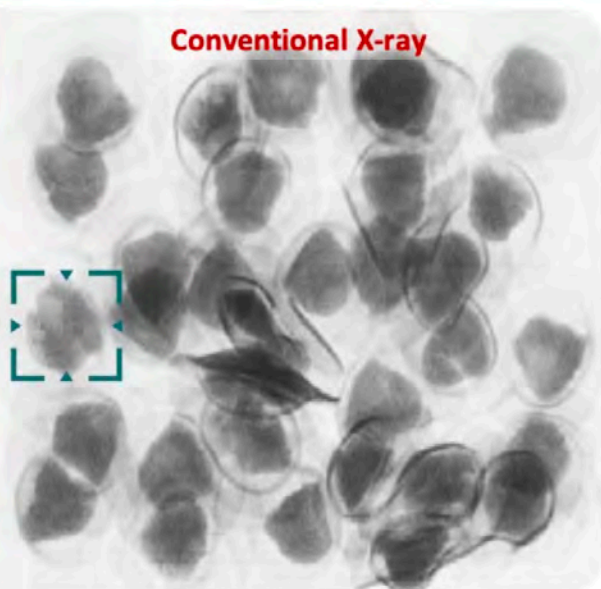
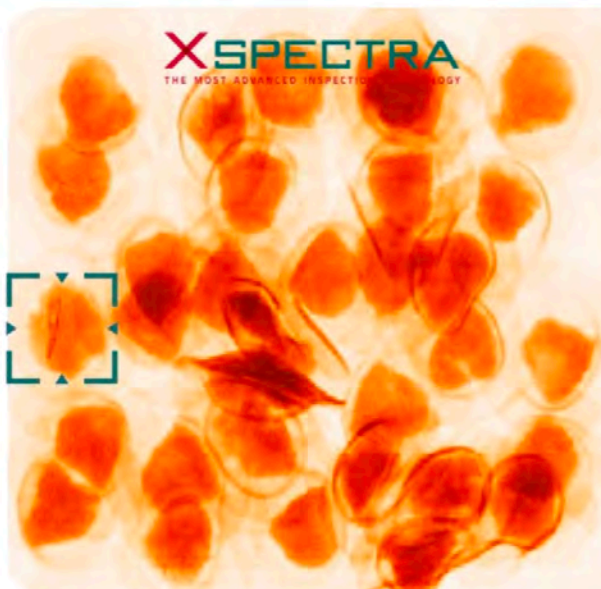
Xnext® has developed the heart of its x-ray multi-energy system, XSpectra®, to further increase the quality of supply chain control.

XSpectra® is based on inspection technology that is capable of detecting even very low-density foreign bodies and is designed to interact seamlessly with every production system currently on the market.

The inspection machine is usually inserted at the end of the production chain in order to find most contaminants at once, but can be inserted into all three main stages



Carapace fragment in filled pasta





## Xnext® was created to respond to the new industrial and commercial challenges of our time



In the pictures you can see the analysis made by Xnext® compared to a normal technology on the market.

of the production chain, at the start with an analysis of the external contaminants of the raw materials, after the food components have been processed, and directly in the final inspection when the product has already been provided with its outer packaging, where a further analysis is carried out to assess the condition of the package and its final contents before being placed on pallets for shipment. Analyses are carried out using a multilevel approach based on photonics and nuclear electron-

ics, which are brought together using artificial intelligence algorithms.

This system is the result of 9 years of research and, compared with current inspection systems, allows very low energies (below 5 keV) to be analyzed, which is necessary to detect materials of very low density.

In concrete terms, Xnext® analyses the interaction of x-ray photons at different energies, and compares the energy of the photons absorbed

by the product and the various contaminants present in and on the surface of it, if this were present (because different materials absorb energy differently).

In just a few milliseconds it generates a chemical and physical analysis of every product on the production line, whether loose or packaged, and identifies the contaminants present.

The great revolution lies in the fact that, while most analysis systems can only find high-intensity materials such as metal, stone or glass, Xnext® can also detect very low-intensity contaminants such as nuts, insects, wood, and plastic.

Common examples of products rejected by Xnext® include wood found in glass jars containing olives, pieces of nitrile gloves in chocolate bars, rubber bands inside tomato cans, pieces of carapace in filled pasta, and Pit and EPDM gasket fragments in sandwich bread. 🏠

[www.x-next.com](http://www.x-next.com)

**XNEXT**  
ADVANCED INSPECTION TECHNOLOGY

# MINI MOTOR, MORE THAN HALF A CENTURY OF INDUSTRIAL AUTOMATION

**M**ini Motor, was born in the heart of the Emilian Motor Valley, in Bagnolo in Piano (RE), and for over 55 years has been designing and manufacturing electric motors applicable in different industrial sectors, designed to meet and anticipate the needs of Industry 4.0. From Italy to the rest of the world, the company has branches in Europe, the USA, and the Arab Emirates accompanied by a widespread network of dealers.

## Automation and motion control, among the company's major innovations

Mini Motor's is a range aimed at innovation, designed to be perfectly compliant with the needs of companies working in an Industry 4.0 perspective,

with products designed for automation and motion control.

The DBS series was born in line with this philosophy: brushless motors with integrated drive and absolute multi-turn encoder, whose connectivity is ensured by the support of the 6 most common field buses. One of the great innovations of these motors is the presence in them of sensors capable of sensing temperature, current, speed, but above all vibrations, through an accelerometer. These sensors detect and communicate their anomalies and that of the organs connected to them, then, crossing the variables sent through the field bus, allow to obtain real predictive maintenance, which avoids the compromise of the production or the machine, increasing its longevity, but above all decreasing the replacement of components.

Among the DBS motors, but first, of its kind, the WBS is a brushless servo motor with integrated wireless activation, thanks to its built-in wireless interface and the presence of an inductively charged battery.

## The USB stick that brings the benefits of wi-fi to DBS engines


Perfectly inserted within the innovations brought in the mechatronics world by the Digital Transformation, the device realized by Mini Motor for better monitoring and set-up of the electric motor: the USB key for the brushless DBS motors just mentioned. It offers to the user all the advantages of the wireless connection: a wi-fi connection and a browser are enough to access from several devices and modify the parameters of the motor. The key can also be left on the electric motor, set remotely. An advantage



## Fast Change

found particularly in those machines subjected to isolation measures to prevent contamination and in those with motors located in positions difficult to reach by the user. This innovative system is the perfect cross between mechanics, electronics, and computer science, concretely able to guarantee practicality and simplicity in terms of usability by the user himself. Besides, the Mini Motor USB flash drive removes the obstacle of reaching motors in difficult positions, making it ideal for plants and machinery for the processing and handling of the product, which require sudden changes in motor speed or frequent format change operations imposed by the dynamics of the market.

For the customer, this is a gain not only in terms of convenience but also in terms of dynamism and efficiency of its fleet of motors, entering more and more into a perspective of integrated logic in which aiming to guide the entire production from remote.

As for all the projects that lead to the creation of the wide range of Mini Motor products, the fruit of years of experience but also of continuous research and a look to the future, also in this case the Emilian company does not limit itself to answering market questions, but pushes its innovation further, creating products capable of truly improving work in companies and filling the gaps of competitors. 

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



# CHANGING

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 **mini motor**<sup>®</sup>  
MECHATRONIC SOLUTIONS

# SATINOX STAINLESS STEEL BOWLS PERFECTLY WELDED FOR OVER 30 YEARS



**S**atinox has been manufacturing perfectly welded stainless steel bowls for more than 30 years. They are made by hands to fit the machines used to knead and mix dough for the bakery and pastry sector as well as for the chemical and pharmaceutical sector.

The company was founded in 1982 and since that it has been a strong believer on the value of manual metalwork fabrication. All bowls are made by expert and specialized workers, able to manufacture robust, versatile

and long-lasting tailor-made products. Satinox can count on a team that works together with passion and professional expertise, uses high-quality materials and is continuously fine-tuning its metal fabrication and welding techniques. In fact technical expertise and knowledge go hand in hand with the quality of the materials and the ability to turn traditional artisan metalwork fabrication into expert joining technique.

During the years Satinox definitely increased fabrication of bowls for

industrial use: leavening containers and bowls with bottom self-draining system for continuous mixing lines as well as bowls with heating/cooling system for specific kneading purposes and bowls with customized brackets for handling automatisaton.

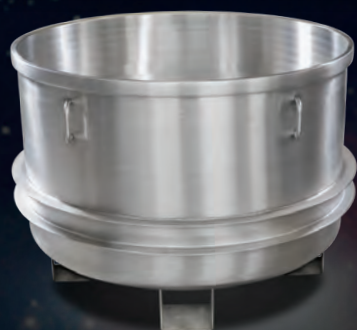
From project development to product manufacturing careful examination of any special production needs is utterly essential to find the ideal solution to optimize bowl performance and consequently machine performance. Strict compliance with the drawings, the painstaking attention to tolerances along with machining precision guarantee tailor-made products of any shape and size. 🏭



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# PACK-SIM: SOFTWARE FOR AUTOMATIC DESIGN/SIMULATION OF SCREWS AND STARS

**S**canny3D S.r.l. is a highly specialized company that deals with the design and production of reverse engineering systems, in particular 3D laser SCANNER, and the development of CAD-CAM software for the industry.

For the bottling sector, the company offers a complete, fast and automatic solution that involves the integration of a 3D rotative laser scanner with a software for the design of stars and screws.

PACK-SIM has been designed and developed entirely by Scanny3d for the design and fast and automatic simulation of SCREWS and COUNTER SCREWS, but also for the realization of STARS profiles to be included in machines of filling, labelling and packaging lines.

It consists of several modules.

The Star simulation module is able to simulate up to 3 grip quotes at the same time and guarantees the full compatibility of the generated geometries (exportable in STEP and IGES formats) with the main CAD system.

The Screw module allows to design and simulate screws and counter screws with various types of handling.

The Multistar module allows to simulate the entire bottling line in all its main phases.


Furthermore, the software allows the design of SCREWS of any type by defining CUSTOMIZED MOTION LAWS in terms of speed, rotation and position of the bottle during the handling. This



**PackSim**  
Advanced simulator for packaging & bottling

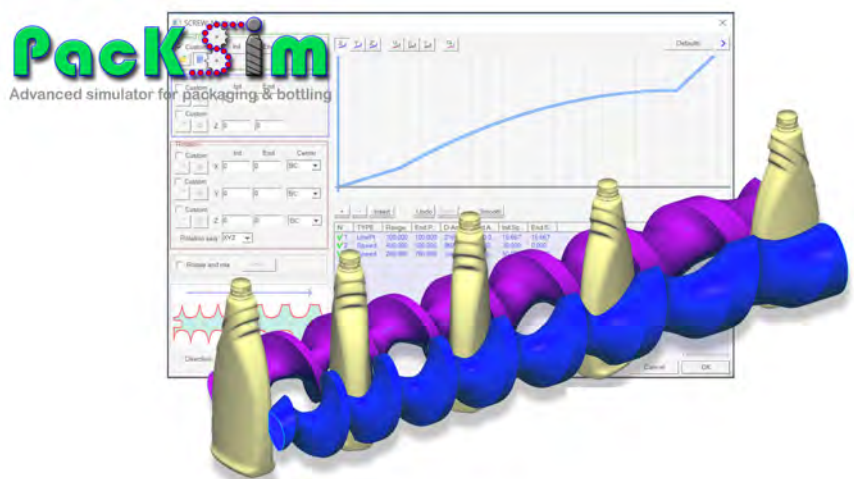
module allows to design any type of screws in 3D: from simple transport screws, to rotation, inversion and orientation screws up to the more complex screws with double or triple helix to group or separate bottles and containers through the simultaneous simulation of pairs of counter rotating screws (screw and counter screws).

The 3D simulation is performed in a few minutes and allows to obtain

a 3D model of the screw with a perfectly smooth surface ready to be made. 

[www.scanny3d.com](http://www.scanny3d.com)

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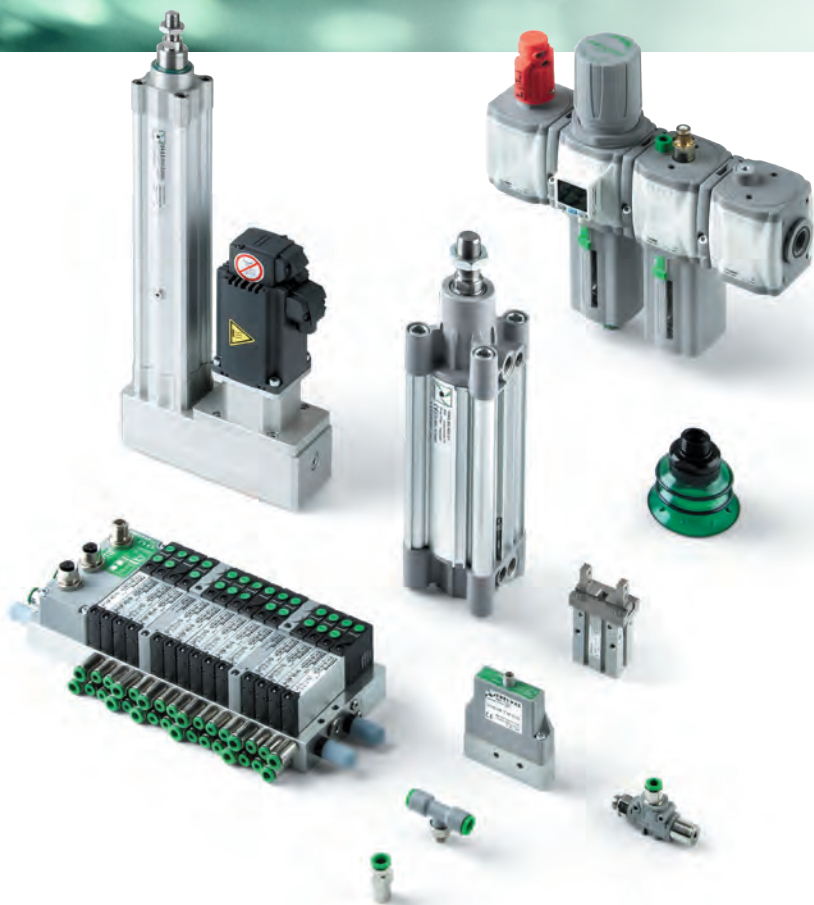


**PNEUMAX**

# Food & Beverage solutions

Technology and Competence to add value in your application

In Pneumax we manufacture components and systems for automation in the food and packaging sector by combining pneumatic technology, electric actuation and fluid control. A wide range of components in stainless steel, aluminum and technopolymer allows us to offer the best solution for each application, as unique and special as our customers.



 Italian Excellence

## FCM Fittings Food Contact Material

Compliant with MOCA and NSF/ANSI 169 standards



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

# CIRCULAR ECONOMY: INDUSTRY AND ENVIRONMENT IN CO-EXISTENCE

## “Pastazzo” promotion for an eco-friendly business

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

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

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

the supply chain, focusing on reducing industrial production costs and at the same time allowing the surrounding environment to be preserved.

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

Depending on the type of citrus fruit and processing, the production of fresh “pastazzo” varies from 49% to 69% by weight of the fruit subject to the transformation process. Some-

times the “pastazzo” also contains process water absorbed during the production phases.

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

- **4.930 [kg] of products derived from the 1° transformation**
  - 4.200 [kg] First pressing juice;
  - 700 [kg] Second pressing juice;
  - 30 [kg] essential oil;
- **5000 [kg] of fresh zest “Pastazzo”**
  - 265 [kg] Peels for the extraction of Pectin;
  - o 315 [kg] Peel for zootechnical use;
- **9330 [l] di Liquid residues**
  - 125 [kg] of Bio-Alcohol;
  - 9205 [l] of residues with C.O.D. equal to 18.500 mg/l for Bio-Gas production;

The citrus fruit pulp can be used in different ways, some of the best known concerning the organic fertilization of the land, the use in animal husbandry and the extraction of pec-






tin: a thickening polysaccharide naturally present in fruit and widely used in the production of jams. Our mission as ORION Engineering company is to make the reuse of this resource usable, through our technology under development, to give the opportunity not only to large industrial processing plants but to many others. The synergy of our growers and all the players involved in this supply chain is one of the keys of success of the process. Our country, with the notification to the European Commission of 13 February 2019, highlights the need

and importance in the use of this resource, asking for the regulation for production, marketing and use of "pastazzo" as a by-product of citrus processing for its agricultural and zootechnical use. The various scientific researches which are studying and proposing the use of "pastazzo" as an alternative for human nutrition provide further value to our recovery project. The idea is to partially replace food fats such as palm oil (used in various baked goods' preparation) with a dried fiber extracted from all the residues of citrus fruits.

From the grinding and drying of the fiber, a flour is obtained that has the characteristics of dietary fiber and great water absorption power, for a "sponge effect" that would allow this flour to at least partially replace the dietary fats present in snacks and other bakery products.

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

[www.orion-eng.it](http://www.orion-eng.it)

## NEWS IN SHORT

## IN SHORT

# MONDI PACKAGES POTATOES IN AWARD-WINNING PAPER BAG WITH SUSTAINEX® BIO-BASED COATING

**M**ondi, a global leader in packaging and paper, has partnered with SILBO, a Polish leading producer of compostable packaging, to create a paper-based high-strength packaging for the Irish farm potato business Meade Farm Group. The innovative bags replace hard-to-recycle plastic with paper, a renewable resource enhanced with a bio-based coating and are certified as compostable.

Working closely for two years, SILBO, Meade and Mondi developed the FSC®-certified bag using speciality kraft paper to ensure strength in handling while providing barrier properties to keep the produce fresh. The bag has multiple sustainability features: a corn starch-based netting for a small cut-out window, water-based ink and Mondi's biodegradable Sustainex® coating, which provides heat sealing and moisture barrier protection. The packaging has been launched across Ireland, Poland,

- Mondi collaborated with food packaging specialist Silbo to develop an innovative paper bag with bio-based coating for the Meade Farm Group
- The high-strength bag is FSC®-certified and uses Mondi's speciality kraft paper, corn starch-based netting, Mondi's biodegradable Sustainex® coating and water-based ink
- The paper bag eliminates the need to use hard-to-recycle plastic

France and Germany, winning the silver Fruit Logistica Innovation Award. The new solution helps Meade to achieve its sustainability goals: using packaging that is reusable, recyclable, renewable or compostable wherever possible.

Jan Murzyn, Extrusion Solutions & Speciality Kraft Paper Sales Manager Poland, Mondi, says: "The bags need to withstand very heavy weights, while providing a solution that is kinder to the planet. Our EcoSolutions approach means we work very closely with our customers to reach their sustainability goals and create a bespoke solution that represents the best possible option for the customer, the consumer, and the environment."

Marcin Śpiewok, SILBO Business Development Manager, explains: "The hybrid solution combines the excellent strength of speciality kraft paper and the tailor-made barrier and heat-sealing properties of compostable materials. Mondi's speciality kraft paper in combination with our net, waterbased print, and unique technology was a long sought solution in the food industry and allowed us to substitute the conventional combination of plastic and mesh. We created the worldwide first compostable form-fill-and-seal potato bag with net window to deliver strong, durable, breathable, eco-friendly packaging for Meade." 

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# SOLVE FERMENTATION CHALLENGES THROUGH APPROPRIATE VALVE SELECTION

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

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

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

The secret to meeting customer expectation every time lies in your fermentation process. To ensure quality, consistency and taste across various beverage styles and flavors, the fermentation process requires exact temperature control. To precisely control heating and/or cooling parameters, control tanks must be equipped with the right valve system.

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



The fermentation process in the beverage industry requires precise temperature control

## Common Obstacles Make Tank System Upgrades Difficult

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

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

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

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

Because fermentation is such a vital process, it's no surprise beverage makers look for opportunities to install or upgrade their tank cooling and heating systems. But these modifications aren't without their challenges. Many facilities, particularly smaller operations, have limited physical space.

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

Other challenges include:

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



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

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

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

**How To Select Valves That Overcome Fermentation Challenges**

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

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

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

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



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



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

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

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

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

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

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

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

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

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

#### **Automation Further Improves Temperature Control**

In addition to proper valve selection, it's important to consider automating your fermentation heating and cooling systems to achieve even greater thermal precision. For example, the G3 Electronic Fieldbus Platform makes this process quick, simple and painless. G3 integrates communication interfaces and input/output (I/O) capabilities into your pneumatic valve manifolds, which enables your PLC to more efficiently turn valves on and off, as well as channel temperature data from resistance temperature detector (RTD) sensors. Compact and modular, G3 includes a range of in-

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

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

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



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

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# SYNTEGON LAUNCHES NEW PICK-AND-PLACE PLATFORM

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

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

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

process technology to primary, secondary and transport packaging.”

## Maximum flexibility thanks to individual configuration

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

ety of products. The Delta robots can be flexibly connected and, together with transport modules, seamlessly integrated into an overall system,” explains Andreas Schildknecht, Product Manager Robotics at Syntegon. “Together with our customers, we can automate single process steps consecutively and in line with their needs or budgets, following the principle ‘build as you grow’. Moreover, the platform can be scaled to suit different production capacities, while multiple cells can be connected.”



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



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

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

food industry. Last but not least, the tool-free format changeover reduces downtime, allowing manufacturers to process different products on the same line and to respond quickly to changing market demands.

**Automation is the future**

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

very important one.” In parallel, Syntegon will continue to develop further innovative automation technologies – and will soon introduce new developments to the market for the food and pharmaceutical industries. 🏭

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

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



Andreas Schildknecht, Product Manager Robotics at Syntegon

# INNOVAZIONE NEI SENSORI DI RILEVAMENTO, TURCK BANNER PRESENTA IL SENSORE RADAR DELLA SERIE T30R

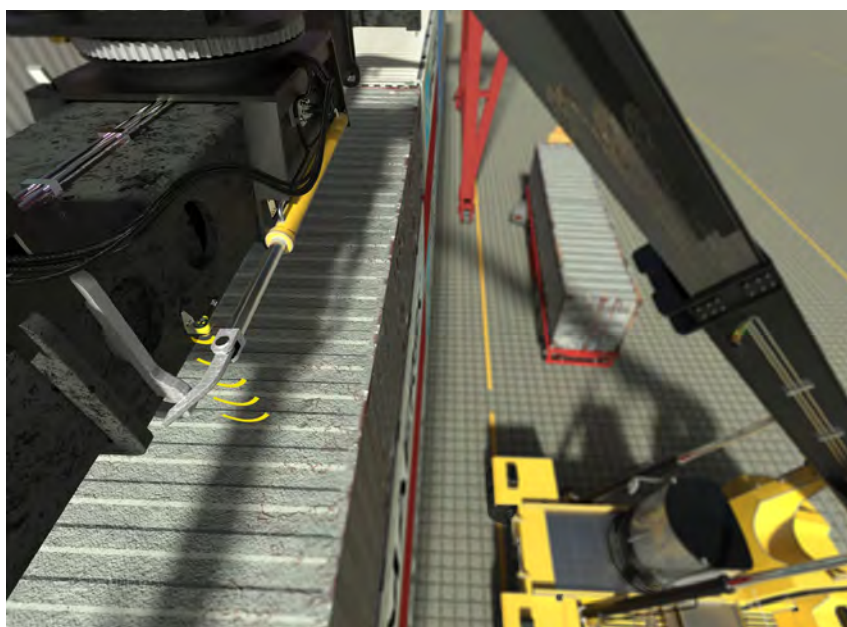
**T**urck Banner Italia, tra i principali fornitori di sensoristica, illuminatori e segnalatori industriali, sistemi bus e sicurezza, presenta l'innovativo sensore radar della serie T30R. Il nuovo sensore radar T30R rappresenta un'alternativa ai tradizionali sensori a ultrasuoni e si contraddistingue per un raggio maggiore che fornisce un rilevamento più affidabile e un feedback di posizione in ambienti difficili o in condizioni esterne estreme. Insensibile a pioggia, vento, neve, nebbia, vapore, luce solare, risponde perfettamente con una forbice di temperatura di esercizio compresa tra -40 e 65 ° C. Come altri sensori radar di Turck Banner, anche il T30R è dotato FMCW (Frequency Modulated Continuous Wave - frequenza a onda modulata continua) ideale per il rilevamento di oggetti fissi e mobili.

Il T30R vanta però capacità di rilevamento molto più precise di una più ampia varietà di materiali rispetto al tradizionale radar a 24 GHz.

Il T30R di Turck Banner è in grado di rilevare oggetti fino a 15 m e può misurare con linearità e ripetibilità inferiori a +/- 1 cm. Il nuovo sensore radar è in grado di rilevare in modo affidabile oggetti ad alta capacità dielettrica, come metallo o grandi quantità di



L'innovativo sensore radar della serie T30R è un'alternativa a più lungo raggio ai sensori a ultrasuoni. Garantisce rilevamenti più affidabili e feedback di posizione in ambienti difficili o condizioni esterne estreme. I sensori radar della serie T30R offrono una zona cieca più corta, una maggiore precisione e la capacità di rilevare una gamma più ampia di target rispetto ai tradizionali sensori radar a 24 GHz.




acqua, nonché materiali più complessi, come legno, roccia o materiale organico.

Il T30R può essere programmato utilizzando il software di configurazione di Turck Banner, semplice e gratuito, oppure tramite segnale remoto o attraverso IO-Link per un set up e una configurazione flessibili.

Sono disponibili due versioni, con doppia uscita digitale, o con uscita analogica, entrambi dotati di tecnologia IO-Link.

Il T30R è dotato anche dell'uscita Pulse Pro di Turck Banner che può connettersi direttamente a una varietà di segnalatori luminosi programmabili sempre di Turck Banner

per fornire un feedback diretto sul processo all'operatore. La soluzione Pulse Pro/IO richiede solo l'alimentazione e non è necessario alcun controller separato. Con una portata massima di 15 m, il sensore radar T30R è ideale per il rilevamento e il posizionamento di veicoli in prossimità di banchine di carico e scarico, per prevenire la collisione di apparecchiature mobili per la movimentazione di bagagli e passerelle passeggeri negli aeroporti, in applicazioni di rilevamento e misurazione all'aperto, per il rilevamento, la profilazione e il posizionamento di veicoli, in applicazioni di misurazione del livello o per il profiling di veicoli in autolavaggi. 

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



# TORQUE LIMITER ECE IN A VERY FLAT DESIGN

## Robust and perfected safety without compromises

**M**echanical Torque Limiters are used in all kinds of technical application areas. Their job is the protection of products and expensive devices.

Torque Limiters react very sensitive to the smallest increase of torque and disconnect the drive from the following masses in a split second. That's why they are also called "Safety Couplings".

The disconnection is forced, that means it has no effect on the function in case of an electrical power outage. A reason for a torque overload is for example the accumulation of material. That's why torque limiters are also called overload clutches.

The special thing about Type ECE is the axial short design, which requires a very small installation space. This simple and robust functional principle has thousandfold proved itself. It has a reliable function and still needs just few parts.

High-precision torque limitation is guaranteed with the use of special disc springs, they also enable a very wide torque range without changing the disc spring.


The perfected functional principle cuts the torque between the engine and the machine within few angle degrees. The couplings have a fixed point switching. That means one

switching point per turn. That is important to retain the reference point of the machine.

To stop the drive immediately in case of an overload, it is advisable to place a proximity switch to the disc spring. The disc spring moves while the torque limiter is disconnecting the drive from the machine. The signal from the proximity switch can be used for the drive control to stop the engine immediately.

Type ECE has a keyway for the torque transmission between engine and torque limiter.

Chain wheels, belt pulleys etc. are mounted on the engine shaft and screwed on the flange ring of the ECE for the torque transmission.

The torque limiter ECE is available in 14 sizes, and torque ranges from 2 Nm to 900 Nm are possible. 



# ELMITI SRL ELECTRIC HEATERS



**W**e are a leading company in the design and production of electric heaters, which are available in standard or customized versions, according to customer request.

Since 1979, year of foundation, we have always been characterised by a stable growth that brought us to increase not only the national trade but above all the international trade. More and more often foreign companies turn to us to obtain Made in Italy products, in which they recognize the high level of quality and reliability. Besides quality our strong points are flexibility, that allows us to satisfy the most varied needs of the customer, as well as fast delivery times. They are around 3/4 working weeks for custom-made products and 3 working days for standard products.

Our tube diameter can be 16, 12.5, 10, 8 and 6.5 in different material such as mild steel, AISI 321, AISI 316 L and INCOLOY 800. Raw materials are all of European origin.

We are well integrated in many product sector and above all in the food processing industry.

**These are some of our main items:**

- Electric heaters for cooking
- Electric heaters for pasteurization
- Electric heaters for sterilization
- Electric heaters for desiccation/de-watering of fruit and vegetable
- Electric heaters for smoking
- Electric heaters for washing and drying. 🏭

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



# SUPPORT SOFTWARE BY OPTIMA IS AWARDED THE ANNUAL MULTIMEDIA AWARD 2021

With it, challenges with machinery can be overcome in real time

**W**ith the “Remote Assist” software solution Optima has found the right answer to today’s challenges. This was the conclusion of the jury for the digital creative competition “The Annual Multimedia Award”, who conferred a silver award on the support software. Optima’s software experts developed the application in cooperation with the Crailsheim-based digital agency Stoll von Gáti, and they nominated the innovative product for the Annual Multimedia Award. The Annual Multimedia Award is one of the digital industry’s most important prizes.

On-site service assignments have become more difficult due to the pandemic; machines have to be set up or serviced. With the “Remote Assist” software solution, Optima has found the right solution for the current situation. The Annual Multimedia Award’s expert jury also thinks so. The support software received the Silver Award in the category “Best Use of Creative Technology/Digital Services”.

### Communicating simply, rapidly and securely in real time

The software simply, quickly and securely establishes an audio and video

link between the customer and Optima Support. It also features a chat function, a practical drawing function and the ability to send data. The intuitive application is complemented by encrypted communication and external hosting. Optima uses Remote Assist on laptops, tablets and smartphones as well as with augmented reality glasses. The digital service is part of the OPTIMA Total Care life cycle management program. With this program, Optima provides its customers with support throughout the entire machine life cycle.

### A joint development between OPTIMA and Stoll von Gáti

“We are delighted that our digitalization strategy is paying off and being honored with this important digital award,” says Dr.-Ing. Benjamin Haefner, Group Leader Industrial IT at Optima. “We would like to thank our partners at Stoll von Gáti, who have made a major contribution to Remote Assist’s success,” says Haefner.

In an online session, and after extensive discussions, the Annual Multimedia Awards jury awarded a total of 42 prizes to outstanding projects in digital communication and creation: 11 Gold, 25 Silver and 6 Digital Talents. This is one of the digital industry’s most prestigious awards. 🏆

[www.optima-packaging.com](http://www.optima-packaging.com)

## OPTIMA



# ISOLCELL FOOD-GRADE NITROGEN GENERATORS: FROM PIONEER TO INTERNATIONAL PLAYER

Isolcell solutions are highly customized, reliable, and always at the top of the technology available today

## **O**ver 60 years of experience

Since 1958 Isolcell has been designing and manufacturing plants that exploit controlled and generated atmosphere technology. Isolcell was the first company in Italy to develop this method of food preservation, later extending the use of its nitrogen generators to other production sectors. It is recognized as a world leader and is part of an industrial group headed by Finanziaria Unterland SpA.

Isolcell is present worldwide with a network of distributors and resellers, operates according to the highest quality standards and its product range complies with the most stringent European and international directives.

## **On-site nitrogen production, sustainable productivity**

The air we breathe consists of 78% nitrogen, 21% oxygen, 0.96% argon, and 0.04% carbon dioxide, plus other components. Nitrogen is an inert gas that lends itself to a multitude of uses. Over the years, we have invested considerable resources to study the application possibilities and make them easily available to companies. Traditional supply methods such as high-pressure cylinders or liquid nitrogen tanks create disadvantages for companies. Transport and rental costs, delays in external

# Isolcell

CONTROLLED ATMOSPHERE SINCE 1958

supply, the need to have a dedicated and delimited space, safety controls, and maintenance... all result in significant costs that are not always predictable. These factors have pushed Isolcell, for some time, to study an alternative system, more economical,

functional, and ecological: the self-production with the use of nitrogen generators.

**Isolcell generators: nitrogen right now, simply**

The traditional methods of nitrogen



distribution, especially in the last 15 years, have been gradually replaced by autonomous generators. This has resulted in clear advantages for companies. First of all, they can count on a constant and punctual supply that does not depend on external sources. Moreover, they can achieve significant savings, cutting the costs of other types of supply. They can also operate with simplicity: just one click is enough to produce the necessary quantities of nitrogen on-site, in total safety and with the desired purity.

### Food grade nitrogen

Nitrogen is classified as a food additive when it comes into direct contact with food.

The abbreviation identifying food nitrogen is "E941".

In the European Union, a specific directive indicates the minimum requirements for the use of this gas as a food additive.

Isolcell's nitrogen generators with PSA technology can supply nitrogen in full compliance with the parameters indicated by this directive.

**Benefits:** Nitrogen in the food industry is used to maintain the original organoleptic and nutritional characteristics of packaged food products. Modified Atmosphere Packaging (MAP) involves the use of nitrogen, carbon dioxide, and oxygen mixed in optimal percentages to meet the preservation requirements of various food products. These gas mixtures slow down the aging process, preserving color and taste with freshness.

Nitrogen is generated only on demand (stand-by function).

From 0.25 to 0.39 Euro per M3 of nitrogen produced, depending on the purity delivered. Amortization of the generator cost normally in less than 24 months.

The choice of high-quality molecular sieves combined with an automatic filling system specially designed by Isolcell technicians allows to limit to a minimum the maintenance inter-

ventions on the generators and eliminate costly reintegration or replacement of molecular sieves which, in optimal conditions, have a life of more than 50,000 working hours.

### Nitrogen generators Isolcell PSA NIMOS NL

Isolcell PSA NIMOS NL nitrogen generators are more efficient, quiet and easily expandable, compact, and with an essential geometry to ensure easy access to all pneumatic and electronic components.

The components that constitute the NIMOS NL generators, including the design of the machines, are designed and manufactured with the latest technologies and are the result of more than 12 months of work at the plant in Laives (Bz) by the technicians of Isolcell's Research & Development Division, followed by a long series of field tests carried out at some historical customers. Numerous international trademarks characterize a series of nitrogen generators destined to be the point of reference for many years.

The product range, the widest currently available on the market, consists of 2 series of machines able to cover the needs of most industrial applications:

- NIMOS NL PSA M Series for low flow rates, from 0.5 to 33.7 Nm<sup>3</sup>/hour, compact but with the same reliability characteristics as the larger models.
- NIMOS NL PSA S-D Series for medium and large flow rates, from 3 to over 5000 Nm<sup>3</sup>/hour.

The design of the Isolcell PSA NIMOS NL S and D nitrogen generators minimizes space requirements and allows nitrogen flow rates from a few liters per minute to thousands of cubic meters per hour.

Thanks to the modular design, you can expand your production capacity by adding additional columns or new modules. It will therefore be



possible to exploit the advantages of a "Multibanking" system capable of optimizing work cycles and energy consumption.

All Isolcell nitrogen generators are equipped with a residual oxygen analyzer which, in addition to measuring and displaying the residual oxygen value, controls the correct operation of the generators, guaranteeing the production of nitrogen of quality perfectly compatible with your needs.

The operating parameters of the generators are displayed on a 5" color touch screen.

### ISOLCELL WEB SERVER INDUSTRY 4.0

The new N2 Industry web server designed and developed by Isolcell is a remote control system dedicated to data collection, remote control, monitoring, and diagnosis of Isolcell's ON-SITE nitrogen production plant.

The N2 Industry web server removes all restrictions on the distance between the user and the system. Remote control access is possible via computer, smartphone, or tablet. 🏠

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

# FRUIT LOGISTICA 2022: BACK TO BUSINESS IN PERSON

**F**RUIT LOGISTICA, the world's largest venue for produce sellers, will be held in person from 9 to 11 February 2022.

"We asked our exhibitors, and most of them want FRUIT LOGISTICA 2022 to be a physical event here in Berlin. We will do our best to meet our customers' expectations," says Madlen Miserius, Senior Product Manager at FRUIT LOGISTICA. "The world is on the right track to coming out of this pandemic. Global vaccination efforts are making great strides, and the hard lockdowns are finally showing their effectiveness. The decreasing infection rates make us hopeful that we can invite the world to come to Berlin in February."

Proof of vaccination or negative test results from the respective day make

it possible to travel, stay at hotels, visit restaurants and take part in trade shows. Event-based hygiene concepts also provide additional safety. This means that new and old business partners will finally be able to meet in person once more.

At no other industry event in the world can people and companies involved in the fresh produce industry discover and compare so many options in one place. This is a clear selling point for Bianca Bonifacio,

The leading trade show for the global fruit trade will be held in Berlin from 9 to 11 February 2022. Exhibitors can register now, and registration will remain open until 31 July 2021.

Internationalization & Exhibitions Manager at CSO Italy: "We're looking forward to trade show business picking up again. We attend many trade shows, but FRUIT LOGISTICA is the largest and most important for us."

Exhibitors at FRUIT LOGISTICA 2022 can register online until 31 July 2021. The FRUIT LOGISTICA team in Berlin, or one of Messe Berlin's foreign representatives in 150 countries around the world, can also provide assistance. 🏛️

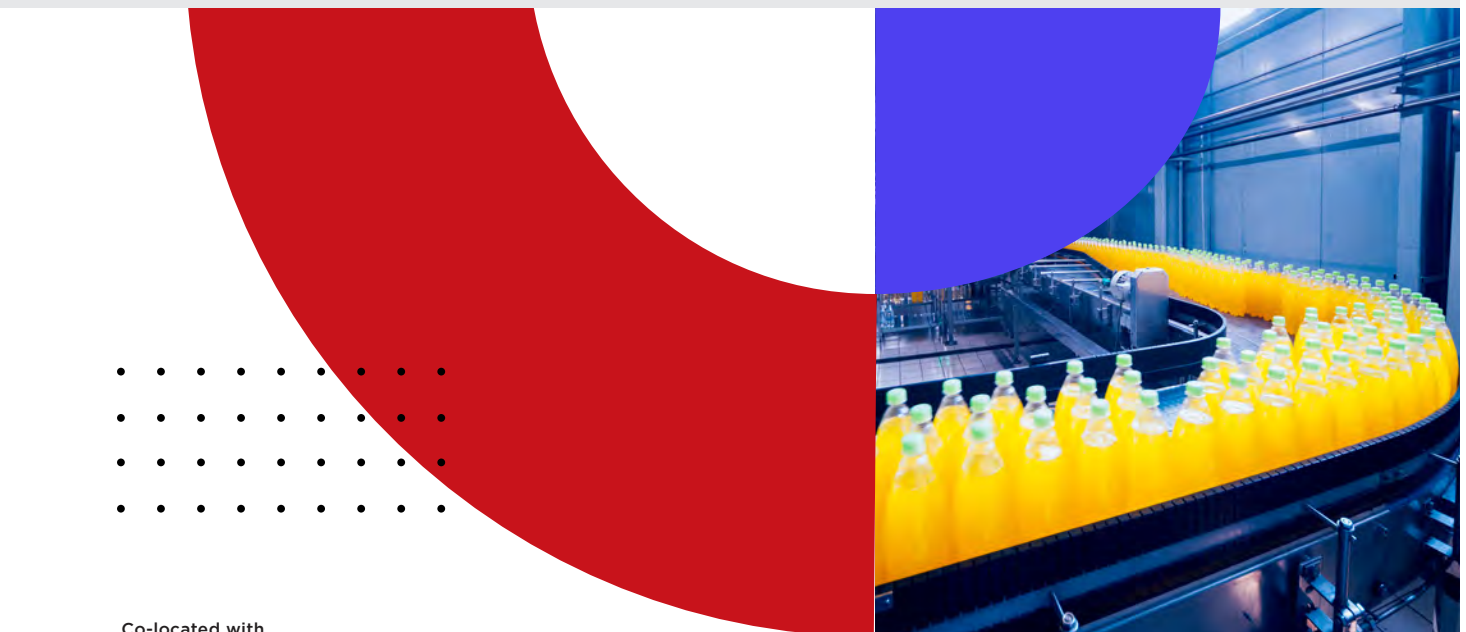
**FRUIT  
LOGISTICA**  
9|10|11 FEBRUARY 2022



# World's Largest & Safest Annual Event For F&B Processing & Packaging



Do business in **one of the world's most well-connected and thriving F&B markets**. Take pole position in the race for the manufacturing evolution.



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**EXHIBIT NOW**

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# SIRHA LYON WILL BE HELD FROM SEPTEMBER 23RD TO 27TH, 2021

GL events have confirmed that Sirha Lyon will be maintained in 2021. However, the 20th edition is rescheduled and will be held from Thursday 23rd to Monday 27th September 2021, Eurexpo Lyon.

“**F**or nearly a full year now, the food industry and Food Service sector have been among the most impacted by the health crisis”, explains Olivier Ginon, Chairman/CEO of GL events.

“The return to business in January 2021 has not reduced the uncertainty surrounding the opening of restaurants in France, which is not expected to happen before the spring. Consequently, we have taken the exceptional decision to reschedule the 2021 edition of Sirha Lyon.

The event will take place at Eurexpo Lyon from September 23rd to 27th,

2021 and will make a strong mark on the recovery of a sector that is essential to society, to the economy and even to our lives.”

Initially scheduled for January 2021, Sirha Lyon naturally takes into con-

sideration the sector it serves, a sector that has been severely impacted by seven months of cumulated closing since March 2020. All the exhibitors, partners, chefs and key players in the catering and Food Service industries have reasserted their trust

# SIRHA+ LYON





in Sirha Lyon. This 20th edition will more than ever play a central part on the path to recovery, attesting to the event's role as a pioneer and in support of a sector that is continually adapting.

GL events, like never before, will mobilize all the teams and expertise of the group. Sirha Lyon 2021 will demonstrate its ability to push back the boundaries of the events industry, to generate novelty and new services in support of the exhibitors and visitors, in a conscious and responsible way. "Sirha Lyon in September will send a strong signal for recovery and reconquest, says Marie-Odile Fondeur, Managing Director of Sirha Lyon. It paves the way for a new economy of Food Service for the post-Covid-19 era."

Sirha Lyon has now integrated the Sirha Food brand and digital ecosystem and will offer a new digital service: Sirha Connect. This powerful app will connect Sirha Lyon's exhibitors and professional visitors, enabling them to exchange before, during and after the event. It will offer the possibility to plan business meetings as well as Instant Messaging and digital business meetings features. New local and environmentally friendly stall design/creation packages will make it easier for exhibitors to create and set up their stalls.

To be accurate to its unifying and human DNA, Sirha Lyon 2021, more than ever, promises to pay a vibrant tribute to all types of Food Service that have had to adapt to this unique period in the history of the industry. The constellation of 24 Sirha contests, including the world reference events that are the Bocuse d'Or and Pastry World Cup, is intent on celebrating not simply a return to normal but a true renewal for the entire sector. 🏆

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



# INDUSTRY KNOWLEDGE AND DIGITAL KNOW-HOW EXPERT

## Industry knowledge and digital know-how expert

With Susann Seidemann, GHM will have an experienced trade fair and digital expert. She possesses over 10 years of experience in sales, market analysis, virtual events and B2B and B2C project coordination. As Head of Media Sales at a well-known media agency, she contributed significantly to the success of various projects in the trade fair industry, including electronica and iba. Susann Seidemann has a clear perspective of the challenges that lie ahead:

“ I am looking forward to the entire baking industry and especially to the trusted collaboration with the German Bakers' Confederation. It is my ambition

to further develop the brand iba, which is strongly established on the market, to introduce new changes and to make virtual components even more digital-tangible in the future. My particular focus will continue to be on the live event: In 2023, we will finally offer the long-awaited reunion for the entire family of the global baking industry with an iba in Munich. We will provide the market an iba that sets new standards for the baking world, with the clear goal of being an international business platform for experts - because there is no substitute for personal face-to-face interaction.

**Susann Seidemann, Director iba**

## Economic engine and platform for the future: Focus on synergies

With the handover of the baton, Cathleen Kabashi is devoting herself to new tasks as Director Business Unit B2B trade fairs, following an internal reorganisation at GHM. As Exhibition Manager and Head of iba since 2007, she has made a significant contribution to the development and internationalisation of the trade fair, which consistently shows itself to be an economic driver for the industry.

Most recently, she successfully implemented the virtual knowledge and networking event iba.Connecting Experts in March 2021, thus setting a milestone in the baking industry in collaboration with her team. Cath-





leen Kabashi on her role as Director Business Unit B2B trade fairs: “I am looking forward to new challenges and would like to take this opportunity to thank the entire industry once again for the cordiality and the valuable business relationships. The iba universe will remain part of my work

in the future. My goal is, among other things, to further develop iba in line with the market and to create synergies in order to offer a central and professional future platform for the global exchange of experts and a stage for product premieres and innovations.”

“ First of all, we would like to thank Cathleen Kabashi for her strategic foresight and commitment to iba over the past few years. With her, we have managed to travel from Düsseldorf to Munich and around the globe to develop and establish iba as a world trade fair. Keeping an eye on what is to come: the needs of the market. At the same time, we are looking forward to working with Susann Seidemann and congratulate her on becoming the new Head of iba. With her expertise, she will lead iba into a successful future.

**Michael Wippler, President of the German Bakers' Confederation.** 🏠



# MACFRUT 2021 TECHNOLOGICAL INNOVATION TAKES CENTRE STAGE

**S**ensors to remotely guide agricultural machinery, drones for treatments and devices that monitor soil moisture in real time. These innovations are all examples of Agriculture 4.0, which demonstrate that this sector plays an increasingly central role in a true technological revolution, and will be on show at Macfrut, from 7 to 9 September in Rimini. In fact, if there is one lesson that the sector has learnt from the Covid-19 pandemic, it is the awareness that competitiveness in the international market and innovation go hand in hand. The international trade fair for the fruit and vegetable sector will feature four dynamic areas with different activities, all with the same theme: innovation. These will include the fourth edition of the International Asparagus Days, which will be hosted by Macfrut for the first time; a test field for agricultural machinery with Macfrut Field Solution; Acquacampus, dedicated to innovations in irrigation; and the Greenhouse Technology Village, dedicated to the world of protected crops.

‘The future of our industry depends on the development of technology that allows us to cut down costs and increase quality and production yields,’ says Luciano Trentini, coordinator of the dynamic areas. ‘The fact that we can see these innovations in action is an added value for producers and technicians who will be guided in their choices. These technologies often improve environmental, economic and social sustainability; they are increasingly demanded by consumers and strongly supported by European policies. The four dynamic areas at Macfrut point in this direction and provide a detailed insight into an ever-changing sector.’

## International Asparagus Days (IAD)

Now in its fourth edition, the IAD offers field demonstrations, conferences and visits. This area, organised with the scientific and technical support of Christian Befve, one of the world’s leading experts in the industry, will cover all aspects related to asparagus: from new varieties to nursery production, from preparing the land for planting to looking after asparagus beds, from harvesting both white and green asparagus to processing produce in an environmentally friendly way in order to guarantee high-quality products for end consumers.

## Macfrut Field Solutions

The trade fair will also feature a real demonstration field covering more than 1,000 square metres, larger than the one seen in previous editions, where farmers and technicians will have the opportunity to see how cutting-edge machines and equipment work in the era of Agriculture 4.0. This area has been designed in cooperation with Cermac, the Consortium for the internationalisation of Italian manufacturers of machinery, equipment, technologies and accessories for agriculture, agro-industry and animal husbandry. ‘Macfrut kicks off the post-Covid era and, if the sector is to recover, a major in-

ternational showcase is exactly what it needs,’ explains Enrico Turoni, President of Cermac. ‘This is why, as a Consortium, we have decided to invest in both the digital and physical parts of the trade fair as well as setting up a test field for showcasing the latest technological innovations.’

## Acquacampus

Water is increasingly becoming a primary commodity and its use in agriculture will be the focus of Acquacampus, the dynamic area showcasing cutting-edge technology applied to water resources in greenhouses and open fields. It will be implemented by CER (Canale Emiliano Romagnolo), coordinated by Gioele Chiari, together with ANBI (National Association of Land Reclamation).

## Greenhouse Technology Village

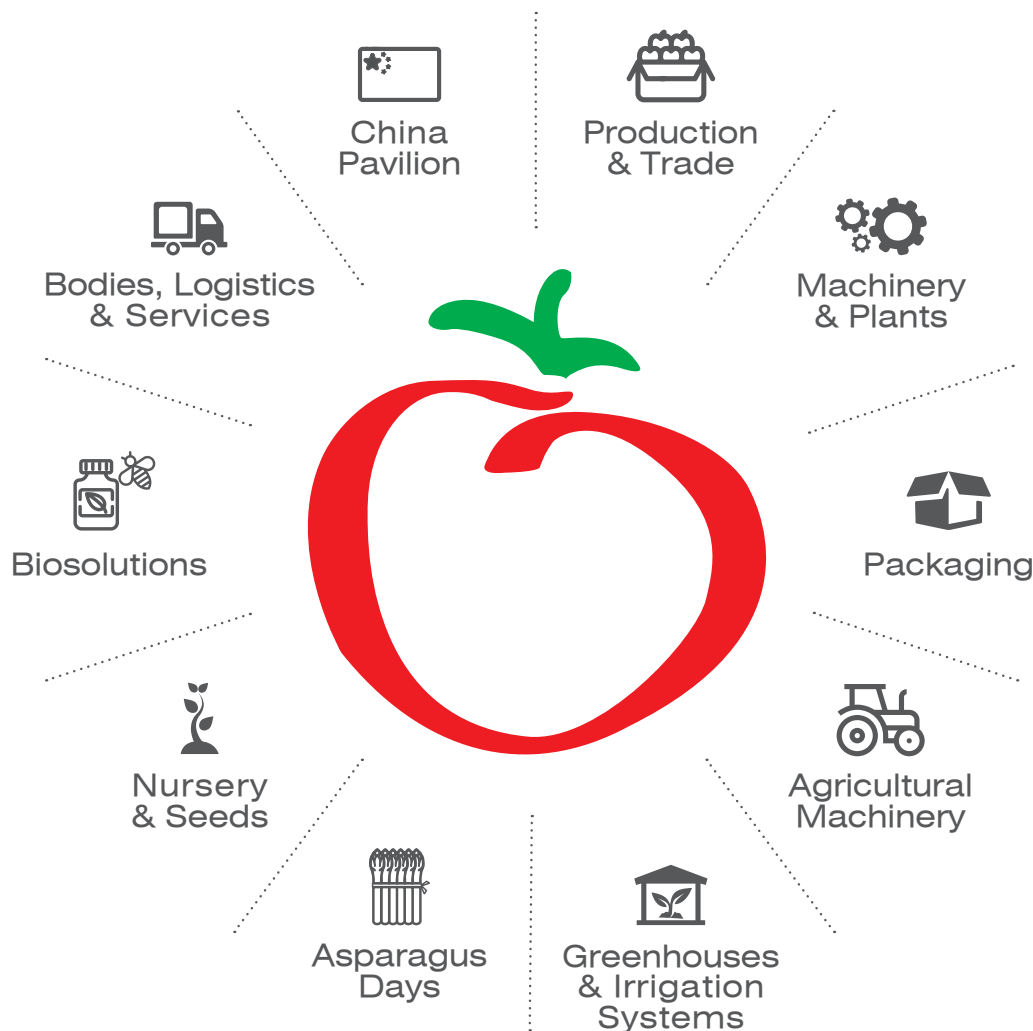
There is growing talk of vertical farming, soilless cultivation and modern floating production systems. The Greenhouse Technology Village is where production and technology will meet: an innovation village dedicated to greenhouse horticulture set up in the exhibition halls of the Rimini Expo Centre. Producers of technologies, materials and technical equipment will be attending along with seed companies and specialised nurserymen. 🏠



# MACFRUIT 2021

GET TOGETHER IN RIMINI

SPECIAL EDITION



**Exhibition onsite**  
**More business online**

**7 - 8 - 9 September 2021**  
**Rimini - Expo Centre - ITALY**

# PROPAK CHINA 2021

## Tapping the Processing and Packaging Market in Asia

**O**rganised by Sinoexpo Informa Markets (former UBM Sinoexpo), ProPak China 2021, the 27th International Processing & Packaging Exhibition, will take place at the National Exhibition Convention Center Shanghai (NECC) from 23 to 25 June 2021. This premier processing and packaging event will help advanced manufacturers to tap the flourishing market in China and Asian region.

### A grand event for processing and packaging industries in Asia

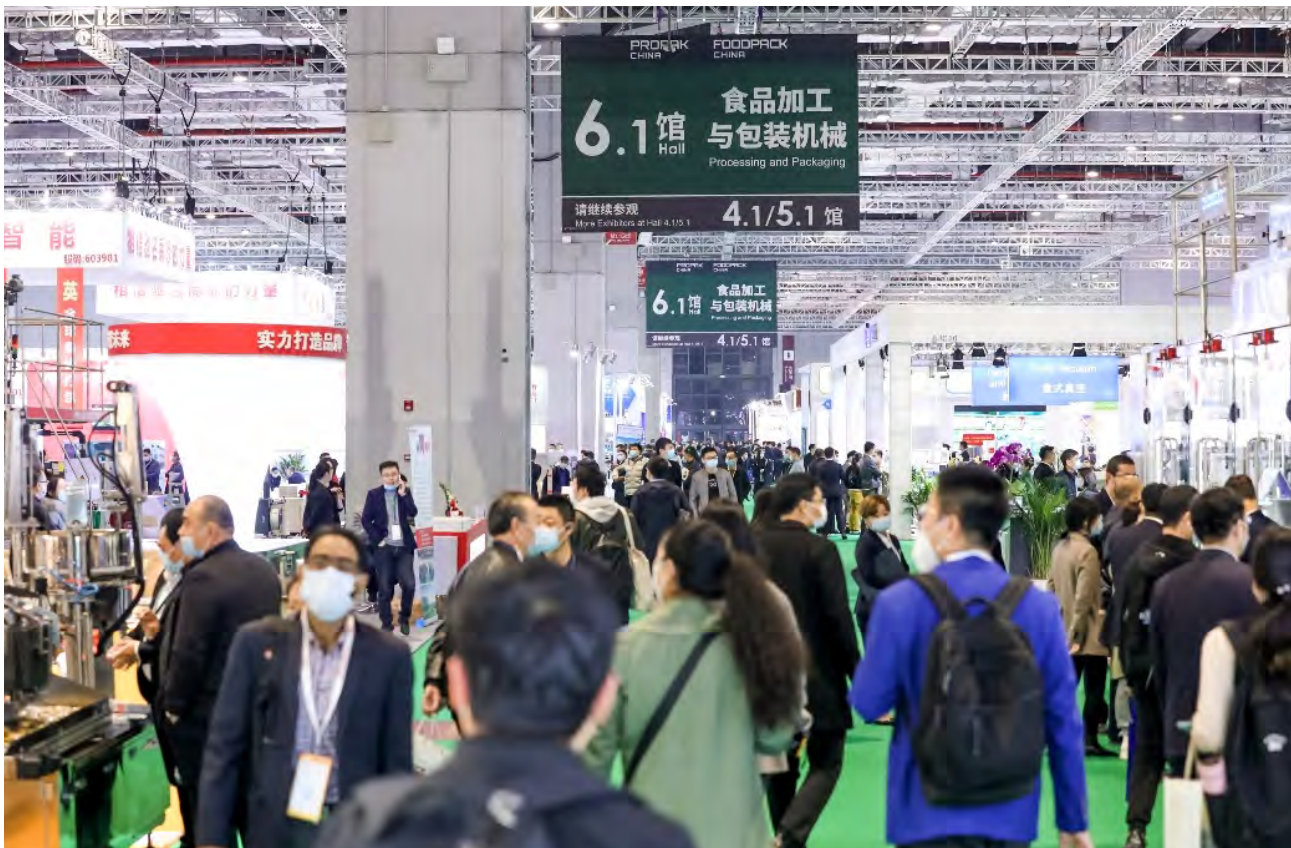
With the participation of leading exhibitors of processing and packaging industry, ProPak China is the best place to find out which machines, systems, technologies and applications are made possible by the latest developments. It provides

solutions on food processing, packaging, labelling, weighing, printing, logistics, automation, containers and materials to food, beverage, dairy, confectionery, bakery, condiment, FMCG, pharmaceutical, personal care, cosmetic, home appliance and 3C, e-commerce, courier and other industries.

Alongside with specialized trade fairs including FoodPack China, Health Ingredients China, Food Ingredients Asia-China, Healthplex

and Natural & Nutraceutical Products China, Starch Expo, and iCorrugated, ProPak China 2021 will build an ideal platform for industry professionals to connect with their target markets, showcase their brands to decision makers and network with the industry buyers that matter most. The joint exhibition is estimated to attract more than 2,000 leading exhibitors and 100,000 trade buyers from across the globe and cover a record-breaking floor space of 170,000 sqm.

# PROPAK CHINA





**A world of pioneers from across the globe**

In the last edition of ProPak China, it gathered a number of leading international companies from around the world, including Belgium, Canada, China, Finland, Germany, Italy, Japan, Netherlands, Singapore, Switzerland and USA who provided abundant choices and total solutions for improving productivity, reducing cost and solving production challenges including: Aetna, AFA, Apollo, BIHAI , BOSTAR, Fortress, DAJIANG,DANENG, Elin, Fuji Machinery, GURKI, Hengli, Huituo, HUALIAN, Ishida, JCN, Koch, Kunshan Dahe, METTLER TOLEDO, Strapack, PRECISE, Speed, Sutian, Soontrue,

Thermo Fisher, WEIKEDA, Wenzhou Dajiang, Wolf, Wuhan Rentian, Xiaoteng, Yamato, Yilong, Yuedong, Yusheng, Zhejiang Brother, Zhongheng, Zhongya and more.

Meanwhile, the show captured high attention of professional buyers and end users from all industry sectors who are from food, beverage, dairy products, FMCG, medicine, e-commerce, daily chemical and other terminal fields.

ProPak China is organised by Sinoexpo Informa Markets (Former UBM Sinoexpo), a joint venture between Shanghai Sinoexpo International Exhibition Ltd and Informa PLC. As

the world's leading exhibitions organizer, Informa Markets creates platforms for industries and specialist markets to trade, innovate and grow.

Its portfolio is comprised of more than 550 international B2B events and brands. With our expertise in operating events and exhibitions and global network in a diverse range of industries, we will help you unlock new opportunities.

Speak to us today and get your business part of the big picture.

For more information, please visit **[www.propakchina.com](http://www.propakchina.com)**



The Premier Processing & Packaging Event for China

# ANUTEC

## International FoodTec India co-located with PackEx India, Food Logistics India, and ANUTEC - Ingredients India cancelled due to rising cases and venue unavailability

India is witnessing a rapid second wave of the infection cases, and local Government has already issued a warning to re-impose the lockdown in Mumbai.

Mumbai requires massive efforts to fight the coronavirus due to the dense population. Multiple jumbo COVID Facilities are created to treat a maximum number of patients possible. Bombay Exhibition Centre is one of them where the event was planned from February 3-5, 2021.

Therefore, the organisers have made the difficult decision to cancel the

exhibition. By doing so, Koelnmesse is keeping attendees safe, helping to flatten the curve, and affecting positive change.

This is disappointing, yet needs to be appreciated that the steps are taken to help keep exhibitors, partners and attendees safe.

“This inevitable decision comes as a consequence of insurgent COVID-19 situation around us. However, with industry’s support we are confident to rise, reassemble and present the best B2B trade fair to the Indian food industry in September 2021” says

Milind Dixit, Managing Director of Koelnmesse YA Tradefair Pvt Ltd.

The next ANUTEC - International FoodTec India, co-located with PackEx India, Food Logistics India, and ANUTEC Ingredients India will be held from 15-17 September 2021 at Pragati Maidan, New Delhi. 🏛️



# ANDINA PACK PRESENTS ANDINA INGREDIENTS

in its 16th edition in November 2021 in Bogotá Colombia

With the inclusion of the ingredients sector, Andina Pack becomes the only trade show offering a complete overview of all industry sectors involved in food, beverage, and pharmaceutical production. The international packaging, food technology and processing industry will once again be meeting at Andina Pack in Bogotá (Colombia) from 9 to 12, November 2021. The Andean Region’s largest and most important trade fair for Processing and Packaging Technology is on course to

set a record of more than 500 exhibitors from 25 different countries.

Andina Pack 2021 will launch the ingredients sector with the only goal to support the entire spectrum of the industry by bringing exhibitors with specialty ingredients as well as bulk ingredients. Andina Ingredients will complement the already established trade show sectors to provide food, beverage, and pharma manufactures all they need in one platform.

Through an exhaustive range of stand displays, business meetings, semi-

nars, and workshops, Andina Ingredients will offer its visitors who are processors of food and drinks, as well as cosmetics and pharma, the opportunity to make inroads in two key fields: sourcing new ingredients and innovation. Andina Pack, jointly organised by Corferias and Koelnmesse SAS, anticipates an increase in participation of visitors from Colombia and neighbouring countries compared to the 18,000 professional buyers from the last edition and despite the world pandemic. 🏛️





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# THE FIRST VIRTUAL EDITION OF AGROPACK EXPO

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EXPO

INTERNATIONAL FAIR  
OF AGROFOOD  
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**A**gro-Pack Expo the international exhibition of agri-food and packaging industry will be held from 27th to 30th of September 2021 in the new exhibition center « Abdellatif Rahel » C.I.C of Algiers ; the first in Algeria, an economic Hybrid event through the two versions , physical and virtual, a meeting point between professionals and agri-food industry actors, national and international, in order to fulfill the needs of the mentioned industry especially during the worldwide health crisis. This event gathers an important number of exhibitors, coming from many different countries offering to the visitors a large choice of materials, equipments , products and services, rich, diversified and innovative covering all the agri-food, conditioning and packaging sectors. « Agro-Pack Virtual » an online event, accessible via an electronic platform, allowing the connection of the physi-



cal exhibition with the visitors by the exchange of information; as well as the insurance of participation of the exhibitors who have difficulties traveling due to the current health situation or with scheduling.

Agro-Pack Conferences offer to its exhibitors and visitors various themes presented by renowned speakers around the agri-food and packaging industries on the development, strategic reflections in these fields, presenting the different evolutions of the legislative context, commercial and economical of Algeria, as well as the new innovative and performing technological solutions .

AGRO-PACK VIRTUAL CONFERENCES offer to its exhibitors and visitors webinairies, videoconferences in streaming or saved videos. Thus, it will allow the exhibitors and visitors to connect and follow the full program; questions and answers via chat will be possible during these audiences. 🏠

[www.agropack-expo.com](http://www.agropack-expo.com)



# PACPROCESS & FOOD PEX MUMBAI – A COMPREHENSIVE EVENT FOR PROCESSING AND PACKAGING MANUFACTURERS

**P**acprocess & food pex Mumbai the no.1 trade fair in India for Processing and Packaging will be held on 09-11-Dec 2021, Bombay Exhibition Centre, Mumbai with all **health and safety standards**.

As the world's leading event's organiser, Messe Düsseldorf India has developed a detailed set of enhanced measures to provide the highest levels of hygiene and safety at its events, providing everyone with reassurance and confidence they are participating in a safe and controlled environment.

Pacprocess & foodpex Mumbai aims to witness participation from over 200 exhibitors with representation from over 10 countries including from Germany, Italy, China, Singapore, etc., spread across 10000 sqm of exhibit space who will present their latest technology & innovations of machinery, materials, process control & testing, and automation for the processing & packaging market.

Part of the hugely successful Inter-pack pacprocess & food pex Mumbai is well supported by industry and is backed by international organizations and Indian associations.

Pacprocess & food pex India endeavors to analyze trends, forecast future developments and come up with viable solutions to help businesses thrive. It showcases the true potential of the processing & packaging industry for India.



# NETWORK WITH POTENTIAL BUYERS AT A GLOBAL STAGE



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**15-17 September 2021 | IECC, Pragati Maidan, New Delhi**

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4business

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For more information:

info@koelnmesse-india.com  
+91-22-62044800



The key highlight of the show is its ability to reach out to various industries through one platform - food, dairy, beverages, personal care & hygiene, industrial goods, e-commerce, pharma, and cosmetics. 🏛️

**About Interpack Alliance**

The new label interpack alliance spans all international events staged by Messe Düsseldorf under its Processing & Packaging portfolio. The interpack alliance addresses the target groups of food, beverages, confectionery and bakery, pharmaceuticals, cosmetics, non-food consumer goods and industrial goods in key emerging markets, focusing on different areas in each individual event. For more information visit:

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



**About Messe Düsseldorf India**

Messe Düsseldorf India is amongst the leading global players in the trade fair and event industry. Messe Düsseldorf India Pvt. Ltd. is a fully owned subsidiary of Messe Düsseldorf GmbH which is a global player both as a trade fair organizer and as a provider of trade fair related services for exhibitors and visitors. Since inception, the Messe Düsseldorf team in India is dedicated to closely work with both Indian as well as international partners in India.



To know more about, Messe Düsseldorf India, please visit:

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



# EXHIBITIONS - EXHIBITIONS

## EXHIBITIONS

## 2021-2022

### SIGEP

15-17/03/2021

RIMINI

Fair for bakery, pastry, ice cream, coffee.



### mcTER

12/04/2021

ROME

Exhibition on energy efficiency.



### BEER&FOOD ATTRACTION

12-13/04/2021

RIMINI

Fair for beers, drinks,  
food and trends.



### FISPAL

22-25/06/2021

SÃO PAULO

Fair for product from packaging.



### SPS/IPC DRIVES/ITALIA

06-08/07/2021

PARMA

Fair for industrial  
automation sector.



### CIBUS

31/08-03/09/2021

PARMA

Fair of food product.



### MACFRUT

07-09/09/2021

RIMINI

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



### mcT COGENERAZIONE

21/09/2021

MILAN

Exhibition for applications  
of cogeneration.



### FACHPACK

28-30/09/2021

NUREMBERG

International packaging trade fair.



### HISPACK

19-22/10/2021

BARCELONA

Technology fair for packaging.



### MEAT-TECH

22-26/10/2021

MILANO

Fair for the meat and ready meals industry.



### HOST

22-26/10/2021

MILANO

Fair for bakery production  
and for the hospitality.



### SAVE

27-28/10/2021

VERONA

Fair for automation, instrumentation, sensors.



### mcT ALIMENTARE

28/10/2021

BERGAMO

Fair on technology for the food&bev industry.



### MECSPE

23-25/11/2021

BOLOGNA

Fair for innovations  
for the manufacturing industry.



## MIDDLE EAST 2021/22

### GASTROPAN

11-13/03/2021

ARAD

Fair for the bakery and confectionery industry.



### GULFHOST

07-09/11/2021

DUBAI

Fair of hospitality.



### PROPAK ASIA

16-19/06/2021

BANGKOK

Fair for packaging, bakery, pastry



### HOSPITALITY QATAR

09-11/11/2021

DOHA

Fair of Hospitality and HORECA



### PROPAK VIETNAM

28-30/07/2021

SAIGON

Fair for packaging, bakery, pastry.



### WOP DUBAI

22-24/11/2021

DUBAI

Fair for for fruits and vegetables.



### IRAN FOOD BEV TEC

01-05/09/2021

TEHRAN

Fair for food, beverage&packaging technology.



### DJAZAGRO

22-25/11/2021

ALGERS

Fair for companies  
of the agro-food sector.



### ANUTEC

15-17/09/2021

NEW DELHI

Fair for the food&beverage industry.



### PACPROCESS FOOD PEX

09-11/12/2021

MUMBAI

Fair for product from packaging.



### GULFOOD MANUFACTURING

07-09/11/2021

DUBAI

Fair for packaging and plants.



### GULFOOD

13-17/02/2022

DUBAI

Fair for food and hospitality.



# EXHIBITIONS - EXHIBITIONS

## EXHIBITIONS

# 2021-2022-2023

### SIGEP

22-26/01/2022

RIMINI

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



### PROSWEETS

31/01-02/02/2022

COLOGNE

Fair for the sweets and snacks industry.



### INTERSICOP

02/2022

MADRID

Fair for bakery, pastry, ice cream, coffee.



### FRUIT LOGISTICA

09-11/02/2022

BERLIN

Fair for fruit and vegetables.



### COSMOPROF

10-14/03/2022

BOLOGNA

Fair for the cosmetic production chain.



### ProWein

27-29/03/2022

DUSSELDORF

International wine & spirits exhibition.



### VINITALY

10-13/04/2022

VERONA

International wine & spirits exhibition.



### LATINPACK

26-28/04/2022

SANTIAGO CHILE

International packaging trade fair.



### ANUGA FOODTEC

26-29/04/2022

COLOGNE

Fair on food and beverage technology.



### IPACK-IMA

03-06/05/2022

MILANO

Exhibition for the packaging industry.



### POWTECH

30-08/01-09/2022

NUREMBERG

The trade fair for powder processing.



### DRINKTEC

12-16/09/2022

MONACO

Fair for the beverage and liquid food industry.



### SIAL

15-19/10/2022

PARIS

Fair on food products.



### SUDBACK

22-25/10/2022

STUTTART

Fair for bakery and confectionery industry.



### BRAU BEVIALE

08-10/11/2022

NUREMBERG

Fair of production of beer and soft drinks.



### SIMEI

15-18/11/2022

MILANO

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



### ALL4PACK

11/2022

PARIS

Exhibition about packaging technology.



### INTERPACK

04-10/03/2023

DÜSSELDORF

Fair for packaging, bakery, pastry.



### IBA

22-26/10/2023

MONACO

Fair for the bakery and confectionery industry.



## RUSSIA CHINA

### INPRODMASH

14-26/09/2021

KIEV

International packaging machinery exhibition.



### AGROPRODMASH

04-08/10/2021

MOSCOW

Fair of machinery and equipment for agroindustrial industry.



### UPAKOVKA

25-28/01/2022

MOSCA

International packaging machinery exhibition.



### MODERN BAKERY

22-25/03/2022

MOSCOW

Fair for bakery equipment and food ingredients.



### BEVIALE MOSCOW

29-31/03/2022

MOSCOW

International trade fair for the beverage industry.





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Italy

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CHINA**



**Hi** Health ingredients  
China  
健康天然源

**Fi** Food ingredients  
Asia-China



**POTATO  
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## Exhibitor Profile



Food Processing Machinery



General Food Machinery



Packaging machinery



Industrial robots and automation



Packaging materials and products



Labelling technology/ Flexible packaging



Logistics packaging

### Space booking:

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Sinoexpo Informa Markets  
T: +86 131 4389 6198  
E: vicky.leung@imsinoexpo.com

Mr. Andrea Boccellini (Worldwide)  
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