

# FOOD

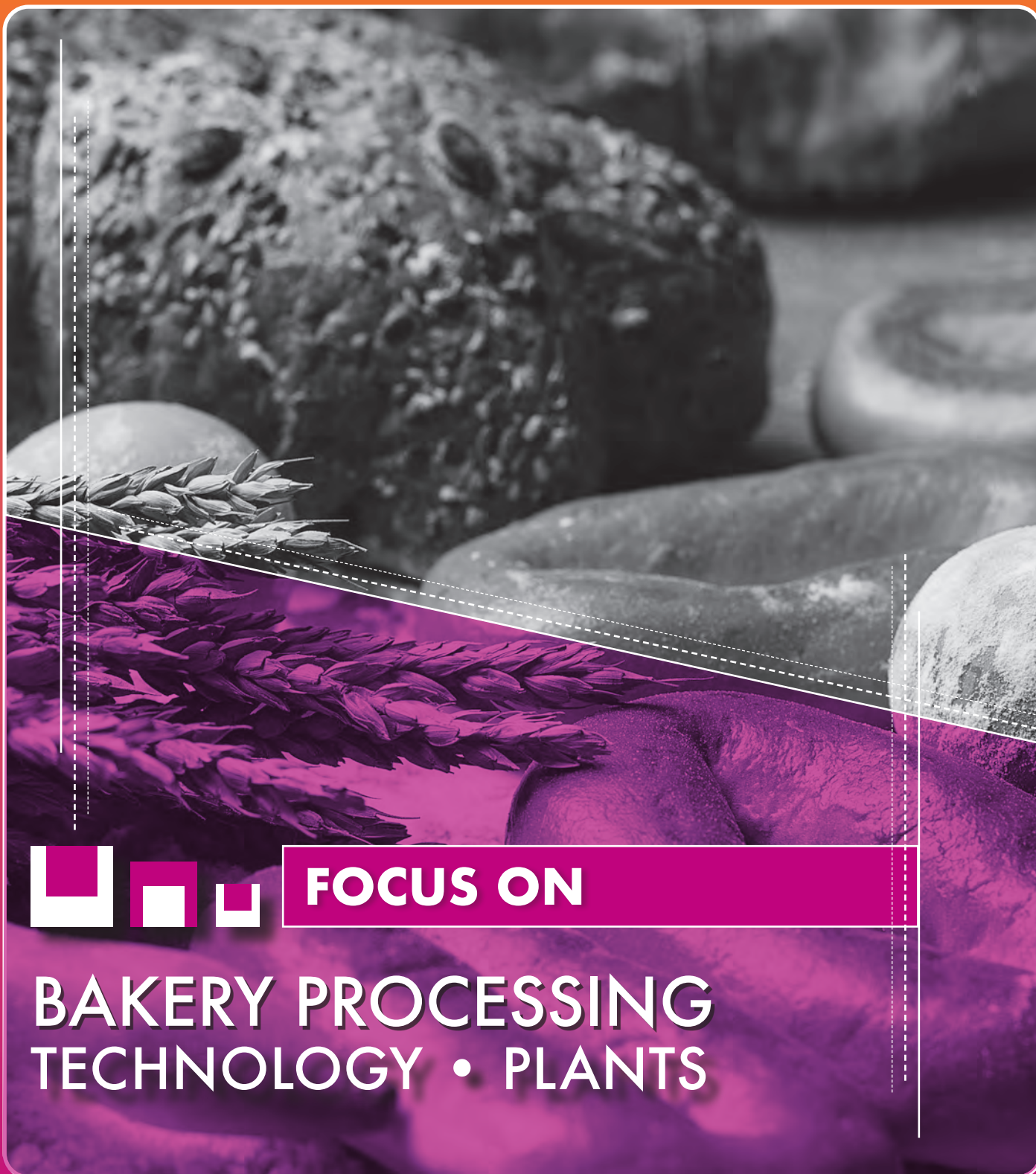
## PROCESSING

it. MAGAZINE

n° 6-2022

**BEVERAGE & PACKAGING**

**PROCESS  
AND PACKAGING**



**FOCUS ON**

**BAKERY PROCESSING  
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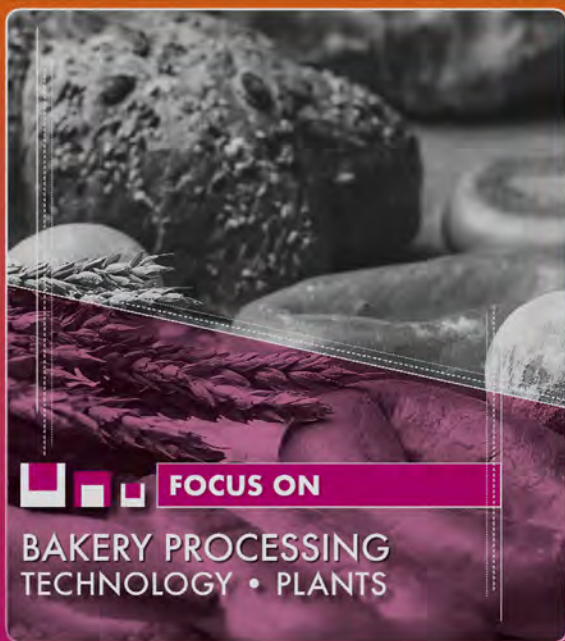
**FOOD**

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ir. MAGAZINE  
n° 6-2022

**BEVERAGE & PACKAGING**

**PROCESS  
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**magazines  
and web portal  
focusing on BAKERY  
and on the  
FOOD&BEVERAGE  
technology**



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SONIA V. MAFFIZZONI  
*Editorial Manager*

We are coming up to the new year with many certainties.

Whilst on the one hand the difficulties related to the supply of raw materials and energy are a cause for concern, on the other hand the market is showing momentum and an excellent capacity for innovation.

We are doing our best in a complex scenario and, sooner or later, the results will come.

We just need to apply our optimism, that is, our ability to see the glass half-full.

However, we also need a dose of realism, shaped by the certainty that the other half of the glass is not empty, it is just full of another fluid substance we call air. That gas that is vital for all living beings and for the food that we process and consume. Nothing is as it seems. There will of course be challenges and changes to be managed, but the industry is ready and in order.







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**EDITRICE**  
**zeus**

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# TARNOS ELECTROMAGNETIC vibration for the confectionery and the bakery industry



**T**he features of the new generation TARNOS vibrators, which have been manufactured at its facilities in Madrid for more than 60 years, have given a solid boost for its applications within the food sector, specifically for the confectionery and the bakery industry.

This electromagnetic equipment works with a very little amplitude but high frequency to feed product, even powder, very uniformly and instantly controlled.

The specifications and finishes of the equipment meet the most demanding hygiene standards in the sector, protection against dust and water IP-66, stainless components, FDA paint, among the most common.

Precisely due to the high sanitary requirements, vibrating equipment is especially suitable for the food sectors, since, not only, they are easy to clean, but they also avoid product remains and traces along the surfaces in contact with the material manipulated.

The instantaneous regulation units present variants depending on the needs of the installation: double speed, manual or signal regulation, different IP finishes, etc.



The electromagnetic vibrating applications shown in the pictures are:

- Seasoning feeder for salt, spices, and other additives.
- Spreading vibration feeder for sugar glass, chocolate drops or any kind of toppings.

In both cases, the purpose is the supply a curtain of products uniformly, like sugar sprinkles in cakes, chocolate drops in cookies, toppings over muffins, etc. 🏠

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## **TARNOS**



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- ✓ Possible ATEX execution for almost all range of vibrators.
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- ✓ UL/CSA certification upon request.

### USES AND APLICATIONS

- ✓ Standard vibrators as strategic components of dosers, weighers, optical sorters, counters.
- ✓ Feeding and dosing to elevators, belts, weighers, freezing tunnels, cutters, sorters.
- ✓ Feeding and transport of solids in packaging and canning processes.
- ✓ Feeding and dosing of the spread product.
- ✓ Removal of impurities and safety check.
- ✓ Product clasification by size.
- ✓ Spread and distribute toppings uniformly
- ✓ Load big bags and boxes.
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- ✓ Orientation, separation, transport and PICK UP line, inspection.

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## “THE BREAD MAKING INDUSTRY TODAY”

To overcome the difficulties brought about by the pandemic and the war in Ukraine, the bread making industry has had to rethink its methods, resulting in innovation and change.

Over the past two years the world has witnessed a series of worldwide transformations that, without exaggeration, could be defined as epic, given the way that they've profoundly affected the lives of billions of people, their way of thinking, and consequently their way of seeing the world. The Covid-19 pandemic, followed by the war in Ukraine, have brought relevant, but latent, topics to the forefront of public debate, topics such as climate change. Other closely related issues, like that regarding the use of plastic, have changed course within just a few short months. Still others, like the interconnection between various production systems, have made themselves strongly felt in our daily lives for the first time in years.

We've long heard talk about globalization, the free movement of goods, people, knowledge, and capital, but never before had we so powerfully realized the extent to which this global freedom of movement could become a serious hazard when what's being circulated is a deadly virus. It's impossible, therefore, to come up with local solutions to a crisis that requires a search for global solutions.

We've now realized that, in order to function, a world market needs all of its hubs to be working properly and efficiently: no man, nor any production system, is an island.

The topics of ecology, of respect for the environment, and of the need for an unsustainable production system to change its pace, have, in general, asserted themselves forcefully. But at the same time, hygienic-sanitary regulations imposed by measures intended to contain the spread of the virus, have caused new habits and new consumption methods to develop.

For instance, the trend which viewed packaging as an enemy to be fought by any means available, encouraging, for example, the purchase of bulk products, was replaced by thoughts regarding the possibility of sustainable packaging, capable of combining hygienic-sanitary needs and ecological needs.



by Gabriele De Luca





The war in Ukraine, though unrelated to the pandemic which brought the world to its knees in 2020, has further intensified a series of trends that were triggered by COVID-19. The need to address the shortage of natural gas, for example, has forced a profound re-examination of energy sources, industrial production methods, and even personal habits.

The freeze on the production of wheat in one of the most important grain production regions in the world has, once again, highlighted the negative aspects of such extreme interdependence between global production systems.

Within this quickly outlined scenario, the bread making industry plays an exemplary role, encapsulating all of the aforementioned issues.

The grain crisis has, for example, forced a rapid development in the conversation about the use of alternative flours. But that's not all. The ecological challenge has also encouraged broad debate within the bread making world regarding production technologies, as well as those used for packaging and preservation.

The results vary greatly. For example, there's talk of a new wave in baking, which has seen the emergence of more and more young, independent bakers, who have even come together in a movement known as PAU, *Panificatori Agricoli Urbani* [Urban Agricultural Bakers] and whose motto is "Bread for Change", with a programmatic manifest.

Meanwhile, in a more strictly industrial context, a trend that has emerged is that of soft wellness, the tendency to combine the aforementioned search for new, healthier, and more beneficial flours with a specific focus on flavour and sensory gratification.

To this end, new consumption habits, also outside of and aside from the changes sparked by the pandemic and the war, have led to further changes in the bread making world, in particular when it comes to the study of long fermentation processes, the use of sourdough starter, and other practices aimed at combining flavour and wellness.

Furthermore, the world of industrial baking is obviously not outside of the debate regarding the use of plastic and packaging in general. There are many new developments taking place within the baking industry: from the study of isothermal containers made out of recycled waste from the fishing industry to flow-pack packaging in paper or recycled materials.



A whole chapter unto itself is dedicated to the world of products created for the bread making industry in order to deal with new consumption habits like, for example, the ever-growing spread of gluten intolerance and forms of celiac disease.

From an ancient art, bread making has today become an industrial sector that's undergoing a profound transformation, rich in innovation and change. In this issue of Food Processing you'll find a partial and temporary, though undoubtedly useful and updated, map which will help you to orient yourself among the most recent developments in the world of bread baking. Are you ready to go?

# SOTTORIVA, between tradition and zero-stress innovation



MR8 2.0, automatic divider for industrial production

**S**ottoriva, an Italian company that for over 70 years has been manufacturing machines for bakeries, pastry shops and pizzerias, is known worldwide for the wide range of its offer: from small mixers to complex industrial lines, all made in Italy, very competitive in terms of quality.

The company's distinctive feature is to be able to understand the market needs, especially in the food sector, where needs change quickly. Nowadays, in fact, consumers are more and more careful about the quality of products and therefore to the ingredients used to make them. As far as bread making is concerned, this involves the need to make quality bread, without chemical preparations or shortcuts, while maintaining the natural leavening of the product.

For this reason, Sottoriva has conceived zero stress dividers, with an innovative system to process leavened dough. What does zero stress mean? It means that the dough is treated by the machine with great care, in order to keep inside the air produced by leavening and in this way facilitate its development, thus obtaining a product of extreme lightness and fragrance.

Studied and developed in the last few years, this system maintains the natural leavening time of bread, respecting the true Italian gastronomic tradition.

The company has developed various dividers with this technology.

The **MR8 2.0** model, designed for the industry, a laminating machine

that cuts and shapes in a practical and precise way, without ever stressing the dough. The result is a high-quality bread, very similar to the artisan bread but with an industrial production.

This divider is equipped with a sensor that can detect the characteristics of the dough, to treat it in a delicate way. It is ideal for soft and leavened dough, such as ciabatta, French bread and all the types of bread fashionable today, such as the triangle and the diamond, for example. It is also a very versatile machine that can be set quickly and easily according to the customer's needs.

Even **ATHENA PLUS**, a high production divider rounder, has a zero stress system. This machine, that does not stress the dough, has a very high weight accuracy, maximum flexibility





Athena Plus, divider rounder suitable for industrial production



Dinamica, divider rounder suitable for medium production

and a range of weight range from 25 to 600 g. It is a machine suitable to divide and round dough to make round and stamped bread, hamburger bun, long-loaf bread, pita, pizza, tortilla and many others. Athena Plus can also be equipped for the treat-

ment of gluten-free dough, whose demand is growing strongly, managing to work in the best way even the stickiest gluten-free dough.

The **DINAMICA** model is also part of the production range, divider rounder

whose name already announces its intrinsic characteristics. It is indeed a machine that allows a great flexibility of weight, always ensuring a great accuracy in the final result. Here too we find the zero-stress system: it works in a delicate way both soft and semi-hard dough.

And finally **LYRA**, a two-row divider rounder designed to satisfy even the smallest production with extraordinary precision. Available in both mechanical and electronic versions, it is ideal for the production of round bread perfectly leavened.

Four dividers with different characteristics and production capacities, designed to allow both small and industrial bakeries to benefit from the new zero-stress technology. 🏠

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

Lyra, divider rounder suitable for medium-small production



# Level regulation without blemish

## Smart level sensors in **CHOCOLATE PARADISE**

**C**apacitive sensors are a fine thing in and of themselves: They can detect levels of liquids, powders and granular materials through non-metallic container walls without the sensor coming into contact with the media. However, conventional capacitive sensors also have a number of disadvantages. The sensitivity of the sensor must be adjusted in a time-consuming process so that the signal is triggered not by the container itself, but by the container wall together with the medium. And if you ever try to accurately detect the level of chocolate, ketchup, etc. using a conventional capacitive sensor, you will discover that these media do not drain without leaving residue, and deposits regularly lead to sensing errors, which make error-free measurement impossible.

This challenge was faced also by Gysi, the renowned chocolate manufacturer in Switzerland, when seeking to equip the agitators of various tempering machines for heat treatment of chocolate when retrofitting new sensors for level regulation. The previous level detection system based on measuring the pressure difference was getting up in years and repeatedly had to be checked and cleaned at regular intervals, which incurred considerable effort and downtime. Therefore Gysi looked for a new solution.


First attempts with a built-in sensor from the machine manufacturer, however, did not look promising because the application could not be left unattended. Then a Balluff



sensor with smart level technology was chosen finding an error free solution.

Smart level sensors operate at an oscillator frequency significantly higher than conventional capacitive sensors. In addition, the patented electronic processor unit gathers more information than is usually the case with capacitive level measurement. It evaluates not only the capacitance, but also the conductivity value of the medium. Since compact media have high, thin films of the same medium, but only low conductivity values, the new sensors have no trouble distinguishing between thin deposits and the real level. This means that sensing errors with media that do not drain without leaving residue, such as chocolate, are largely prevented. Gysi now has 6 machines retrofitted with the new sensors and there are already plans to

retrofit additional systems. The sensor in the container wall detects the level of the chocolate directly through the end face of the plastic sleeve in the container wall. If the chocolate falls below a certain fill level, the sensor triggers and after 30 seconds liquid chocolate is refilled until the optimum fill level is reached.

Unlike conventional capacitive sensors, these fill-level indicators do not have to be readjusted, neither during operation, nor when changing the recipe. Thus the switch point between white and dark chocolate, for example, differs by only three millimeters. 

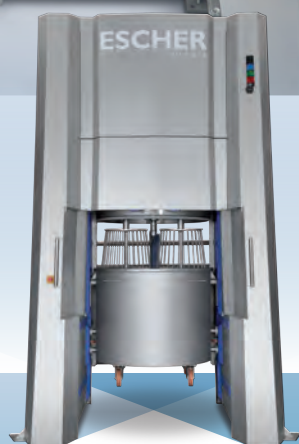
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**E**scher Mixers specializes in the production of mixing machinery for the bread and pastry-making sectors. Over the years we have gained specialized knowledge that has allowed us to develop machines and solutions to meet the needs of a variety of 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.

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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.

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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



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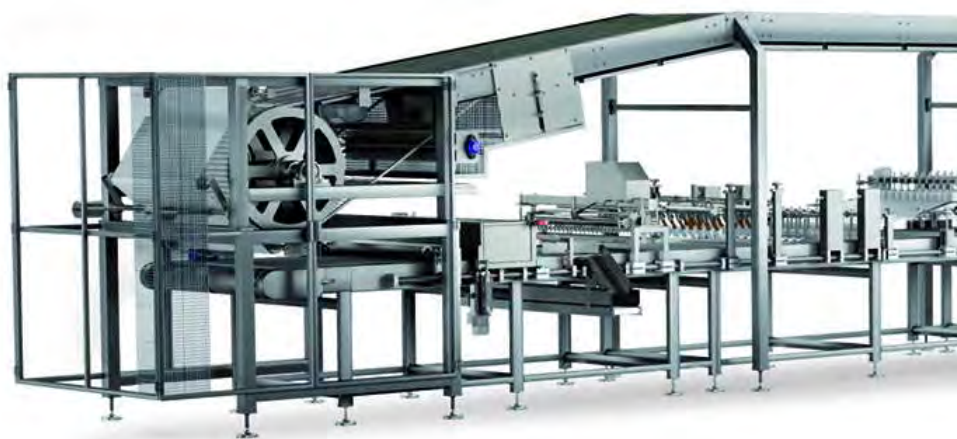
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## **MATCHLESS MIXING SYSTEMS.**

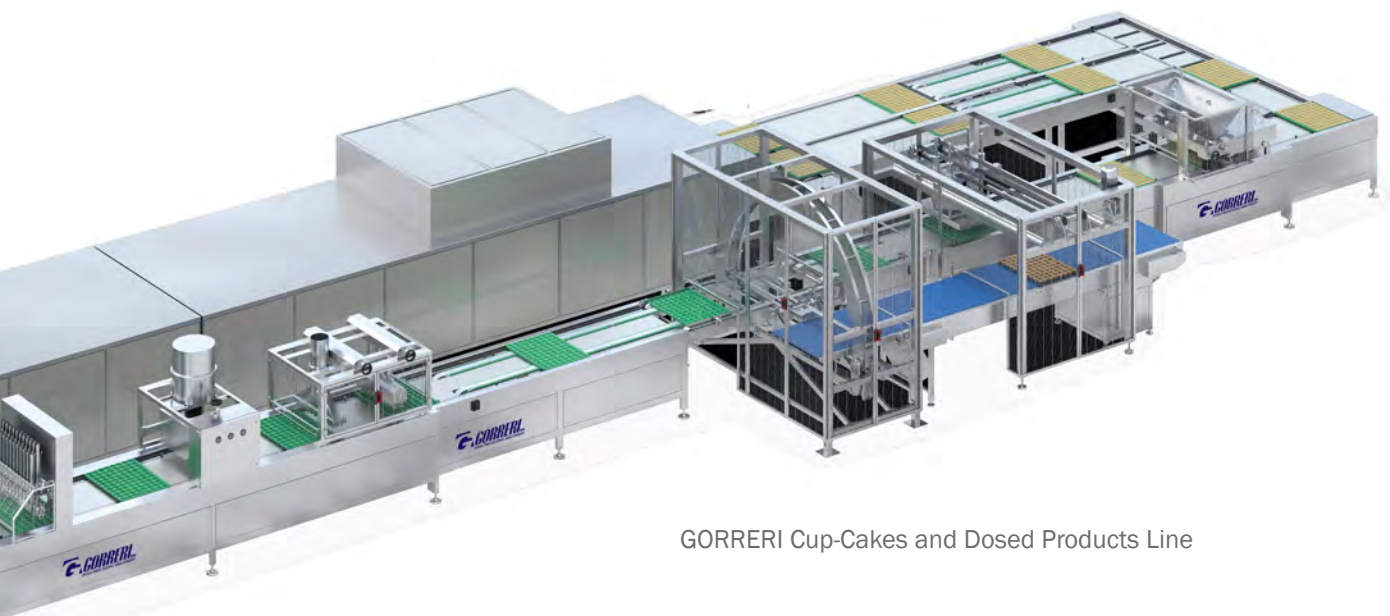
GORRERI TURBOMIXER®, the famous and unique turboemulsifier with vertical head is an innovative in-continuous mixing system, fruit of many years of experience that through a bright solution like VERTIMIX TECHNOLOGY® is able to emulsify, in few minutes, batters, cream, mousse, sponge-cake with a final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

Thanks to VERTIMIX Technology® and to the great know-know, GORRERI® is able to provide unique and innovative solutions



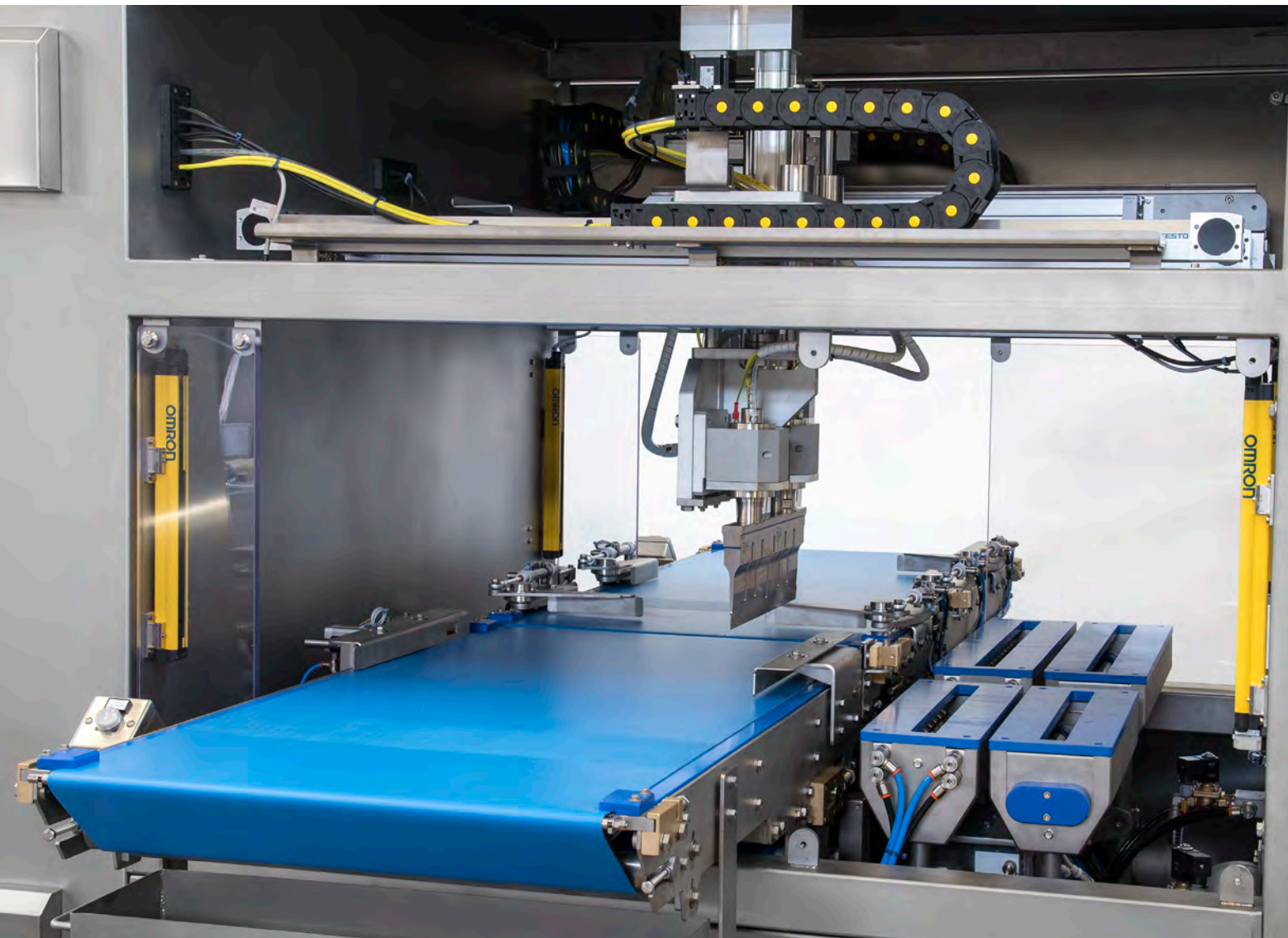


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A brand new facility with a new and high-tech laboratory where customers will have the chance to test the most iconic technologies with their own ingredients and where they will have at their complete disposal all the 50 years-old Gorreri's know-how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

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



logical characteristics of different batters and dough that you can govern every step of a production process, avoiding loss of production and guaranteeing the maximum of optimization.

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It is only when you know perfectly the production process and the techno-



## “THE BREAD MAKING INDUSTRY TODAY”

**W**hen it comes to the industrial production of bread, in order for the final result to be a high quality product that can be sold to an increasingly demanding and vigilant market, importance and attention must be given not only to the raw materials, but also to the methods and technologies used during the production process.

This is why companies which produce bread at the industrial level opt for production lines that ensure high product quality, low time-to-market, and process reliability.

There are various salient aspects to the production process: the choice of primarily natural ingredients, simple and high quality raw materials, and a processing me-



by **Sonia V. Maffizzoni**  
Editorial Manager







thod which respects natural proofing times (24 hours without exception), does not include chemical agents of any kind, and is meticulous about sanitary conditions.

The technologies and methods used today by industrial producers make it possible to produce not only large quantities, but also a wide variety, of high quality bread, which allows large-scale retailers to offer excellent products to consumers at a decidedly lower cost and with an excellent quality-price relationship.

The laboratories within companies which supply these systems continuously perform various kinds of tests, not only as a way to constantly inspect the machines and monitor their performance, verifying how they function when they're "under the stress" of various kinds of processing activities, but also in order to try out new "recipes" that are in line with new market trends.

Within the production process, two other fundamental aspects are also given enormous attention and importance: savings and sustainability.

For this reason, technology manufacturers not only offer efficient production lines, designed in such a way that each operation (such as cleaning) is easy, safe, fast, and makes it possible to reduce downtime, but also provide clients with consulting support, devising solutions

which combine hygiene, costs, time, and a reduction of space in production areas according to the unique characteristics of each individual situation.

Currently a company which provides its technology to a production industry, doesn't merely supply systems, but also serves as a partner, working in synergy with the client to reduce costs, solve problems, and improve product quality, thus boosting market competitiveness.

Ultimately, the market requires companies to provide total support and OEMs respond by serving as consultants as well, offering training and testing services as well as solutions which facilitate and improve the work of technicians, do away with machine downtime, and increase production.

This kind of total support gives producers both confidence in the result and concrete answers to an ever more demanding market.

Furthermore, considering that the characteristics of a bread product aren't the same in every country and that not all countries are able to use high quality products, also due to cost, quality control inevitably becomes a very important aspect.

# WONDERFUL COCONUT!

**C**ultivated in many tropical countries, coconut (*Cocos Nucifera*) contains a deliciously fragrant white pulp, a source of mineral salts (iron and potassium), and some vitamins (E, K, B, C) even if in quite small concentrations.

Faravelli Food Division offers a wide selection of coconut-based ingredients signed by Franklin Baker, a Philippine company that has been a world leader in the sector for over 100 years.

Further to two great white dried classics - GEM MEDIUM and GEM MACAROON (different in size) – Faravelli also offers ready-to-deliver Golden Toasted Coconut Niblets, made from uniformly roasted and dried coconut pulp and characterized by a distinctive aroma and crispy texture and consistency, Kosher and Halal certified.

They are ideal as toppings for cakes, ice cream, biscuits and donutlike donuts, in wafers, in cereal mixes.

Virgin Coconut Oil is a virgin coconut oil derived from the simple cold pressing of the pulp, not to be confused with traditional coconut oil, which is obtained by extraction with solvents. Virgin Coconut Oil is very rich in medium chain triglycerides (MCT), colorless and characterized by a very delicate typical aroma. It is used in the bakery sector and as a frying oil; also, for its excellent nutritional properties, it is used in the nutraceutical and cosmetic industry to nourish the hair and as a body cream.

Coconut milk is also obtained from the pressing of the pulp, a very nutritious product, very caloric and rich in saturated fats.

It does not contain any traces of lactose, nor milk proteins (e.g. caseins)







and a very fragrant and tasty fat, suitable for feeding lactose sensitive subjects and in vegetarian diets / vegan.

A very versatile ingredient, it is ideal for the preparation of creams, ice cream, spoon desserts and semi-freddo; but it can also be used as a substitute for cream to make sauces, accompanying sauces and dressing (especially in the so-called ETHNIC sauces).

Finally, coconut milk powder ready for delivery, which does not require homogenization before use, even in a version without support caseinates (vegan).

These products are widely used in the confectionery sector, fruit preps for yogurt and in preparations for artisan ice creams.

Franklin Baker products are distributed in Italy by Faravelli. 🏠

For more info please contact Faravelli Food Division:

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baking pan for



croissants



baking pan for

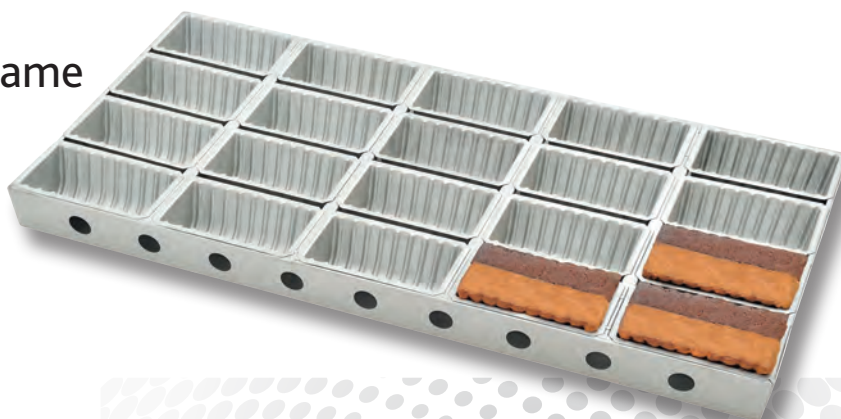


muffins

cake



baking frame



Equipment  
for bread  
and cake baking  
industries

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# ERREPAN SRL the Italian manufacturer of baking pans keeps growing

**E**rrepan keeps growing. The company has been producing metal pans for the confectionery and bread industry for more than thirty years now and is continuing to grow both on the national and foreign markets, acquiring new customers and strengthening existing relationships.

Errepan has always focused its production on standard items for the bakery industry and the hospitality sector as well as on custom-made products for the food industry. Nowadays, the company is constantly investing in the production of machinery that will optimise the manufacturing process and improve the customer's experience. Among the latest innovations are the automatic laser welding station and the new punching machine with automatic loading and unloading system,



download the  
catalogue



visit the  
website



with a doubled working range, which combines high energy savings and reduced processing times.

Thanks to a flexible production structure, the company can offer its customers tailor-made products, studying and providing customized solutions. A further guarantee of the high-quality of Errepan's products is the fruitful collaboration that the company has with manufacturers of machinery and plants. Errepan is fond of teamwork and is a reliable partner in turnkey projects.

Moreover, its range of products is growing with new shapes and models that are designed to meet customers' requirements.

Whether you need a flat tray or a pan for muffins, croissants, plum-cakes or a set of moulds for white bread, at Errepan you'll find what you're looking for. As for the confectionery sec-

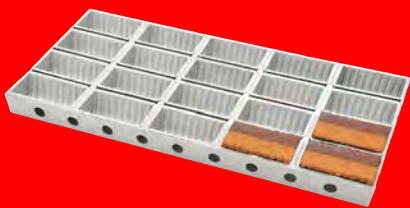
tor, there's a great demand for twinkly moulds, doughnut, sponge cake and other special shapes for single-portion snacks, while the request for hamburger buns and hot-dog rolls in the bread sector is always very high.

On its website, the company gives plenty of space to the presentation of all its products, with technical details and lots of pictures. Now, it is also possible to "visit the company" from the comfort of your own home, thanks to a virtual tour that shows all the stages of the company's production process.

For any other information, Errepan's staff is available at all times to help you, explaining its products and finding the most suitable solution for each customer. 🏠

**www.errepan.com**

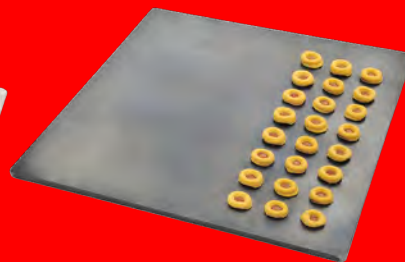




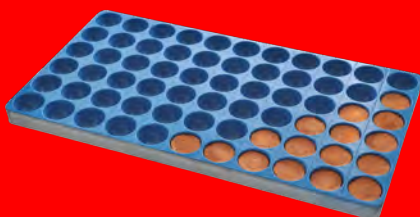
Loaf pan with ridged containers



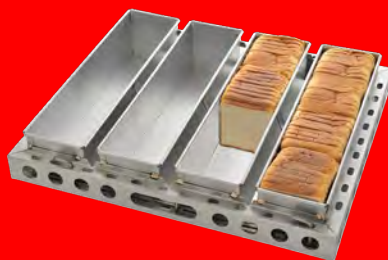
Pan for croissants on a single aluminium tray or sheet



Flat sheet for high output machines



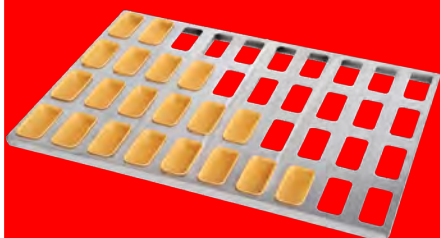
Semi-spheric form with highly non-stick Teflon.



Slotted loaf pan with automatic cover lock



Sheet for hamburgers for up to 125mm in diameter



Tray with self-carrying paper cup holders



Pan for muffins with a large selection of shapes and diameters



Stackable pan for panbauletto



# The CONFECTIONERY SECTOR in the era of healthy food

In the confectionery market, as in the large-scale retail, the search for healthy products seems to be an unstoppable trend: the modern consumer, stimulated by the emergence of new styles of consumption, is increasingly looking for natural, organic and free from products.

New purchasing habits that, on one side, depend on the greater attention to eating disorders (in industrialized countries, gluten intolerance has grown by more than 20% in the last 5 years), but also on the perception the consumer have about these products

understood as "healthier". Here then, the clean label becomes the lever that drives the purchase decision: the absence of dyes, preservatives or allergens is one of the most appreciated characteristics.

The combination of food and well-being pushes the consumer to prefer products of certain and/or certified origin, so doing products "without", organic, IGP, Zero miles and local, are increasingly gaining space.

A search for naturalness that affect the confectionery sector, which records growth rates before pandemic

up to +8% per year, of which over 40% comes from bakery products, followed by chocolate and cocoa products (over 30% approximately), ice cream (15%) and confectionery. In this new, highly specialized market segment, it becomes essential for success, to know how to renew its own production and anticipate consumer trends, which are increasingly demanding in terms of naturalness and ethics.

In this context, Cesarin S.p.A, an Italian company of semi-finished fruit and vegetable products, that has made





*Understanding the taste of the modern consumer means giving priority to natural ingredients without additives, dyes or preservatives in favour of quality. Cesarin studies new methodologies to preserve the authenticity of fruit and vegetable flavors for the sweet and savory industry.*



innovation its competitive advantage, stands out.

With over 100 years of experience in the processing of **candied fruit**, **Cesarin** has been able to anticipate market trends to propose high-quality solutions that guarantee the maximum attention in the search for raw materials from certified origin and the absence of artificial flavours, dyes and preservatives.

**An example of this is the line of Fruit HG with low water**

**activity:** it is a product studied in the Company Research Development Centre, that inhibits the activity of water and keeps unaltered the taste and structural characteristics of the raw material, with a softness and a fresh flavour not comparable to a traditional dehydrated or freeze dry product.

Created as an inclusion for chocolate bars, today it finds its best use in the production of biscuits, energy bars and cereal mixes. The product is naturally gluten-free, contains no artificial colours and is OGM free.

**Fruit HG Cesarin** is also available in the Light version without added sugars (sweetened with maltitol) in the flavours most requested by the international market: from classic red and yellow fruits, to the more exotic flavours of mango, pineapple and papaya and the highly appreciated lime and ginger, or in the version with Sorbitol for excellent resistance to high temperatures and soft texture after baking. Following the trend of freshness, naturalness and low sugar added, Cesarin offers as an alternative to the traditional **candied fruit**,

the Semi-candied fruit TuttaFrutta, obtained by a cold process from the best fresh fruit on the market, ideal to garnish and fill baked products or ice cream.

But in **Cesarin** the focus is not exclusively on the sweet pastry side.

Over the years, the company has established itself on the international market also for the search for a line of vegetables dedicated to the food industry.

An example of this is the **Vegetables HG with low water activity** that represent the perfect solution to all the problems associated with the use of dehydrated or frozen vegetables: stabilization in fact allows the preservation of vegetables through the partial inhibition of the water activity naturally present in the fresh raw material.

This process guarantees a better organoleptic appearance and a less fibrous structure than dehydrated products and a higher resistance to

mechanical stress as well as less water release than frozen products.

The stabilized vegetables are obtained from vegetables harvested strictly by hand at the right degree of ripeness, to ensure the high-quality standard.

Stabilized vegetables can be used as a topping to improve the aesthetic appearance or as an ingredient in sandwiches, ready meals, quiches, crackers, breads and rice/pasta salads.

Talking about sugar-free foods, Cesarin launches the **MisterAlberto line - Without Sugar Added** on the occasion of the company's 100th anniversary, to celebrate the company's founder.

The **MisterAlberto** line includes fruit jams and ice cream ripples with over 50% less sugar than the average standard products, designed to enhance some of the best Made in Italy products. In this case the choice falls







on the natural sweetness of the raw material and on the nutritional properties of the fruit.

In addition to the MisterAlberto line, Cesarin is famous for the quality of the jams produced, all bake stable, and the various fruit preparations aimed at the food industry.

Many innovations and many alternative products that do not forget the fundamental relationship with the territory of origin: Cesarin is very attentive to its environmental impact.

This is demonstrated by the strict controls to which the Company is periodically subjected as the environmental management system (EMS) conforming to ISO 14001:2004, those to the progressive reduction of resources used, the continuous improvement of its infrastructure in terms of environmental impact, through the search for effective and increasingly efficient solutions. 🏠

**For more information:**  
**Cesarin S.p.A Verona (Italy)**  
**[www.cesarin.it](http://www.cesarin.it)**



**Cesarin®**  
dal 1920

## “PIZZA, THE TRUE QUEEN OF THE TABLE”

Italians have pizza as a meal at least once a week. Pizza sets the pace in families and has been confirmed as true Italian comfort food. But, if it is so that we often follow routines when we make choices, 2023's trends will most likely tell us a different story. As consumption changes, pizza will evolve.

The traditional Italian dish par excellence, pizza is reckoning with the desire to leave our comfort zone. So, if 2020 was the year that made all of us bakers and pizza makers, 2023 will offer new trends, aligned with those changes consumers are living through.

Sustainability, paying attention to making healthy choices, to safety and to experimentation are keywords for our immediate future, as articulated by a sector that cannot - and must not - forget tradition. In fact, the art of the Neapolitan pizza maker has been recognized by UNESCO as a true Cultural Heritage. Even today, real Neapolitan pizza still has to meet certain requirements. First, it must be made in a wood-oven. Then, its diameter cannot exceed about 35 cm, and the outer crust must be thick and not burnt. Real Neapolitan pizza must be topped with fresh or peeled tomato, fioridilatte mozzarella in strips or sliced bufala mozzarella. Baking also has to meet strict guidelines: no more than 90 seconds in the oven, after a leavening time that should not exceed 24 hours.

And if all of this sounds familiar, pizza makers are actually going further, adding new procedures such as extreme hydration and multiple baking or alternative flours that will ensure a pizza that is easier to digest. That is not to mention the carefully selected toppings, which are always better if they are locally sourced such as zero-kilometre products, when available.

Thus, quality has become the common thread that accompanies the entire supply chain, which is then enhanced by the flair, the fantasy, and the creativity of those who cannot be considered mere pizza makers anymore, but who have become pizza artists tout court.



by Elisa Crotti







### CHALLENGES THAT HAVE BECOME TRENDS Few pizza makers

Let's begin with the staff shortages, that have lately become chronic in many sectors of catering and H&R, and the causes of which are still being studied. What we know for sure is that enhancing the role of pizza makers would be the key to making this ancient profession attractive. Actually, this is a job that if professionally framed is worthy of strong recognition. Pizza makers who show creativity in handling pizzas, find solutions for sourcing quality ingredients and dough, an ability to manage job flows and, possibly, the staff with whom they collaborate are highly sought after. In this regard, a draft law has long been proposed to revise this figure professionally. We'll see if 2023 will be the year that sees a change.

### Digestibility and nutritional quality

The strong focus on healthy food choices, a balanced and seasonally appropriate diet has meant that H&R professional's focus has centred on their products' nutritional quality. It should be mentioned that a traditional Italian pizza, as an ideal expression of the Mediterranean diet, includes a balanced mix of nutrients with 55-60% of its caloric intake provided by carbohydrates, 15-20% by proteins, and 25-30% by fats, with a particular focus on fibre content, antioxidants, and mineral salts, in full alignment

with Ancel Keys' principle that we should "Eat well to stay well".

Taking this one step further, new trends are leading toward a rebalancing of traditional recipes. We are talking about a skilful use of flavour and grain milling to give pizza an increasingly satisfying taste, and to the use of sprouted seeds in flours and toppings, for tastier dough as a substitute for dairy products. Thus, innovative doughs include, alongside water and flour, new possibilities to reach optimal digestibility, taste, and alveolation. One example is using aloe vera combined with type 1 flours to ensure lightness. With the right balance, ensured by an increase of alimentary fibre in the recipes, pizza should no longer be viewed as a "deviation from the rules" in a dietary sense, but rather as the healthy and balanced one-dish meal as has always been recognised in Italy.

### High-quality ingredients

Another issue is that of ingredients. Today more than ever ingredients are expected to meet the criterion of sustainability, like an endless variety of other products that consumers love. So, whenever possible, let's buy locally sourced, or zero-kilometre products, and give priority to small producers and seasonal ingredients, to the point that pizza's true seasonality is established, an idea that has already been long supported by our traditional cuisine.



This is a trend that, until a few years ago, has been blatantly ignored by the pizza industry, which basically presented the same menu summer and winter. Just as it would seem meaningless and anachronistic to order prosciutto and melon at a restaurant in December and roast chestnuts in July, consumer sensitivity is beginning to become consolidated in pizzerias along the same lines.

Thus, the examples of winter offerings might include truffles, the finest of the tubers, but also chestnut and hazelnut humus, pumpkin, butter sautéed onions, artichokes, and black cabbage. But also thin sliced cured lard, duck breast or radicchio.

It goes without saying that in the logic of sustainability, vegetarian and vegan options are essentials. This is a trend that has been confirmed by data collected from the Just Eat platform, which commissioned BVA Doxa to conduct a study. In the category of the most ordered items, the most popular dishes in food delivery also stand out in their vegan version, with vegan pizza orders coming to +43%. Not only that, but vegan toppings are also recommended by pizza makers to compensate for the overeating that often occurs during the holiday period.

### New formats

As we were saying, the real Neapolitan pizza is rigorously round. Nevertheless, today consumers are ready to accept different proposals, and the industry is not holding back. After many decades of being confined to specialized takeout establishments, high pan and rectangular pizza are conquering the entire Bel Paese, finding their way into even the most elegant pizzerias.

So, whilst it is true that, thanks to selling by weight

(a method originated in Rome), customers can purchase the proposals in the exact quantities they prefer whilst choosing between a number of seasonal recipes, it is also true that in some of the most innovative restaurants, different types of dough and formats can be found in the same menu to satisfy every customer's wish. The secret of quality lies in high hydration with calibrated leavening that facilitates the digestibility and allows optimal alveolation. Pizza that is round, rectangular or pan is just a matter of taste. When in doubt, you can also order half-and-half.

### A great classic

Pizza has shown that it's not afraid of change and that it is evolving like the smartest species, as it adapts to its context. Pizza totally embodies all today's trends and has also been confirmed as one of the most ordered foods for delivery, as shown by data from the Deliveroo's platform. Among the favourite flavours, the simple margherita, with mozzarella and tomato, is still the queen, followed by the piquant Pizza Diavola and the multicoloured Pizza Capricciosa.

Pizza's great success comes from the fact that it's a product capable of interpreting, the most representative foods in the Mediterranean cuisine even for the future over the short-term. As long as it's made using healthy and green (meaning natural, organic, vegan, sustainable or ecological) ingredients, measured to maintain their natural flavours and nutritional balance, in variants that can meet everyone's dietary needs. Pizza's trump card is and remains its simplicity, which, incredibly, always manages to amaze.

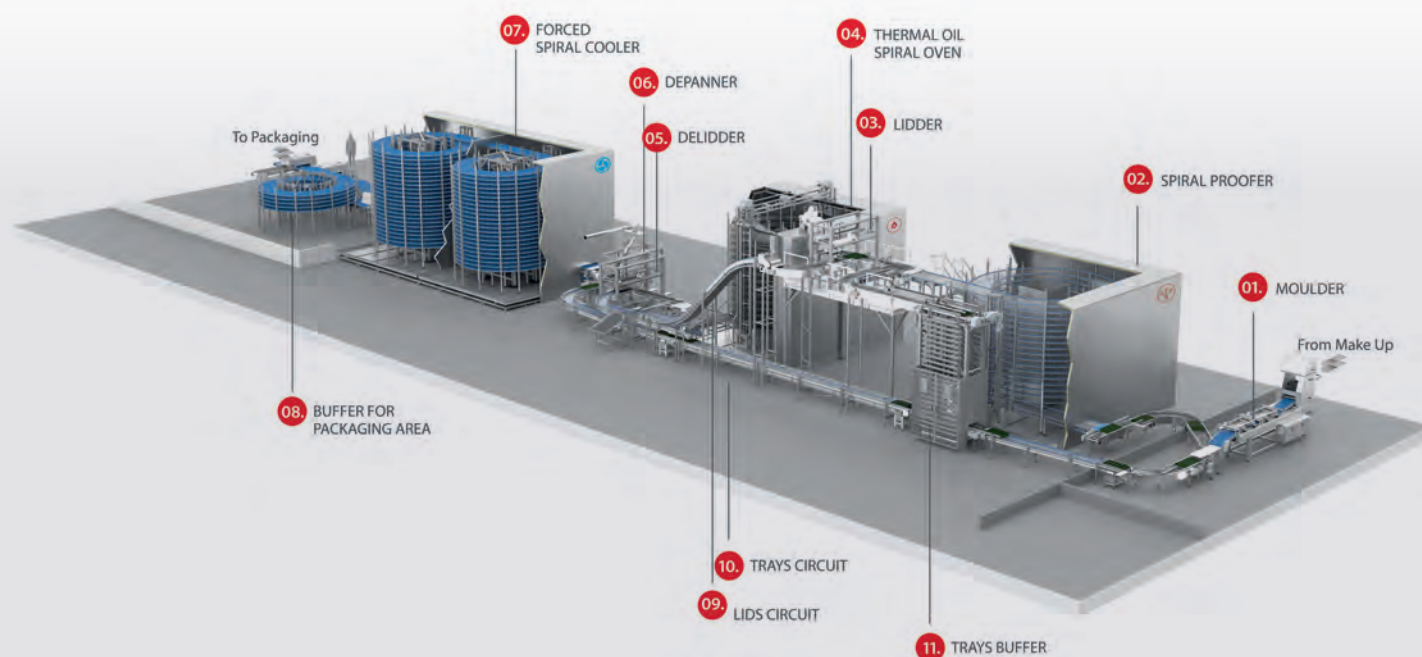




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is our customer's

# IMAGINATION

We design, develop and implement innovative and customized solutions for the food processing industry: **complete lines for your business**



**TECNOPOOL**  
PART OF TP FOOD GROUP



# Automatic cutting and distribution system of Oxygen Scavenger sachets: the **ETIPACK** project for the packaging **tortillas**

**O**ne of the largest companies globally specializing in the production, distribution and sale of tortillas, tacos, corn chips and cornmeal needed to remove the level of oxygen in the packaging's to maintain of his products safety and extend shelf life.

## **The solution: The automatic bandolier feeder Whizzy Cut & Feed for cutting and distribution of sachets**

Etipack has designed a solution capable of to insert inside a flow pack, containing 2, 5 or 10 tortillas, one or two sachets of Oxygen Scavenger, an oxygen absorbing sachet very suitable for the food industry. A machine with a motorised module able to cut and feed on a continuous belt the sachets obtained from a reel.

## **The peculiarity of the machine:**

is that it cuts and distributes the entire reel in compliance with the tight life expectancy of the Oxygen Scavenger. Once the Oxygen Scavenger reel is opened, the life time before the oxygen is absorbed around it is about three hours. The special feature of the machine is that it is able to cut and distribute all the sachets of the reel before this one becomes unusable.

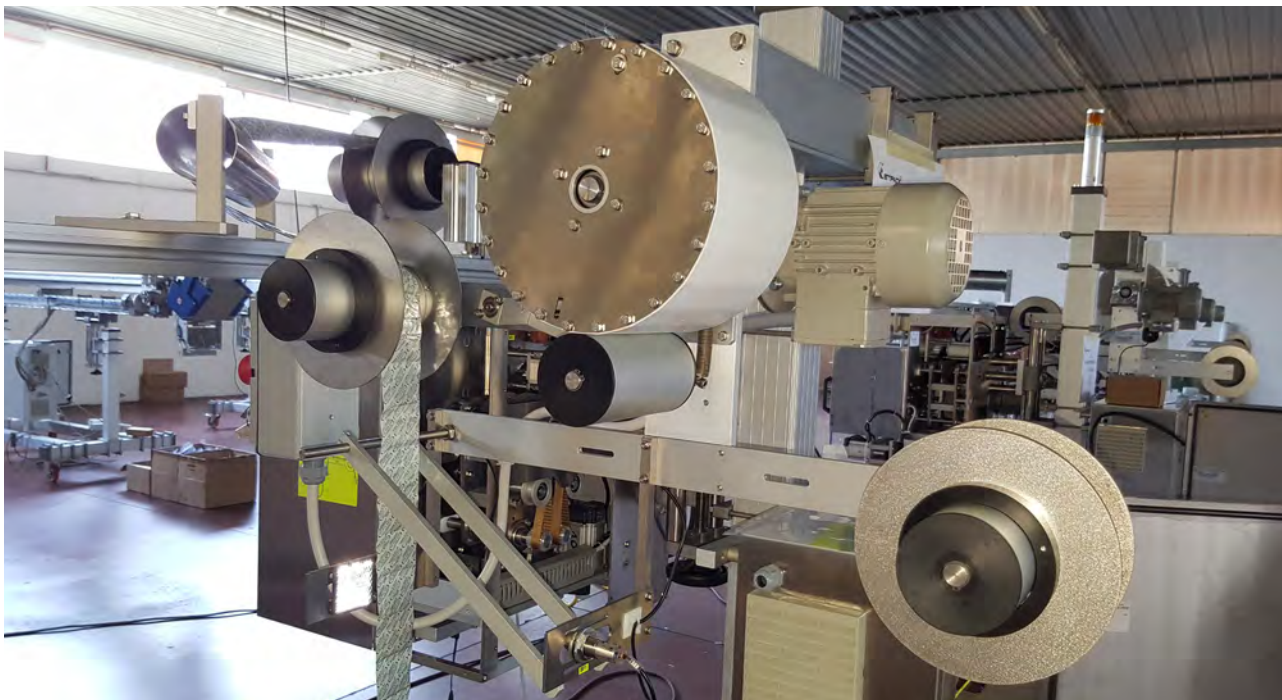
With a motorized terminal, the machine can distribute and cut 150 pieces per minute. It is designed to distribute sachets on a continuous line by placing them horizontally on the packaging line. The machine is equipped with protection guards that cover the moving mechanical parts and with plexiglass











doors with safety microswitch. Allows to modify the cycle parameters according to the specific production needs and the type of product.

The motorized cutting system on electric axis allows to reach speeds up to 150 pcs/ min, performing the cut in a short stop of the towing group, creating a serrated cut in order not to create waste even on the most critical products. The electric axis is in phase with

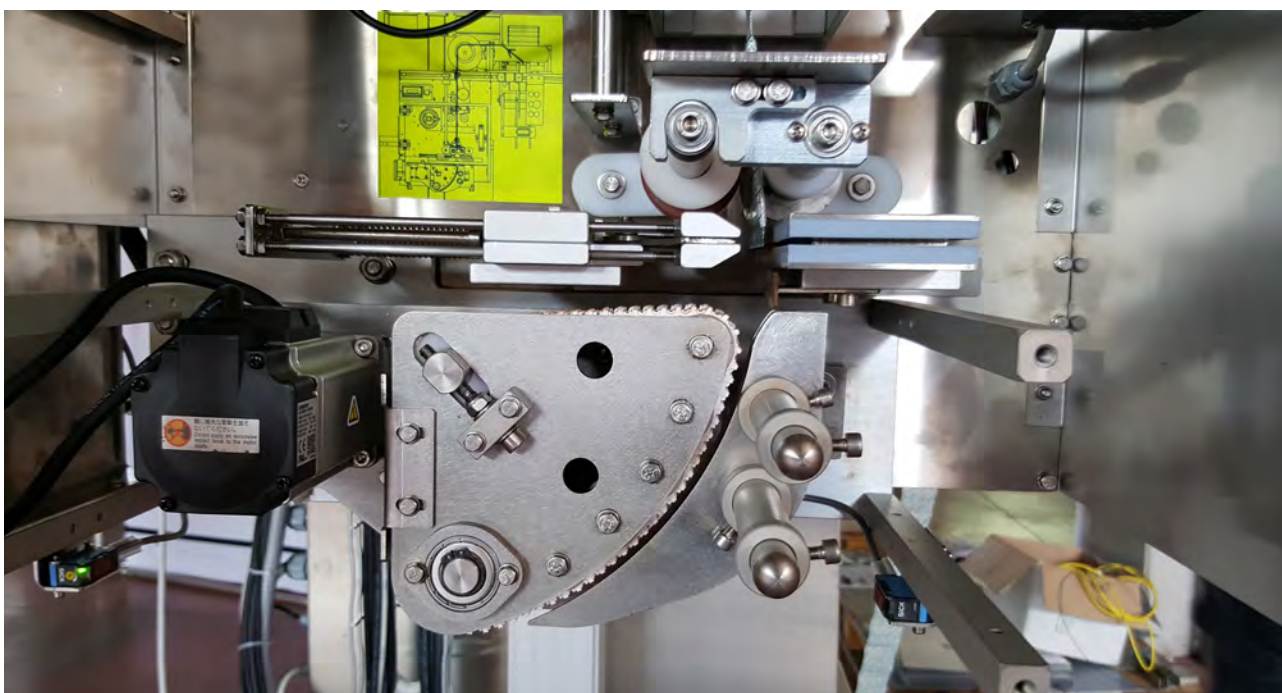
the motor that carries out the towing, in order to have the cut sachet perfectly matched perfectly match with the underlying product.

The motorized unwinder module, in aid of the Whizzy Cut & Feed, manages the product from the reel, making a single strip of product to the haul-off unit. The separate motorization unwinds the reel by unloading its weight through a secondary motor.

The reel is vacuum-packed and the moment the sachet is inserted into the flowpack, it consumes the air inside. It is a valid alternative to the insertion of nitrogen as a preservative

Etipack offers a range of more than 100 solutions to meet the multiple requirements of the food industry, learn more on [etipack.it/en/sector/food/](http://etipack.it/en/sector/food/) 🏠

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





## NIRSO EZIO: since 1969, an Italian excellence

*The Nirso company based in Busto Garolfo (province of Milan) was born in 1969 from an idea of Nirso Ezio.*

Interested in the world of meat grinding, Ezio designs and develops a line of accessories for meat grinders, in particular it specializes in the production of molds and knives that largely satisfy most of the manufacturers of plants for the food industry and producers of cured meats on the market.

Ezio, starting from simple ideas, brings to the market an increasingly innovative and quality product over the years.

In 1991 Ezio left the family business to his son Dario, who has always been very passionate about the world of small mechanical parts, he brings the company into constant professional growth and expansion on the Italian and foreign market

Since 2007, always attentive to market developments, the Nirso company has been buying new numerical control automation systems with software able to control in a precise and detailed way the various processing phases

In 2017, Dario studies and manufactures a patented and certified cutting kit for food use for the production of mortadella, which allows to bring numerous benefits in the grinding phases.

After numerous steps between mechanical tests and paperwork, this patent repays Dario for many difficult moments, when the competition was strong and the market difficult to scratch.

After years of sacrifice and constancy, success has arrived, Nirso products have high quality standards and are among the most





requested in the preparation of foods such as cured meats.

Another strong point of the company concerns the sharpening of molds and blades of any shape and size, with a department that presents high quality machinery.

In 2017, Dario added his son Marco to the company staff, representing the third generation, who deals with marketing and communication, supporting his father Dario in the various stages of mechanical processing, to steal all the secrets.

In 2021, thanks to the determination of his son Marco, the company proudly participated in the Meat Tech fair concerning the process and product technologies of the meat industry in Milan from 22 to 26 October, in conjunction with Host and Tutto Food

Humility, simplicity, constancy great human qualities at the helm of the Nirso factory have led it to today's awards.

From attention to detail to logistics, each piece that leaves the company represents the past and the future,

tools of the past and innovation come together obtaining the trust of the largest Italian food companies, all strictly Made in Italy. 🏠

**www.nirsoezio.it**  
**info@nirsoezio.it**

**NIRSO** EZIO  
di Nirso Dario e Marco snc

(50)  
1969-2019





# PROFESSIONAL BAKING SOLUTIONS

## for Bakeries, Confectioneries, Biscuits Manufacturers, Bakery-Cafés, Hotels, Pizzerias and Fast-Food Restaurants



**F**or more than 30 years, EUROPA Srl has been selling professional ovens to an ever-larger number of bakeries, hotels, pastry and pizza shops all over the world. Established in 1990, EUROPA has become a brand synonymous with "reliability" and "innovation", specialized in the production of ovens and equipment for bread, pastry and pizza, to facilitate bakers' lives ever more.

The strong entrepreneurship of the company's management, the long experience of a dynamic team of qualified technicians and the professional competence of a closely-knit work-group always ready to foresee the

real market requirements, permitted to grow up rapidly and establish itself over the main international markets.

Experimentation and research have always represented the principal means to achieve the company's primary objective: "anticipate and satisfy the customer requirements". Moreover, the testing severity, as well as the close examination of the materi-

als, guarantee the high quality of the products.

Over the years, EUROPA has consolidated world-wide its own position, thanks to a constant renewal of its range with increasingly more advanced products.

It continues to grow year by year, consolidating its presence both in



Italy and abroad, relying on a strong mark, which means quality and modernity.

Besides, thanks to the cooperation of a loyal and specialized distributors' network, EUROPA is able to guarantee an excellent assistance service to all its customers, whether it is a small pastry shop, a traditional artisan bakery or a bakery industry with loading and unloading automatic systems.

EUROPA offers two main product lines, in which you can find the most suitable oven according to your own needs. Besides, every product line has its own accessories.

The BLACK LINE presents a wide range of solutions for large and regular production, including: electric deck ovens, steam tube deck ovens, both traditional and evolved rotary rack ovens, multi-loading deck ovens and provers. It features two models of rotary rack oven: the traditional GALILEO, with rear heat exchanger, and the evolved JOBS, with side heat exchanger.

Furthermore, both series have two different versions, the DIGIT and the PRO ones, to satisfy all customers' requirements. Among its many characteristics, the standard DIGIT version comes with digital control panel, 2-speed baking fan, weekly programmable ignition system, motorized steam damper and stainless-steel outer panels.

The PRO version, instead, has the electromechanical control panel, manual steam damper and 1-speed baking fan. However, regardless their differences, GALILEO and JOBS have several common qualities, such as: solid structure, refined design, improved technology and surprising recovery times.

The GREEN LINE presents multiple products for small production, regular production, bakery cafés and horeca. It includes electric modular deck ovens, compact rotary rack ovens, mini-rotary rack ovens, convection ovens, combined solutions and provers. Among the products of the new

GREEB LINE series, the main ones are those composing the BELL and COOPER series: ultra-compact rotary rack ovens for bakery and pastry products.

Thanks to their modular structure, they can be installed in less than 2 hours; besides, they can pass through common doors and they can be fitted into premises with very low ceilings. The special "FREESTYLE" version (patented) allows to reduce the consumptions from 33% to 66% when the baking of a complete rack is not needed: that is to say, that you can decide whether to bake 5, 10 or 15 trays and thus to use 1/3, 2/3 or 3/3 of the power. Stainless steel massive structure, modern design, excellent baking quality, versatility and friendly use: these are the features that make the BELL and COOPER series suitable for all customers expecting great performances from a small oven. 🏠

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## “ GELATO INCREASINGLY SUSTAINABLE ”

Most consumers have become increasingly sensitive to the environmental impact that production processes can have. The gelato industry is also trying to respond to this new and important trend.



by Editorial Office

Eco-sustainable gelato is a type of ice cream that is made using environmentally friendly and sustainable practices. This can include sourcing ingredients from local and organic farmers, using eco-friendly packaging materials, and implementing energy-efficient production processes.

This reduces the carbon footprint associated with transportation, and it also supports local agriculture. Organic ingredients are also a good choice, as they are grown without the use of synthetic pesticides and fertilizers, which can harm the environment.

Another way that gelato makers can make their products more sustainable is by using eco-friendly packaging materials. For example, they can use biodegradable or compostable cups and spoons, or they can package their ice cream in reusable glass jars.

In addition to that many ice cream makers using renewable energy in their production, for example solar and wind power. They also can use energy-efficient equipment to reduce their overall energy consumption.

Finally, sustainable gelato makers should consider the environmental impact of the water they use in their production process, particularly in areas with limited water resources.

Overall, eco-sustainable gelato is made with a focus on environmental responsibility and the use of sustainable practices throughout the entire production process.

As mentioned earlier, even plastic ice cream spoons are giving way to new environmentally friendly materials.



continued on page 45

# New needs lead to new design for SLEEVE TECHNOLOGY

*Revised machine design, higher performance and smaller footprint address industry's most pressing needs, while delivering contemporary performance and integration capabilities to wider markets*

**A two-year development program for a packaging solution with an outstanding 30-year pedigree has resulted in a new range of sleeve machines from leading global packaging technology company Cama Group.**

The three new machines in the range offer better speed, simpler integration, a smaller footprint and significantly improved flexibility – all of which are coupled to a servo-based infrastructure and a digital architecture that will deliver seamless Industry 4.0 integration.

"Sleeve machines have been part of our product offering for the last 30 years," explains Alessandro Rocca, Group Sales Director at Cama. "They have always offered impressive speed and performance, but we knew we needed to develop them further to make them more suitable for modern connected plant operations.

"The market for this machine technology is growing," Rocca explains. "We have always enjoyed successes in the dairy industry, but we are starting to see a real pull from other verticals, such as pet food and ready meals – both of which would benefit from this newer technology."

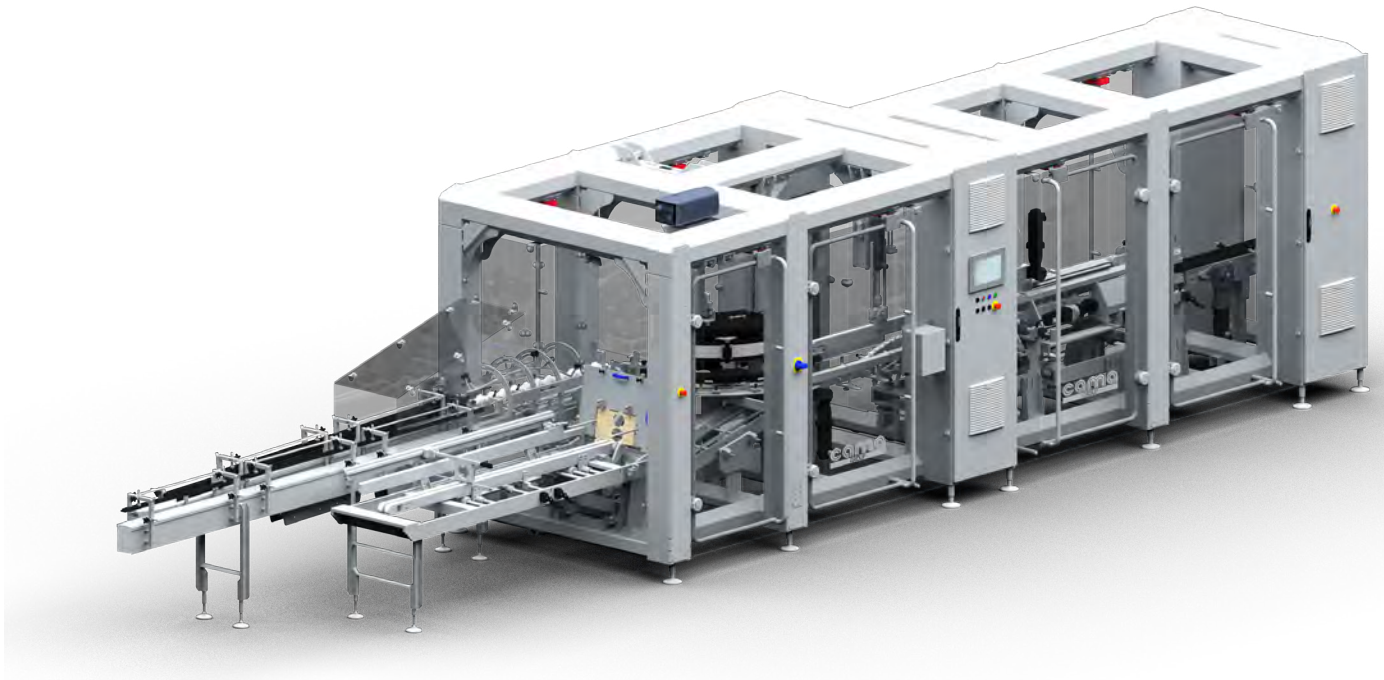
There are multiple facets to the re-development of the machines. First is a new framework, based around the company's class leading Break-through Generation (BTG) approach.

This comprises a modular, scalable design that offers easy entry and

access, optimised cable runs and hygienic features, all of which house contemporary automation solutions – including advanced rotary and linear servo technology and robotics – to deliver the all-important flexibility and adaptability required by modern packaging operations.





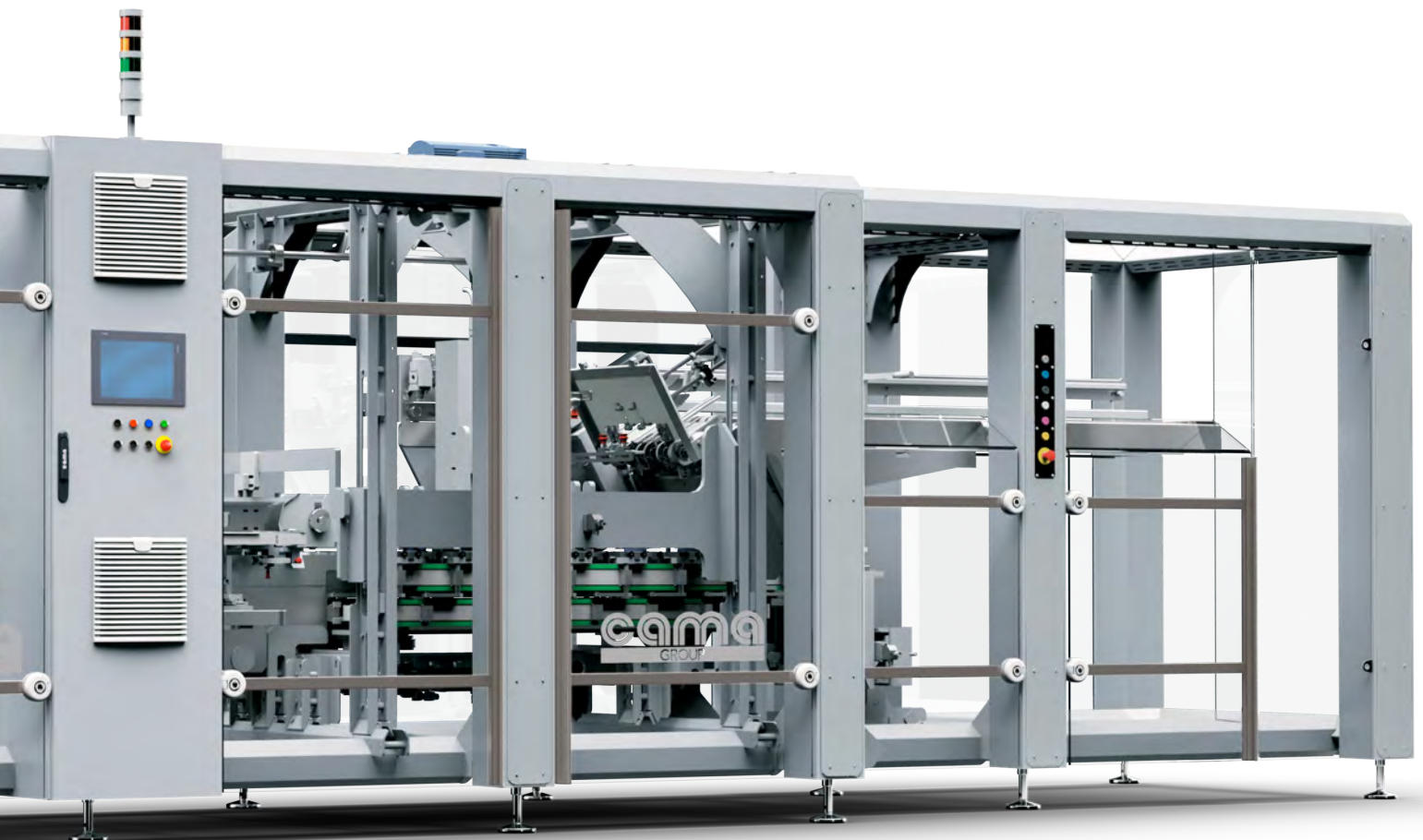


"We have also redeveloped the primary internal elements," Rocca adds, "such as the rotary feeder, which is not only faster, but comprises fewer parts, which will result in greater up-

time and far easier maintenance. We have also simplified the infeed starwheel and clamping system for the same reasons." A new phasing device has also been deployed,

which phases one or two-layer configurations accurately.

This double-pitch layout will give users the flexibility to more easily adapt



the machine depending on the packaging format required, and this is coupled to a new stacking device at the infeed for the creation of double layers.

The new designs also cater for packaging variety. "One of the important enhancements is the ability to deploy a corrugated cardboard overwrap for larger product arrays," Rocca explains. "Sometimes compact cardboard is simply not up to the job, so we offer the possibility of stronger packaging with a stronger closure."

The starwheel, the phasing device, the rotary feeder and the stacking device are all smaller than the technology they replace, which has resulted in a machine that is overall smaller/shorter – an essential design cue, especially for plants within limited or premium real estate.

"We also like to make the machines easier to operate," Rocca enthuses. "Not only does the new design benefit from our simpler clamp-based format changeover – with single-to double-pitch conversions taking less than 20 minutes – but we have also lowered the blank magazine, making it far easier to load."

Tight integration of Cama's in-house-developed robots allows users to create multi-flavour configura-

tion, insert gadgets or leaflets and formulate multiple stacks. "In a standard application we may see the same cup design, but in different layer counts," Rocca adds. "However, for different product arrays – that could be multi flavour or require the insertion of a sachet, spoon or leaflet – robotics is certainly the way forwards, as the immense flexibility offered by our robots removes the need for large-scale format changes.

"We can also integrate case-packing," Rocca adds. "Most of the time, the products go into trays, which is typical for dairy, and we have developed a case packer that is 100% integrated onto the sleeving machine, even removing the need for conveyors or other phasing units."

Available in three variants depending on the complexity and requirements of the application, the new MP series – like other new variants in Ca-

ma's extensive packaging technology range – will set the standard for the industry. Already in action at a leading global dairy company, the machines have proven their pedigree.

"We really do feel that we can now offer the complete package to all of our customers in all the industries we serve," Rocca concludes. "With full Industry 4.0 compatibility, seamless robotic integration, multi-architecture control solutions and the services of our highly experienced packaging design team, we have customers returning time and again.

And with extensive AR and VR capabilities – including completely immersive customer design reviews and flythroughs before a contract has even been signed – it's not just our machine performance that makes us the first point of contact." 🏢

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





Recyclable ice cream spoons are a type of spoon that can be easily recycled after use. They are a great alternative to traditional plastic spoons, which can take hundreds of years to break down in the environment and can be harmful to wildlife.

There are a few different types of recyclable ice cream spoons that are available on the market.

One type is biodegradable spoons, made of plant-based materials such as corn starch, sugar-cane, and bamboo. These materials are compostable and will break down in the environment within a relatively short period of time.

Another type is made of paper or wood, it also can be compostable and biodegradable. It has a natural look and give a premium look.

Lastly, some ice cream spoons are made from recycled materials, such as post-consumer recycled plastic.

While these spoons are not biodegradable, they do help to reduce waste by repurposing materials that would otherwise end up in landfills.







# 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.

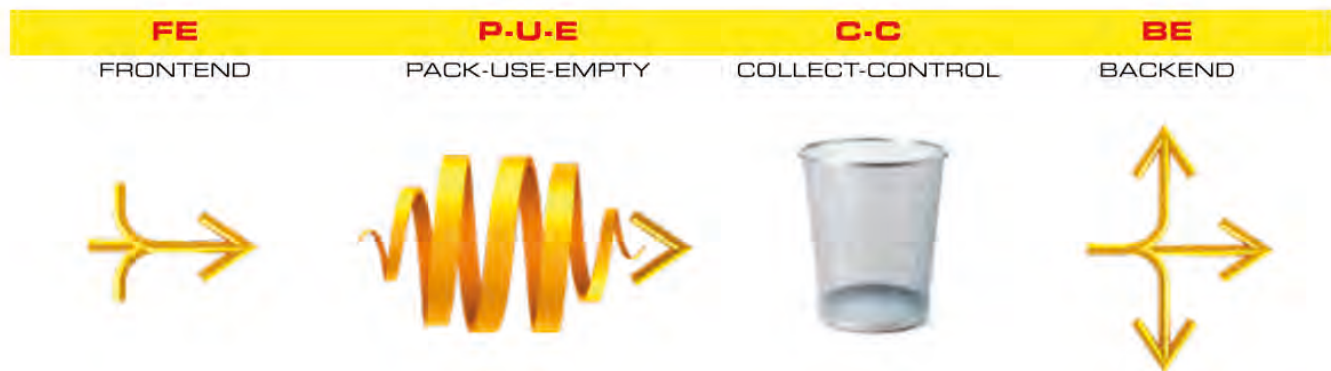


*Holistic innovation is needed as we are all interconnected in packaging*



## 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 Product Packaging material + Total environmental impact				
Future issues	✓	✓	✓	✓

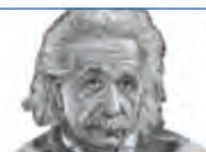




# SUPPORTING PUMA



*Success comes from deeper understanding and supplementing earlier insights*



## I SUPPORT THE PUMA MANIFESTO AND HEREBY PLEDGE TO:

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



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



## MY DETAILS:

Company name

Initials and surname

Date of birth

Address

Phone

E-mail

**For an overview of recent references and background information worldwide please visit [www.nvc.nl/puma](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)



# 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 Dolce-

zze 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 different types of flour, the Valdarno brand bo-



asts 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 gluten products,



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



**Tecno Pack**  
PACKAGING MACHINES

**IFP**  
PACKAGING

**SP**  
general system pack

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 management 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 Dolcette 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 Dolcette Savini has resulted in the development of three packaging lines, specifically designed by the group for the bread sector of the Tu-

scan company. These, in detail, are the new packaging lines implemented in the production system of Dolcette Savini:

- Monopiega Diamond 650 wrapper. This is an innovative and high-performance shrink wrapping machine.







ne, 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. [🏠](#)



# 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.

## FOOD Labels

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

must be produced in compliance with **consumer health protection laws.** OROGRAF uses top-quality certified and guaranteed materials that meet these legal requirements and guarantee consumer protection. In addition to informing the consumer about the product, food labels can be used as warranty seals or open-and-close labels; they can also carry advertising, recipes, warnings, information about competitions, discounts, and so on.

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








### MULTIPAGE, TWIN LABEL and PEEL-OFF

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

**Multipage labels**, as their name suggests, have a number of pages and they come in different sizes and formats: they can take the form of folded leaflets; detachable or with a transparent resealable cover; or booklets (bound like a book).

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

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

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

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.

Orograf offre una vasta gamma di materiali plastificati, sia bianchi che trasparenti, oltre a rifiniture standard come la laminazione e vernici UV protettive, stampe con lamina a caldo e goffrature a rilievo.

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.

### SLEEVES

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



# Mondi & Henkel partner to launch fully recyclable mono-material refill pouch for Pril

**M**ondi, a global leader in packaging and paper, and Henkel are helping consumers to wash dishes more sustainably by creating a completely new reuse packaging concept. The two companies worked together on a packaging solution for Henkel's hand dishwashing products that allows refilling plastic bottles from flexible pouches.

This supports Henkel's sustainability targets of making 100% of its packaging recyclable or reusable and reducing 50% of fossil-based virgin plastic by 2025.

Since January, consumers can purchase a new keep-at-home refillable pump dispenser with refills in the lightweight, mono-material pouch produced by Mondi. The flexible stand-up pouch reduces plastic by 70% every time it replaces rigid plastic bottles and is easy to recycle where existing infrastructure exists.

Convenient and lighter to carry home, the pouch completely empties thanks to its shaped design, leaving no residue. It is soft touch with a sturdy base so it can easily stand in-store, offering retailers attractive and eye-catching on-shelf appeal while also communicating all the brand information including sustainability benefits.

Mondi's leak-proof pouch is certified according to ISTA 6, providing a highly durable packaging for both in-store and online shopping.

Muriel Joncheray, Global Key Account Manager Consumer Flexibles,

Mondi says: "Sustainability is a vital element in the homecare industry and a trend that is shaping the whole market - and rightly so.

At Mondi, we have defined sustainability goals that focus on circular driven solutions in our MAP2030 action plan. This includes a target to make

100% of our products reusable, recyclable or compostable by 2025 – just like the recyclable pouch for Henkel. Our EcoSolutions approach meant that we worked very closely with the Henkel team to create the new packaging. While the aim was to provide a solution that helped Henkel reach its





*The new packaging concept is being launched for Henkel's brand Pril in Germany. It has been certified by "Blauer Engel", the independent ecolabel of the German Federal Government*



sustainability targets, we also needed to ensure the materials and structure would protect the product in transit and on-shelf, preventing leakage and minimising waste."

Carsten Bertram, Head of Global Packaging Innovation Dishwashing at

Henkel added: "At Henkel, we recognize our responsibility related to packaging. We're committed to driving sustainable packaging and have a set of ambitious targets.

Our strategy is based around circular economy and focuses on integrat-

ing recycled plastics, reducing the amount of plastic packaging, having reusable packaging and using fully recyclable packaging concepts to close the loop.

Mondi was the obvious partner to help us with their expertise in creating the best possible solutions - for the product, the planet and the customer."

The new packaging concept is being launched for Henkel's brand Pril in Germany. It has been certified by "Blauer Engel", the independent ecolabel of the German Federal Government that sets stringent standards for environmentally responsible products and services. 

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

- Mondi has created a recyclable refill pouch enabling Henkel consumers to reduce plastic by 70% and helping Henkel to move closer to its sustainability targets
- Henkel's Pril hand dishwashing liquid is available in a 100% recycled PET pump dispenser bottle which can be re-used many times using refills packaged in Mondi's recyclable mono PE refill pouch
- The innovative pouch is light-weight, convenient to use, certified as leak-proof and highly durable even for home deliveries



# MAKRO LABELLING: technology in evolution on the small and large scale



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

need and constant expansion on all the most important international markets.

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

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

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

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





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

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

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

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

quality labelling as a rotary machine. In common with the entire Makro range, the MAKLINE is fitted with the **Vision Control** system to verify the quality and correctness of the packaging and manage rejects.

The **Follower** optical guide system (an exclusive patent) enables the bottles to be aligned for application of the labels in precise positions with respect to a reference on the bottle and reduces format change times and costs. It is available in carbon fibre

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



# 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 me-

dium. 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 innovative 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. 

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



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

# W.B.L. SYSTEMS: the re-birth of the washing, drying and conditioning process

*What can help a winery improve its process?*

*How can costs be optimised in a winery?*

*How can you work better and produce more without necessarily having to invest in buildings or water drainage systems?*

*How can you do without compressed air?*

*How can you be greener?*



Washing-drying LAB12+ conditioning CAD-8\_3000 combined synchroblock

**L**AB-X and CAD-X, with their patented systems, completely revolutionise the work in the winery.

The **External washer/dryer with single combined carousel mod. LAB-X** opens the way to new washing concepts. It is the first machine in the world to enclose in a unique carousel the washing and dry-

ing phases, with a consequent drastic reduction of the occupied space.

**1 - Most compact machine in the world**

**2 - Active surround system** Automatic shape recognition brush system.

**3 - Automatic brush wear compensation** The "tactile" washing device requires the brushes to ad-

vance towards the bottle up to the contact, recognizing the shape. Wear is compensated.

**4 - Green washing system**

Water is dosed on the bottle in a smart way only where and when it is needed in a closed station.

**5 - 3-Axes washing system**

Improved cleaning efficiency.

**6 - Totally self-lubricating** No greasing points.





conditioning CAD-8\_3000

**7 - Universal drying** Innovative drying air distribution system.

**8 - No compressed air on the whole range**

**9 - Water off system** Injection system which recognizes the absence of the bottle and stops the dosage of water in the corresponding empty station

**CAD-X radiant dynamic conditioner** is synonymous with transformation and progress compared to

traditional technology. It revolutionizes the bottle conditioning process. It is a radiant conditioner with dynamic accumulation. Thanks to this device, water is totally eliminated in the process, consequently the system is perfectly cleaned and free from contaminations.

**1 - "no water" device**

**2 - significantly reduced dimensions**

**3 - advanced catalytic tech-**

**nology** System with an efficiency of 98,5 % as all energy is transformed without dispersion. No more plant engineering charged to the customer.

**4 - Stationary treatment** First machine in the world with stationary product treatment.

**5 - "FIFO" device FIFO** ("first in first out") FIFO managed machine which guarantees traceability by batch and the staying time during the process. Uniformity of treatment.

**6 - "Contactless" filling** Bottles feeding method takes place without contact between the bottles. Relative noise is eliminated as well as the format change.

For more information and to discover the range of products visit the site. [www.wblsystems.com](http://www.wblsystems.com)

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



Washing-drying LAB12



# Pressed stock cubes: IN-LINE EFFICIENCY

*A brief interview with the IMA team behind the highest speed line with the smallest footprint available on the market*

**T**he manufacturing of pressed stock cubes is a market niche where a higher level of efficiency is often required: all the machines in the line have to work together in synergy to ensure maximum productivity. Today IMA is the

only supplier on the market that can single-handedly offer a complete line. We had a brief conversation with IMA experts regarding the latest development in this field: a complete line with an output of 2,000 tablets/minute.

**Let's start with Fabriano Ferri-  
ni, Product Manager for Tablet  
Presses at IMA Active. Since  
we are talking about pressed  
stock cubes, I suppose  
everything starts with a tablet  
press. Is that right?**

Yes, that's right: the first machine in the line is a tablet press. Prexima is designed to guarantee high efficiency in production, mainly pursuing two factors: high output and consistent processing.

Prexima features several technical solutions for high-speed tableting of bouillon powder.

A new die feeder has been designed specifically for high efficiency feeding of wet masses with low flowability. This has proven to ensure low deviation in weight, even with tablets of 10 grams or more.

Compaction and dwell time are also important factors when high speed needs to be reached.

They allow more time for the ejection of the air contained in the powder blend and for the bonds to be made between the particles.

Here, the 250 mm pre and main compression rollers mounted on Prexima really make all the difference, as well as the IMA 32T tooling, which features a larger punch head.

In addition, the Prexima high-yield motorisation minimises heat production in the lower compartment, being the





ideal solution for low melting or heat sensitive products. Low temperature tableting maintains blend flowability at die feeding, prevents product sticking to punches, and dies and preserves tablet quality.



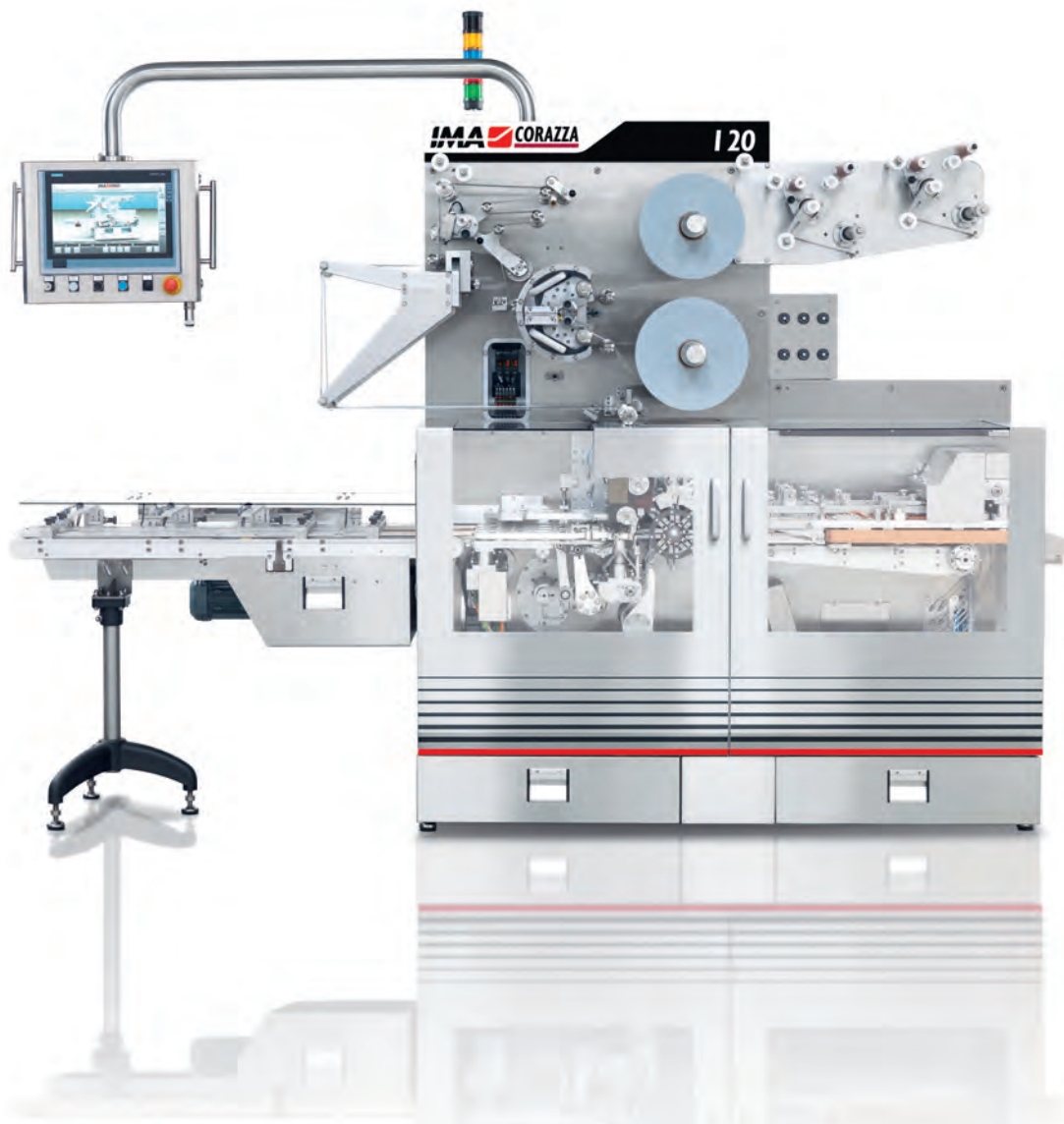
**So, Prexima can run fast. But to achieve efficiency you must ensure a consistent process as well.**

Correct: an optimal OEE is based on a robust operation, which minimises unexpected line stop, reduces cleaning times and maintenance work. From this perspective, Prexima ensures complete separation between processing and mechanical areas thanks to the use of purposely designed seals and protections. The absence of products in the mechanical area makes

for extended duration of cams, tooling and compression rollers, leading to reduced cleaning time. In addition, a powder-free mechanical area allows for a totally automated and recirculated lubrication system: the control system automatically takes care of lubrication frequency, without any need for operator intervention. In that way, the best parameters do not depend on the operator's skills. The only required action is to check the oil level and refill it, if necessary.

**Now the tablets have to be wrapped. Let's turn to Davide Giordano, Sales Manager at IMA Corazza.**

That is correct. Stock cubes are wrapped by the I20 wrapping machine, in side-folding execution, with its fully electronic operations. The machine can be equipped with the "easy-opening unit" which enables an easier consumer-oriented opening of the stock cube wrap. The I20 is also able to handle paper-based packaging



materials, which is certainly a plus for Corazza solutions in a world where recyclability and sustainability have become a must.

### What are the I20's main hallmarks?

The I20 has been engineered with a very compact footprint, delivering a space-saving solution. What's more, its modular design means it is easy to access and maintain.

Its two-lane execution, equipped with a unique wrapping reel without any aligning unit, ensures gentle operations and high efficiency. The dedi-

cated feeding system allows for a compact design to be delivered for both the press and the wrapper: products coming out of the pressing unit accumulate on the two-lane conveyor, distanced thanks to the acceleration wheels and then driven towards the folding wheel by a pusher.

The new welding system, installed in the outfeed grouping unit, ensures excellent sealing quality of the final product. Compared to other wrapping equipment available on the market today, the I20 machine concept and operations allow for very fragile products to be handled.

### What about maintenance and cleaning?

Since the I20 has been developed to meet customer expectations in terms of maintenance, the plug-in design of the main groups greatly facilitates activities such as reel change, foil feeding set-up as well as infeed and outfeed group cleaning.

The I20 shows its customer-oriented approach through the HMI control panel, which reports machine performances to monitor production, has alarms to tackle downtimes and enables remote machine assistance.





**The high number of tablets released by the I20 means an automated solution is necessary to place them into a tray. Let's listen to Michele Nomi, Area Sales Manager at IMA GIMA, who can give us some more details on the FTB569 tray packer.**

Over the last few years we have seen increasingly faster wrapping machines and, at the same time, a general growth in labour costs.

These factors have led many customers to look for automatised solutions also in the end-of-line sector, replacing what was normally done by semi-automatic equipment or even manually by operators.

It has been almost ten years since we began collaborating with IMA Corazza, supplying a downstream wrap-around tray packer for wrapping machines, and I can definitely say it is highly appreciated on the market for its many features.

First, its compactness – a total length of approximately 2 metres, including infeed and outfeed conveyors – and its accessibility.

Then, product handling and flexibility: thanks to the servo driven movements and other tailored devices, we can guarantee the smoothest product handling without any damage. Lastly, the machine is designed to provide a quick size change, switching from one format to another by replacing just a few parts, allowing our customers to be reactive to market changes and trends, while maintaining high efficiency levels.

**You mentioned the wrap-around tray packer. What are the advantages of this technology?**

The fully automatic technologies used to place the tablet in trays are usually top loader and wrap-around. Although

we have both of them in our portfolio, for this specific application we have decided to use the wrap-around solution because of several advantages.

Firstly, as we have just mentioned, the compactness of the machine.

Secondly, optimised tray dimensions: by forming the tray directly around the bundle, we can design it with zero tolerance between product and tray, which means a reduction in the used material, while achieving significant annual savings in logistic and shipping costs.

Last but not least, the quality: a tray that perfectly fits around the product looks better on the shelf and facilitates its wrapping.

**Now we should wrap the tray... Let's ask Enrico Pazzi, Food Sales Manager at IMA BFB, which has a long tradition of designing and manufacturing end-of-line machines, ranging from overwrapping and stretch wrapping to case packing, palletizing and handling solutions. If you had to choose the best machine to end this line, which one would you propose?**

The A50: it is a very compact machine. Its reduced footprint also makes it the ideal end-of-line solution when it comes to wrapping because it can easily adapt to any space constraint. Being the final equipment in the line means that it has to be flexible in size if you want it to fit into any space.

The machine is also extremely easy to operate. Operators do not have to be trained or particularly skilled to use it. We can say that it is designed with the operator in mind because it is easily accessible thanks to its balcony structure: it is very easy to reach the product-flow areas for cleaning.

The A50 guarantees maximum protection both for the operator and the product.

**How is overwrapping carried out on the machine? How is the final quality of the wrap guaranteed?**

The machine has specific film unwinding, cutting and sealing systems to ensure that the film is always cut with a very precise fold and sealed without wrinkles, air bubbles or other imperfections. The product is treated with care, lifted by the elevator, gently wrapped and pushed to the sealing area, where it is securely sealed and closed as it goes through the sealing plates. Thanks to this system, the machine can handle very thin films, like 16 micron films, considering the standard thickness is 22-24 micron. The option of handling thinner films brings significant advantages because, on the one hand, you can reduce the cost of the packaging material and on the other, you have a greater film reel autonomy which means less operator intervention. 🏢

[www.ima.it](http://www.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](http://sensingfuture.ima.it) to re-watch these sessions, as well as any other session from past editions.

# INNOVATIVE AUTOMATIC DOSING SYSTEM: fast, accurate and eco friendly

*Color Service is an Italian excellence and since 1987 has positioned itself as a leading supplier of automatic dosing systems for any kind of powder and liquid product.*

**W**ith a start in the textile field and thanks to years of experience and know-how, Color Service introduced its unique technology into many markets segments (rubber, tire, cosmetics, plastics) before orienting his innovation into the food industry, where the dosing of powders and liquids requires considerable precision, speed and traceability.

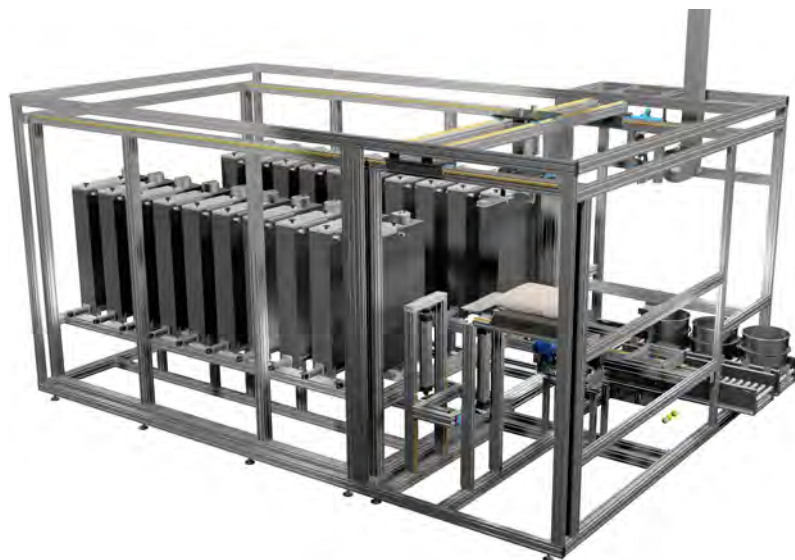
## **Why dosing is so important in food processing?**

Weighing is a key element of the food production process for quality compliance: dosing the proper amount of ingredients is extremely important to fulfill recipe specifications and constant quality requirements. In most cases, the food industry's

weighing department employs operators who manually dose raw ingredients, resulting in difficult and complicated management in terms of weighing accuracy.

To support this necessity, our technology is designed to solve problems associated with the manual weighing of any kind of powders and liquids applied in the food industry and it is developed with the goal of achieving a safe, fast and precise dosing. The aim is therefore the development of high-efficiency systems that allow to minimize the production costs and boost productivity while also improving final product quality, essential for the competition of all companies.

According to customer's requirements, Color Service offers to the market two





solutions of automation: a complete full automatic and a semi automatic weighing system.

### **Full automatic dosing system**

With the full automatic dosing system, all processes are automatically monitored and data are recorded in the software integrated with the customer's management system. The activity of the operator is exclusively confined in the loading of products into storage silos of various capacities through high-performance vacu-

um for powders and pump for liquids that guarantee fast loading with low air consumption.

During the dosing, a multi-scale conveyor completely aspirated through a dedicated dust extraction system allows high dosing accuracy of recipes that can be dosed directly into a bucket or in identified bags created in a completely automatic way: this is a fundamental characteristic that allows each individual recipe to be traced. The full automatic system, guarantees High Dosing Accuracy,

Batch Traceability and Modularity of storage stations and according to product consumption and production requirements, the system offers several storage modules of different capacities that could be interchangeable or expanded in the future.

### **Semi-automatic dosing system**

On the other hand, the semi-automatic weighing system can offer a good compromise: the robotic storage of powder products with the manual







weighing assisted by a PC. In this way, according to the recipe, the system drops the right box and transfer it to the weighing position, where the operator, guided by the PC can dose the product.

## Key benefits of our automatic dispensing system

By investing in an automatic dosing system, the customer will be able to benefit from a repeatable production process that runs 24 hours a day, is reliable and fast, in which human error is definitively eliminated and which allows leading to high-quality

end products with uniformity features throughout time.

Systems are user-friendly and software is intuitive and easy to use, allowing a quick and easy understanding.

„Dosing right the first time” as a consequence of accurate and exact dosing of powders and liquids, results in a reduction of product waste, energy/water consumption, processing times and, as a consequence, cost.

From the ecological point of view, our technology reduces to zero the exposure for operators to dangerous substances or toxic ingredients and provides absolute control of the dust

emitted during the weighing with the use of special suction devices, ensuring total operator safety and environmental protection.

Another significant advantage is the traceability of recipes. Indeed with a manual weighing, in case of non-conformity, it is impossible to identify all the products that are affected by this problem downstream and it is difficult to trace the causes upstream that can be represented for example by an incorrect mixing proportion or from a non-conformity of a specific ingredient. Without expensive labor costs due to manual batch processing and profit loss due to recipe formulation mistakes, companies can begin to boost profits, while offering a superior and uniform product to their customers. 🏠

[www.colors-service.eu](http://www.colors-service.eu)





# The choice of being unique: MINI MOTOR going all out with DBS

*DBS is the line of uniquely designed brushless gear motors with built-in drive, made for ultra-high performance*

**A**n excellent machine is made of excellent components. Mini Motor knows this all too well and for 55 years it has been bringing to customers extremely efficient gear motors on the cutting edge of technology. The Reggio Emilia-based company has always chosen to design custom solutions for those complex and difficult applications where a standard product just won't do. This choice developed into excellence and today Mini Motor electric gear motors stand out for their compact size, speed, and resistance under any condition.

Up there with the top products we find the family of DBS brushless gear motors with built-in drive system where all the elements - motor, driver and reduction gear (where fitted) - are packaged in a single product of indisputable excellence.

The 4096-PPR multi-turn absolute encoder offers maximum freedom in terms of speed and position adjustment, maintaining the distance even when the motor is off. The great innovation about DBS is the presence of an accelerometer that is able to detect gear motor vibrations.

The accelerometer plus the other sensors that detect temperature, current and speed are able to identify anomalies within the sensors themselves or from the machine systems connected to them, implementing real predictive maintenance.

What's more, with DBS several motors can be connected in a cascade system via the main communication protocols: EtherCAT, Ethernet/IP, Powerlink, Modbus, PROFINET I/O and CANOpen.

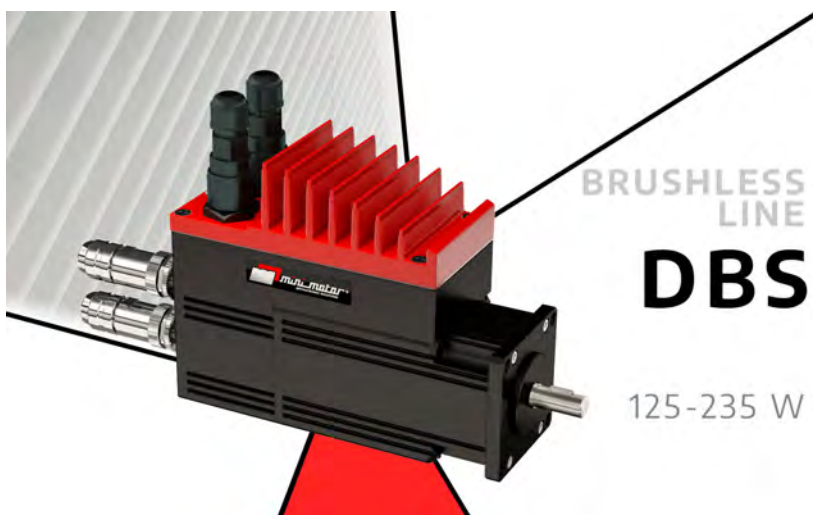
The wireless protocol was recently added to these 6 fieldbuses. Mini

Motor has in fact patented the first all-wireless gear motor in the market powered by an inductive charging battery.

This means no drag chains, which translates into lower machine costs and greater freedom of movement.

**FOOD &  
BEVERAGE**  
IP67

**ACF**  
31 W  
three-phase



**BRUSHLESS  
LINE**  
**DBS**

125-235 W

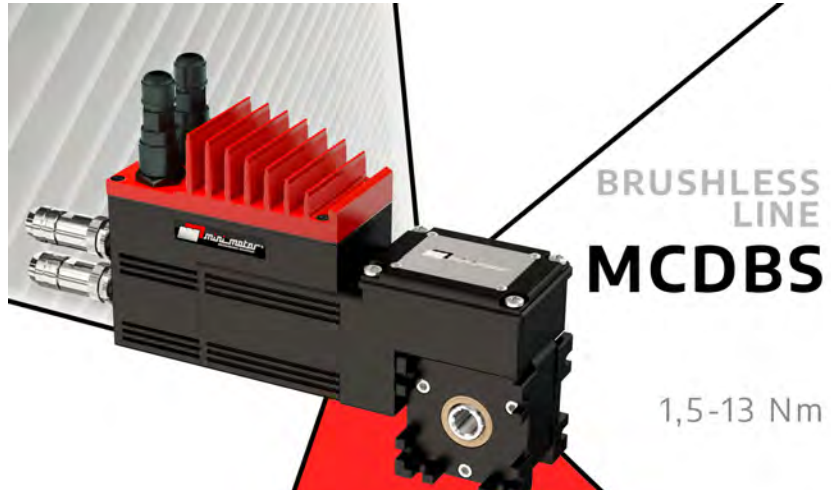
### A character of steel the one of the Clean Series!

For demanding sectors like the food&beverage and pharmaceuticals industries, Mini Motor has designed also its SS series of motors that combine a small footprint with the superior specifications of Aisi 304 and Aisi 316L stainless steel: resistance to corrosion, compact surface, lack of porosity, high bacterial removal performance, and low bacterial retention.

It complies with IP69K protection rating and is ideal for aggressive environments or applications demanding high standards of hygiene.

### About DR Series

The **DR series** represents the next step in classic single phase and three phase-motors. Complete with integrated drive, connectivity with the most common field buses, and a new design reducing the footprint and optimising the use of space, they represent the perfect integration of drive, motor and gear unit, lowering energy consumption. The great capacity for **customisation** and extremely high **quality** at **competitive prices** are guaranteed by each product. For all applications demanding an IP67-rated seal, Mini Motor has designed a digital concept drive capable of adjusting the speed of motors and gear motors using sensorless vectorial control: the DRF. It is built according to the guidelines issued by the European Hygienic Engineering & Design Group, which can be applied to ACF, MCF, PCF and PAF three-phase asynchronous motors up to 270 Watt. The technical features of the DRF are



ideal for use in the dairy, bakery, wine-making, fruit and vegetable processing, and oil sectors, as well as the Food industry in general. The Reggio

Emilia-based company is the benchmark in the Food world not only for the quality of its products but also for its fast and dependable after-sales support service. Supported by an online ticketing system, a qualified team of mechanical and mechatronic engineers is ready to answer questions and provide assistance within 24 hours.

Mini Motor wants customers to get service as excellent as the quality of its motors, an unshakable commitment that is at the heart of the company's philosophy. 🏢

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





# PNEUMAX: components and systems for industrial automation

*Pneumatic components,  
electric actuation and fluid control*

**F**ounded in 1976, Pneumax S.p.A. has become one of the leading international players in the field of industrial and process automation components and systems. The company is at the head of the Pneumax Group made up of 25 commercial and production companies with over 730 employees worldwide.

The international network includes 9 branches in Italy, 8 branches in Euro-

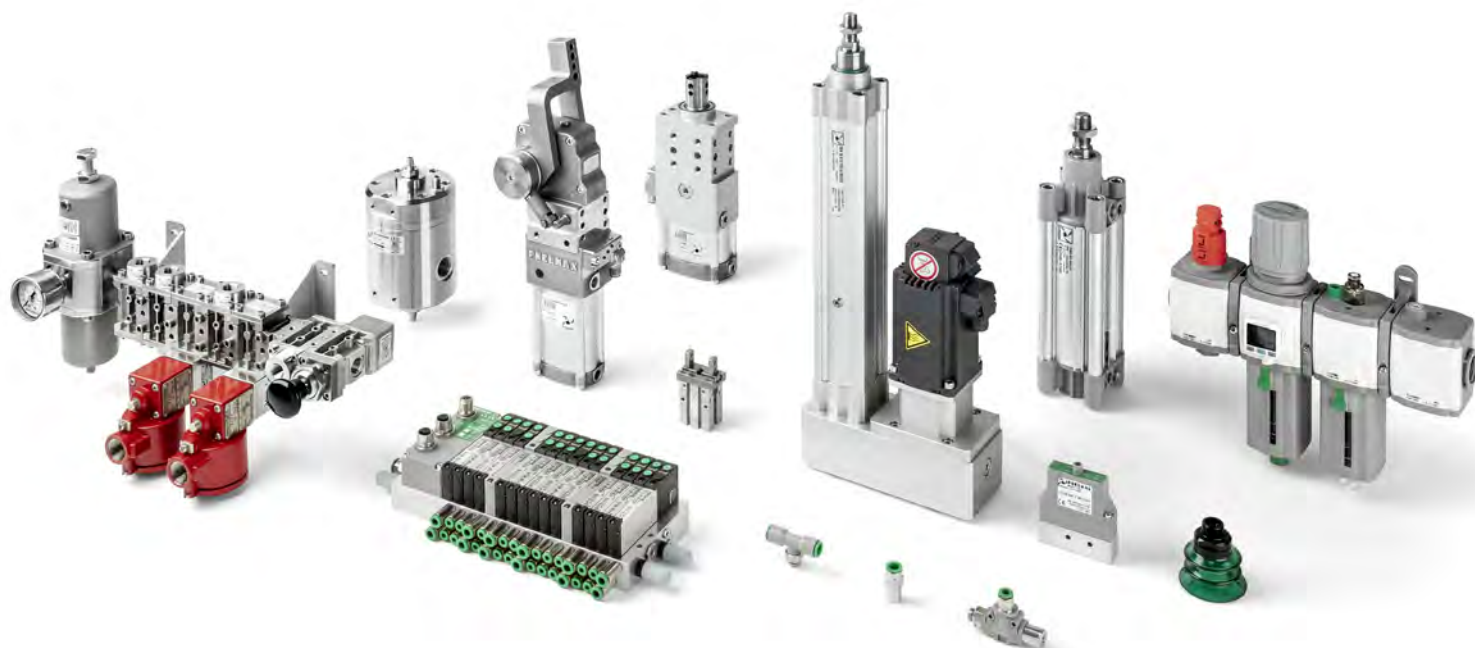
pe in addition to branches in the USA, Brazil, India, China and Singapore, and a vast network of distributors that guarantee presence in over 50 countries.

All of the Pneumax Group's manufacturing facilities are located in Italy, the seven units in Lurano (BG) plus Titan Engineering in San Marino. All the facilities comply with the environmental and workplace safety requirements set

out in standards ISO 9001: 2015, ISO 14001:2015 and ISO 45001: 2018.

Continuous investment in research and development has enabled Pneumax to expand its offer by combining well established pneumatic technology (actuators, valves and solenoid valves, proportional technology, fittings, air treatment, materials handling, vacuum), with electrical actuation and com-





ponents for liquid and gaseous fluid control and offering solutions made from different materials ranging from stainless steel to engineering polymers or from aluminium to brass.

The organisational structure designed to maximise flexibility and the use of cutting-edge technologies ensure maximum efficiency both for the supply of standard components and the creation of completely customised solutions.

At the same time, the development of mechatronic and digital expertise underlies the creation of integrated systems which, thanks to enabling technologies, are capable of meeting the requirements of Industry 4.0, from component interconnection to the ability to remotely control and manage component performance, without ever neglecting aspects such as optimising consumption.

## FCM FITTINGS


### Food Contact Material

The food & beverage and food packaging sectors are two of the sectors for which the company offers

**Pneumax Automation LLC**  
A Pneumax Group Company

128 Durkee Lane  
Dallas NC, USA

specific products such as the entire range of stainless steel components (cylinders, valves and air system units and fittings) or FCM fittings which, in addition to ensuring reliability and high performance, comply with relevant international standards such as NSF/ANSI 169 and MOCA. FCM fittings are suitable for con-

tact with food and the passage of food fluids according to European Regulations (EC) 1935/2004, (EC) 2023/2006, (EC) 11/2011 and contact with drinking pursuant to Italian Ministerial Decree DM 174/2004. 

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





# 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*

**T**he 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 variety 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



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.

capacities, while multiple cells can be connected."

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

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.



Andreas Schildknecht, Product Manager Robotics at Syntegon

[www.syntegon.com](http://www.syntegon.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 busi-

ness 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 ( $60 \div 75\%$ ), pulp ( $30 \div 35\%$ ) and seeds (on average  $0 \div 9\%$  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. Sometimes 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 pectin: a thicker-



ning 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

# 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, France and Germany,

- 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

vation 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."

velopment 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." 🏢

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

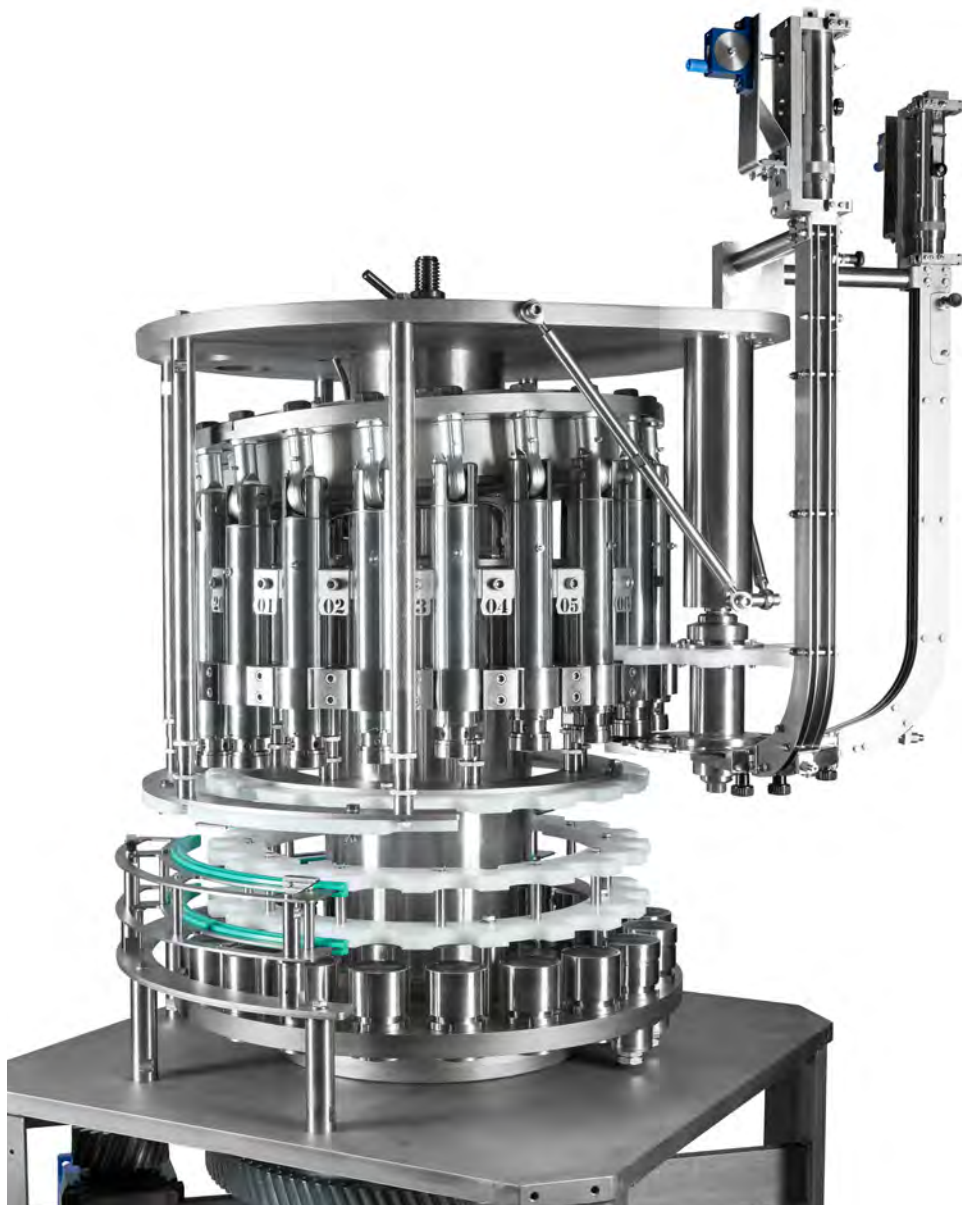


# Crown capper for glass bottles

**OSTS**  
TECHNICAL SERVICE

## Features

- excluding the slewing rings which are protected by a special stainless steel casing, all the other parts are in stainless steel or plastic, making the machine suitable for external washing.
- the housings where the pistons slide are easily removable allowing quickly pistons disassembling for maintenance
- the movement of the capping pistons is obtained through a simple inclined disc without the use of cams and bearings



EXP40S STANDARD - EXP40WVL WATER

- the Pick & Place rotation is controlled by the piston body to have a perfect synchronization
- the machine can be supplied with double chutes to avoid production stoppages in case of jamming due to defective caps
- for ultra clean application is available a water lubrication version
- the crowner can be installed on a monobloc base with a filler or in a stand-alone version on its own base. 🏠

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

# FUTURE OF FOOD PRESERVATION

## Already present and available

**P**IGO srl is a family-run company, founded in 1991, and based on continuous research and development of new technologies, and improvement of the most cutting-edge technologies existing in the food processing.

PIGO srl is specialized in freezing that for decades was the best way to store the food, and still is. With deep freezing, up to 100% of all the natural characteristics and nutritional values of the fresh product are preserved, but

the frozen product requires the cold chain.

The future of the conservation is in the possibility to conserve the product in the easiest way possible. That is why the future is now.

The perfect complicity of the high technology, simplicity for the user and economical advantage are all concentrated in EFD Easy Freeze Dryer. Taking the frozen product, drying it with the sublimation process (freeze

drying), we obtain a product with all the characteristics of the fresh product, but completely without water, with a "shelf life" of many years, which does not require any particular conditions for the storage.

Today it is possible to freeze-dry not only individual components, but also whole meals. All we had the pleasure of seeing and trying complete meals, also for celiacs, who do not lose their taste or natural characteristics, thanks to one of our customers





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



who with decades of experience in the medical-pharmaceutical field uses these methods for its product.

Foods processed in this way have always been used by astronauts but today these products are the most innovative and most popular in all sectors of the food industry worldwide.

**Today, PIGO srl is one of the very few companies in the world that offers all three main methods of preserving food: freezing, drying, and freeze drying.**

Managing to improve existing technologies, obtaining the final product of clearly superior quality.

Following guideline "our raw material is gray matter", PIGO srl is focused on research, development and continuous improvement, thanks to engagement of entire team and collaborators.

PIGO srl long term experience in fruit and vegetables processing brought also to develop the high tech freeze-dryer that allows to save delicate aromas while drying the frozen product under vacuum, producing a premium quality product. The sensorial properties of the finished product are absolutely superimposable to those of the fresh product. After the process, product will have retained its form, volume and original structure, as well as all its physical, chemical and biological properties.

As the product is porous, it can be re dissolved by the simple addition of a proper solvent (water).

As mentioned PIGO srl is specialized also in freezing, and for the perfect IQF freezing process we recommend **EASY Freeze IQF Freezer**, PIGO srl avantgarde in freezing technology.

Fully controlled fluidisation method keeps the product constantly suspended above the belt in a cushion of air. The result is the immediate crust freezing and efficient core freezing of individual pieces, regardless of type, variety or condition of product.

**Maximized freezing efficiency** is guaranteed for each unique







product, whether the product is heavy, light, soft, sticky or fragile, thanks to Variable speed control of all fans and all other build-in drives, allowing on-the-fly optimization of air flow conditions.

PIGO srl is also specialized in other drying and freezing technologies. Besides **Easy Freeze Dryer EFD**, main machines for drying are **Adiabatic Multistage Belt Dryer PG135** and Tunnel Dryer PG128. For freezing, besides the **IQF Freezers EASY Freeze**, PIGO also produces **Spiral Freezers EASY Freeze SPYRO**.

PIGO srl experience also in complete stone fruit processing lines is perfectly proven and incorporated in the **High Capacity Pitting machine - PG 103**.

**The key advantages of PIGO Technology and competitive technologies:**

**FASTER PROCESS WITH LESS ENERGY** – Our method reduces process time up to 25% while consuming less energy.

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

**NO PRODUCT WEIGHT LOSS / ZERO DEHYDRATION** - Uniquely designed features allow air flow which are crucially important for preserving the natural integrity of your product, almost immediate crust freezing and preventing product weight loss.

**HIGHER YIELD** and faster investment return.

**LISTERIA AND PATHOGEN FREE OPERATION** - Today's "must" for food safety, provided by open design of all machinery parts by unique PIGO design.

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

For more information we invite you to visit our website **[www.pigo.it](http://www.pigo.it)** or simply send an e-mail to **[info@pigo.it](mailto:info@pigo.it)**.

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



# RUMMO is born again thanks to unique partners

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

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

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

## #SAVERUMMO IS ICI CALDAIE'S CONTRIBUTION

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

tory 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.

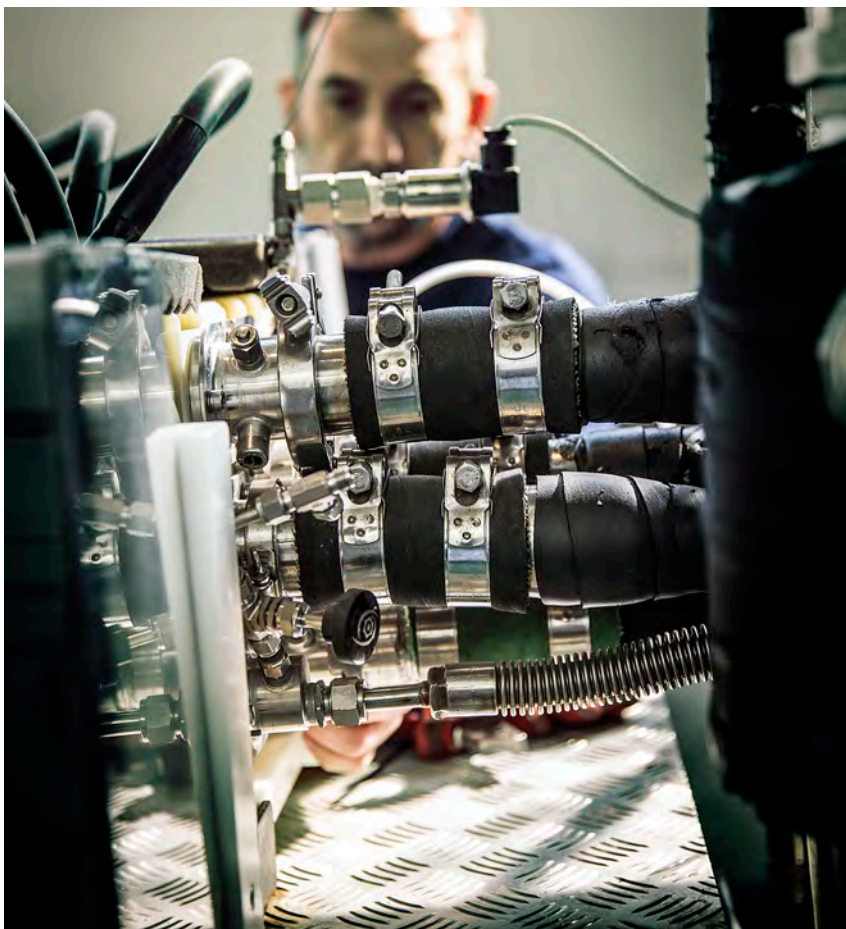
#### **Interventions and results**

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 results. In the refrigeration plant, for instance, a reduction in

## 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**







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 disconnector to work at the same

temperatures as the cooling tunnels of 14°C. The electricity saving is equal to 282,972 kWh/year, equivalent to about 22,600 €/year, i.e. 93 tons of CO<sub>2</sub> less released into the atmosphere. As for the compressed air power plant, the ex-ante situation was based on fixed speed compressors.

These were replaced by inverters compressors, which resulted in an electricity saving of 30%, about 325,387 kWh/year, corresponding to about 26,000 €/year and a reduction of about 107.38 tons of CO<sub>2</sub>. Finally, in the vacuum plant, the vacuum pump has been replaced by a liquid ring pump cooled by the chilled water produced by the Fridge Units with an air-cooled pump.

This replacement has allowed a saving of electricity of 30 kWh in addition to the non-use of chilled water for cooling, which means a saving of electricity of 237,600 kWh/year, equivalent to about 19,000 €/year and about 78.41 tons of CO<sub>2</sub> less released into the atmosphere. S4E System has also introduced an energy monitoring system for the heating and cooling plant, and also installed switchboards with PLC and digital interface to replace the previous electromechanical switchboards with no digital interface. In 2019, Rummo commissioned S4E System to carry out and transmit the Energy Diagnosis procedure according to the Legislative Decree 102/2014.

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

When the client's initial needs are fully met, there is no question of success. Success is made possible by the vision of those companies that no longer think themselves in terms of simple producers, from an individual perspective, but see the project on a larger scale.

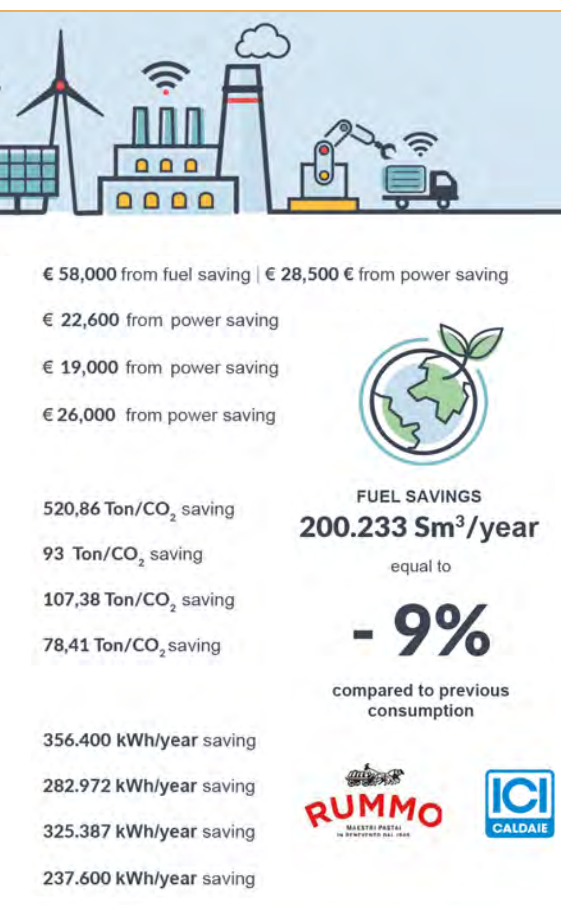
Only if driven by the desire to achieve a comprehensive solution one can establish partnerships with other companies that have different specializations and bring together multiple skills to develop complete projects.

With this ambition in mind, a company like ICI Caldaie collaborated in the energy improvement process of another company, in this case Rummo, not simply offering its boilers, but participating in a design process that involved many other areas.

Starting from a specific urgency, making useful energy-saving actions, it has been possible to create a condition of saving in a wider sense, making the company sustainable while maintaining the high-quality standards of its efficiency and productivity.

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

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



# The (re)discovery of hygiene, health and safety connection with COLUSSI ERMES

*The whole world has a new awareness: the connection between hygiene and health cannot just exist but must be tangible.*





**H**ow? This is Colussi Ermes' starting point. This company specialized in food industry washing systems has seized the opportunity to renovate their mission, which has always aimed to pursue perfection in terms of hygiene and sanitization.

Colussi has done so trying to strengthen the concept of safety in the food industry world. During such an intense period, many food-production companies faced the demand to comply with new strict standards.

No one knows this better than Colussi Ermes who has met many new requests coming from its clients: ranging from the meat to the dairy industry, from the confectionary field to fruit and vegetable production, from the poultry sector to fish industry. How can safety be increased during the food production and washing cycle? With solutions that allow to reduce cross-contamination risks thus protecting consumers and also with the kind of care for every detail that distinguishes Colussi Ermes. Machine design, energy consump-

tion reduction, water and detergent use, cycle automation, loading/unloading automation and the parameter monitoring in compliance with HACCP rules are just a few of the features that combined in a single washing system make the difference. The CIP (Clean in Place) self-wash programs are an example of this. Their goal is to protect and depurate the production lines from organic and inorganic contaminating agents.

Thanks to this automatic system – that involves all of the machine circuits,





walls and key points and that is performed with pre-set pressure and temperature including also a final rinse and sanitization phase – companies can reach the high safety standards that are required.

Colussi Ermes' challenge for 2022 becomes another opportunity to make the world a safer place. Two new plants have been built comprising the new Colussi Research Centre site.

This is an actual innovation space, a lab where experts can study new improved systems for industrial washing, sanitization and drying that guarantee energy savings and that aim to ensure higher quality, safety, performance and efficiency levels. The new site, which are completely covered with solar panels, qualify Colussi Ermes as a model of sustainable excellence.

Colussi Ermes exports all over the world, extensively in many countries. Europe, North America and Australia

are the main markets where the most important sales targets are constantly reached. Furthermore, with the aim of strengthening the efficiency in the American market, Colussi Aws Inc. has been established in California, together with an all-American brand.

### **Saving resources**

Large and small companies working in the food market and using COLUS-SI ERMES machines have been able to achieve extraordinary advantages such as:

- dramatic energy and chemical savings
- environmentally friendly wash op-

erations

- reduced wash time vs. very high hygienic and sanitary standards
- increased production capacities and safety
- better working performance of their staff

Colussi Ermes is continuously innovating to improve your safety.

This is a company that marked its path with its resilience spirit which is fundamental in this memorable period. 🏛️

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





# LISA WICKER named Ceo of Lyons Brewing & Distilling Co

*Lyons Brewing & Distilling Co. is the new global brand name for the Lyons family's beverage business, including breweries and distilleries in Kentucky and Ireland*



Lisa Wicker  
Ceo of Lyons Brewing & Distilling Co

**W**hat began as a personal passion and a toast to family tradition for the late Dr. Pearse Lyons has become a global beverage business with six breweries and distilleries in Kentucky, USA, and in Ireland crafting an award-winning line of beers and spirits. The legacy continues with Dr. Mark

Lyons, the seventh generation of the Lyons family to be involved in brewing and distilling, as well as his mother and Pearse's wife, Deirdre Lyons. Recently, Mark and Deirdre developed a new global brand name for their family of breweries and distilleries. Lyons Brewing & Distilling Co. now represents their beverage entities, including Lexington

Brewing & Distilling Co., Dueling Barrels Brewery & Distillery, Pearse Lyons Distillery and Pearse Lyons Brewery. This new name is reflective of the business' private and family-owned nature and will enable the business to better tell its story.

With the development of this new global brand, the Lyons family also

began an international search for its first CEO.

"We were looking for a leader who shares our team-focused values, commitment to excellence and passion for brewing and distilling," said Dr. Mark Lyons, president of Lyons Brewing & Distilling Co. "We were delighted to find those qualities in Lisa Wicker.

When Lisa and I met, one of the elements that stood out most to me was her background as a scientist and journalist.

As we appoint our first-ever CEO for Lyons Brewing & Distilling Co., it seems fitting that we found someone who, like my father did, has a deep enthusiasm for and expertise in the craft — both the science and the storytelling."

Wicker most recently served as the president and master distiller at Widow Jane Distillery, a rapidly growing whiskey brand in New York. Her early interest in the beverage business began on an Indiana vineyard, where she picked grapes as a farmhand and proved she was not afraid to get her hands dirty.

Since then, her 20-year career journey has spanned many facets of the spirits industry, including winemaking, whiskey production, product development and fermentation management.

She has held progressive roles in distilling and management at Limestone Branch Distillery in Lebanon, Kentucky; Starlight Distillery in Starlight, Indiana; and Preservation Distillery in Bardstown, Kentucky.

Wicker's strengths include building teams and mentoring others in the industry. She has trained brand ambassadors and distributors and conducted masterclasses at WhiskyFest in New York, Whiskies of the World in Washington, D.C., and The New

Orleans Bourbon Festival in New Orleans, Louisiana.

"I am delighted to return to Bourbon country and have the opportunity to be part of the next phase of growth for Lyons Brewing & Distilling Co.," said Wicker. "The Lyons family's story is unique in the brewing and distilling space, and the passion that the team has for their brand and their brewing and distilling processes is authentic. They have all of the elements to generate even greater success in the future, and I am looking forward to this next phase of growth alongside them."

"Our breweries and distilleries were founded on family tradition, are steeped in rich history and are reflective of their communities," said Lyons. "They hold stories that, when well-told, help connect people to our brand. Lisa's experience with product development, combined with a degree in journalism and a shared belief in the power of storytelling, make her uniquely qualified to deliver on our vision for Lyons Brewing & Distilling Co. and to share what we find to be so special with even more people."

Wicker began in her new role as CEO of Lyons Brewing & Distilling Co. in November and is based at the company's Lexington Brewing & Distilling Co. in Lexington, Kentucky.

#### RECENT ACCOLADES

##### **Lexington Brewing & Distilling Co. wins two World Beer Awards**

Two beverages produced by Lexington Brewing & Distilling Co. recently brought home gold medals from the 2022 World Beer Awards, a global awards program that selects the best beers in all internationally recognized styles.

Kentucky® Maple Bourbon Stout and Kentucky® Bourbon Barrel®

Ale were recognized as a Gold Medal Flavored Stout and Porter and a Gold Medal Heritage Beer, respectively.

Kentucky Maple Barrel Stout is a bold imperial stout brewed with brown sugar for an extra kick.

With flavors of roasted malt and cocoa, this brew was aged for 18 months in a freshly decanted maple syrup bourbon barrel. Kentucky Maple Barrel Stout has notes of sweet maple syrup, vanilla and caramel, backed up by hints of oak on the finish.

Kentucky Bourbon Barrel Ale is aged in freshly decanted bourbon barrels from some of Kentucky's finest distilleries. Subtle yet familiar flavors of vanilla and oak are imparted to this special ale as it rests in the charred barrels. T

his beer has grown to become the flagship beer of the premier name in barrel-aged beers.

The 2022 World Beer Awards are part of the World Drinks Awards, presented by TheDrinksReport.com, a leading online resource for drinks professionals. More than 3,200 beers from more than 50 countries entered the contest, and an international judging panel blind-tasted and scored the entries across three rounds of judging to identify the best beers in 10 categories.

Lexington Brewing & Distilling Co. is located in downtown Lexington and is a popular stop on the Kentucky Bourbon Trail®.

##### **Pearse Lyons Distillery recognized by Whiskey Awards Ireland**

**Pearse Lyons Distillery** at the historic St. James Church in Dublin has garnered yet another accolade, recently receiving the Highly Commended Award in the Sustainable



Distillery Category at the Icons of Whiskey Ireland 2023 awards.

The award is given to "a distillery that has implemented improved sustainability processes within the distillery and the wider supply chain in the past 12 months that have led to demonstrable reductions in the brand's environmental impact."

Pearse Lyons Distillery is Dublin's only independent, family-owned distillery and is named for Alltech founder Dr. Pearse Lyons. It produces Pearse Irish Whiskey brands and pays homage to the Lyons family's brewing and distilling legacy.

Located in a deconsecrated church, the distillery opened in 2017 and quickly became an award-winning tourist destination.

The Lyons family's environmental commitments were at the core of every decision made during the church's restoration, from LED lighting and solar panels to shipping spent grains to local farmers to be used as animal feed.

Pearse Lyons Distillery recently achieved Gold Membership, the highest and most prestigious standard in the Bord Bia Origin Green program, Ireland's pioneering food and drink sustainability program.

Currently, the distillery is also awaiting intermediate certification from Sustainable Travel Ireland, the only Irish certification body with criteria recognized by the Global Sustainable Tourism Council (GSTC).

In November, Pearse Lyons Distillery hosted the 2022 Irish Whiskey Awards ceremony, the pinnacle of the Irish Whiskey industry event calendar. More than 120 whiskey producers competed for medals in 17 categories, and entries were judged by members of eight Irish whiskey societies from across the country.

Pearse Lyons Distillery scooped up three prestigious awards at the event. Both the Pearse Lyons 5-Year-Old and Pearse Lyons 12-Year-Old whiskeys received gold medals. The distillery also won the title of Best New Irish Whiskey in the three-to-six-year-old category for its latest offering, Genesis, which has not even been released to the public yet. 🏰

## MAGAZINES and WEB PORTAL focusing on packaging and on the FOOD&BEVERAGE technology

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# An approach to innovative cross-flow filtration with VLS TECHNOLOGIES

**T**he markets of wine, beer, spirits, juices and soft drinks are constantly evolving, and the technological solutions adopted for the filtration of liquids must keep up with innovation and growth.

VLS Technologies represents worldwide a single reference point for the client for both the aspect of filtration and more complex needs that involve the whole process of liquid treatment: that is made possible by the production plant in San Zenone degli Ezze- lini in the Province of Treviso, northeast Italy, as well as by an established worldwide network of agents, authorized reselling and assistance.

In addition to traditional applications, as sheet filters or pressure leaf filters, the focus of VLS Technologies is the development of innovative solutions as cross-flow filtration systems and reverse osmosis.

Innovative technologies guarantee a number of advantages. For example in cross-flow filtration the liquid is pushed by means of pressure through the particular pores of a membrane: thanks to this system the clients are able to improve the obtained quantity of product, decreasing energy consumption and production costs, for example avoiding the usage of clarifiers and adjuvants.

Among technologies based on cross-flow filtration, the most valued are Unico and Lees-stop.

Unico filter is a solution designed for small/medium manufacturers that need to filter their products (wines and







lees) with a single solution, obtaining a filtered product of excellent quality with a turbidity below 1 NTU.

That is why VLS Technologies has created Unico filtration system: thanks to our filter it becomes possible getting a good filtration of the product and reducing the microbiological flora; all of this by saving all the organoleptic characteristics of the product.

The filtering media can stand repeated regenerations with warm water and detergents: this means a longer lifespan.

Unico has recently won the "Innovation Challenge Lucio Mastroberardino" at SIMEI Drinktec 2017.

Lees-stop, winner of the New Technology Award at SIMEI 2015, is a solution meant for filtering products with high content in solids that replaces the traditional polymeric membranes of the cross flow filters with sinterized stainless steel membranes.

Thanks to several tests, we have verified that this kind of material perfectly fits the cross flow filtration of "difficult" products with about 70% of content in solids.

VLS Technologies, thanks to its 35-year experience in the market, can

guarantee a dynamic and flexible approach, realizing long-term partnerships with both medium and small production companies as well as with major brands worldwide. 🏛️

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





# BrauBeviale welcomes the beverage industry to 2023 with a new brand image and new schedule

**W**e can hardly wait for 2023, because that's when BrauBeviale, one of the leading capital goods fairs for the beverage industry, will finally reunite the world of beverages at Exhibition Centre Nuremberg.

The preparations have already begun. Following the prolonged pandemic-induced break, the trade fair will present itself to the beverage industry with a fresh look and new schedule: From 28 – 30 November 2023, BrauBeviale will get under way with a distinctive profile and new brand image. The slogan "We stand for variety." points the way for the trade fair and its agenda.

"We can hardly wait to finally be able to gather the world of beverages in our exhibition halls again," says Andrea Kalrait, Executive Director BrauBeviale and Beviale Family at NürnbergMesse, who is already looking forward to 2023. "Although we had a long break, we continued to listen closely to the industry and talked to a lot of companies and event partners.

The mood was quite clear: Both exhibitors and visitors are already looking forward to meeting up with colleagues, customers and industry specialists in Nuremberg. In a creative working atmosphere, important contacts will be made, networks expanded, specific issues discussed, and prospects turned into customers. BrauBeviale provides inspiration and sets trends for the beverage sector."

- *Distinctive profile, new slogan*
- *New dates:*  
**28 – 30 November 2023**
- *BrauBeviale at drinktec 2022*

## Brau<sup>'23</sup> Beviale

To ensure that this continues to be the case in future, Andrea Kalrait held intensive discussions in recent months with her team and the event's institutional sponsor, Private Brauereien Bayern e. V. (Bavarian Association of Private Breweries) about the positioning of BrauBeviale.

The outcome of these deliberations is that BrauBeviale will go into 2023 with a sharper profile and new brand image. The slogan "We stand for variety." has the entire beverage industry in its sights. It describes an important and crucial core aspect of the trade fair – only if various players, from young entrepreneurs to experienced industry insiders, can come together under one roof in a relaxed and friendly atmosphere do you achieve that specific sense of community that makes BrauBeviale so unique. The idea of building bridges together to unite all the various players will also

be conveyed through the modern visual brand identity.

This is where we literally come full circle, as the circle is the key element of the new BrauBeviale brand image that will run through the design of all trade fair communications, both online and offline. For example, in the round key visual, which is an authentic reflection of the diversity of the various players and wide variety of beverages in one place. And this is precisely the reason why the colour scheme of the trade fair is also being modified, by adding more colourful and varied shades to the existing green – which is also associated with sustainability.

**Make a note of the new dates: 28 to 30 November 2023**

But it's not just the brand image of BrauBeviale that has changed, the timing of it is new as well: BrauBeviale will now take place from

28 to 30 November 2023, offering the ideal conditions to rounding out the year together with the industry while gaining inspiration and paving the way for the following year. Holding the event at this time offers up another treat: The world-famous Nuremberg Christmas Market, which will be officially opened the day after the last day of the fair by the Nuremberg "Christmas Angel". Andrea Kalrait thinks that this has a distinct advantage: "Particularly for our international visitors, this is a wonderful opportunity to round off their visit to BrauBeviale with a stroll around the magical Christmas market stalls. And of course, for our German visitors too it is an attractive incentive to stay in Nuremberg one or two days longer. The atmosphere in Nuremberg in the run-up to the festive season is extremely hard to beat."

### **BrauBeviale at drinktec 2022**

However, nobody needs to wait until next year to meet the BrauBeviale team live again, because we will be appearing at drinktec from 12 to 16 September 2022. At the stand (A6.512) of the Bavarian Association of Private Breweries (Private Brauereien e. V.) – the institutional sponsor of BrauBeviale – Andrea Kalrait and her team are particularly looking forward to the



personal exchanges, interesting conversations and inspiring encounters with old friends and new contacts, especially after having been deprived of this experience for so long. Naturally, they will also be happy to provide information about plans for BrauBeviale 2023 in Nuremberg.

### **About BrauBeviale**

BrauBeviale in Nuremberg is one of the leading capital goods trade fairs for the beverage industry worldwide. The trade fair is linking its success story to its aspiration to unite the beverage community in the future too. It's where tradition and longstanding experience meet inspiration and the latest trends – at a regional and global level. For the German and international exhibitors and trade visitors from more than 135 countries, it offers the ideal platform for working together to launch innovations and set important trends for the entire beverage industry. BrauBeviale is ably supported by its institutional sponsor, Private Brauereien Bayern e. V. (Bavarian Association of Private Breweries), which provides its expertise, its network, and the European Beer Star competition as a flagship attraction. 🏰





# Planning and realization of machineries for OENOLOGICAL SECTOR

**O**ur company was founded on 09 January 1996 by the current Administrator P.I. Giacomo Cocci who, thanks to the experience gained since 1979 in the wine sector, decided to set up his own business. Over the years the company has grown due to the experience and innate inventiveness of the founder, as well as the arrival into the company of the children and high qualified staff who have added value and new ideas.

## WHAT WE DO

Our business is focused on the study and development of new technologies, on the design of machinery and processing lines, on the construction and marketing of oenology systems. Over the years, oil and beer production plant have been built. In addition to mechanical construction, we are also able to develop com-





plete turnkey wine cellar projects, taking care of the architectural and technological parts and proposing innovative systems, making use of various patents.

### MISSION

A whole life dedicated to wine and his men. The lucky to have fun with your work. The opportunity to meet and work with great Oenologists and Wine Producers. Our mission has always been: to listen, to understand problems, to propose solutions. We are pioneers, we have always explored innovative and highly topical techniques. We are leaders in ion exchange, in the recovery of fermentation gases, in the design and construction of innovative machines from grape harvesting to bottling, in the construction of complete wine cellars.

### OUR PRODUCTS

- Reception and processing of grapes:  
Destemmers, sorting lines, receiving tanks, stalk shredder, stalk aspirators.
- Pumps:

- Elliptical rotor pumps, single screw rotor pumps, lobe pumps, peristaltic pumps, piston pumps, floating stator pumps, coaxial pumps.
- Pressing:  
Membrane presses for soft pressing.
- Musts cleaning:  
Dynamic flotation units for the clarification of the musts.
- Filtration:  
Rotary vacuum filters, kieselguhr filters, plate filters, cross-flow filters, microfiltration housing, reverse osmosis.

- Refrigeration:  
Chillers, heat exchangers, refrigeration plates, electrical panels for to control fermentation temperatures.
- Tartaric stabilization:  
Manual and automatic ion exchange deionizers.
- CO2 recovery:  
Plants for the recovery and reuse of fermentation carbon dioxide.
- Sparkling wine and fizzy wine:  
Complete plants for Classic and Charmat Method.
- Nitrogen:  
Nitrogen generators and plants.
- Batonnage:  
Automatic devices for mixing liquids inside the tanks.
- Tanks and accessories:  
Stainless steel tanks and autoclaves of all types. Removable stirrers.
- Bottling:  
Bottling systems of all types, manual and automatic. Rinsers, fillers, corks, labellers, capping machines.
- Barriques and tonneaux accessories:  
Supports for barriques and tonneaux, manual stirrers, filling, emptying, washing.
- Sanitization:  
Steam generators, dry nebulizers.
- Oxygen dosage:  
Micro oxygenators.

### OUR MARKET

Our main activity is in Italy but since 1996 we export our products to over 53 countries around the world. Exports currently constitute about a 35% of sales. 🏠

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





# AMS Ferrari: technology and passion for more than 90 years



Rinsing/filling/capping triblock mod. Infinity ultraclean for dairy and delicates

**F**or more than 90 years AMS Ferrari's passion has never stopped growing, driven by those unique values typical of the Emilian people, who have successfully exported the best bottling line technology throughout the world. The demanding achievements, experiences lived alongside clients and tough international competition have shaped our character, helping us to develop the characteristics setting us apart today: great production flexibility combined with high innovative capacity, assiduous quality control of the entire production process and applied materials, and above all, a complete focus on customer.



## AMS Ferrari for dairy products

The delicate nature of the product inspired us to develop a filling valve without any gaskets.

The absence of any gaps and the internal end of the valves facilitates decontamination. The machines can be built either traditionally or in the Neck Handling version, depending

on the type of container and target production.

The latest novelty for the milk and delicate liquid filling system is the electronic filling machine, the INFINITY series, specifically formulated for an extremely broad range of sensitive products such as milk, flavoured milk, yoghurt, yoghurt drinks, fruit juices



Hydrogen peroxide injection star - for empty bottles sterilization



Ultraclean filling carousel with electronic flow meter - contactless filling

and dairy products with fruit pieces. Electronic flow meters control the filling process.

Machine cleanliness is guaranteed by an efficient sterilisation system (CIP / SIP). In terms of precision and reliability, the "Infinity" series is superior to any other filling system. The technology has been developed to satisfy all specific "shelf life" requirements.

The main feature of this machine is the electronic filling system with flow meters. The quantity of product is measured with high accuracy. The simplicity of construction of the machine ensures accurate washing external and internal.

The large capacity of sanitization and sterilization, make INFINITY the ideal machine for the filling of dairy products in general. The range of INFIN-

ITY models covers from 6 to 40 filling valves. The wide choice of optional constructions, make the machine customizable, tailored to the customer.

### How is structured mod. Infinity?

A volumetric pump with pushes the product from aseptic tank to the filling carousel.

With an electronic flow meter, one on each filling valve, the product is filled into the bottle (both of glass & PET with the same machine) contactless, ensuring a perfect cleanness of the filling system.

Bottles are previously cleaned with sterile water or using the peroxide who is dosed in the bottle by a pump with electric control. Then, a subsequent injection of steam activates the peroxide.

Finally, bottles are rinsed with water to remove any residue from the inside. Caps are washed and then sterilized by an UV lamp as the washing water. Many types of closures are available on customer's request.

The machine cleans itself with an external washing circuit without recovery using a sanitizing product.

The upper part is provided with a hood for the aspiration of any residues.

Our machines are also provided with tempered glass safety protection doors resistant to acid washes and scratches and is perfectly washable. This protection system adds value to the customer's investment.

Electronic, mechanic, materials and production cycle, ability to listen to and responsiveness. Everything contributes to realize a high-quality standard that meets customers' needs and satisfies all the employees of the company. 🏠

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



# MERGER SYSTEMS IN PACKAGING LINES: a short guide for selection



**T**he presence of merger systems in the packaging lines is a significant sign of a very high level of complexity and automation. The selection of the correct device is not trivial and has a strong impact on the quality of the products and the proper functioning of the downstream machines and in general on the efficiency of the line.

There are many types of mergers, but the main ones fall into two categories: **pneumatic or accumulation unifiers and dynamic unifiers.**

Accumulation types have “gates” on the entrance lanes which remain closed waiting for the convergence section to be free, then releasing the rows of products in sequence. This simple and cost-effective solution have **two important prerequisites:** the products must be able to withstand the pressure during the accumulation phase and the downstream machines must be able to receive the products in trains without being stressed. The first point is intuitive because it concerns the integrity of the products and it means that those eligible are boxes,

trays, stacked products in tight wraps. It is more important to deepen the second point though. At the exit of the merger, the products are attached to each other or in any case very close, but the speed of the belt is equal to that which would be obtained with regularly timed products with a gap between them equal to the size of the product itself. The average productivity of the line does not change, but when the train arrives downstream, the instantaneous one, from the point of view of the machine, is double. For this reason, either the machine is able

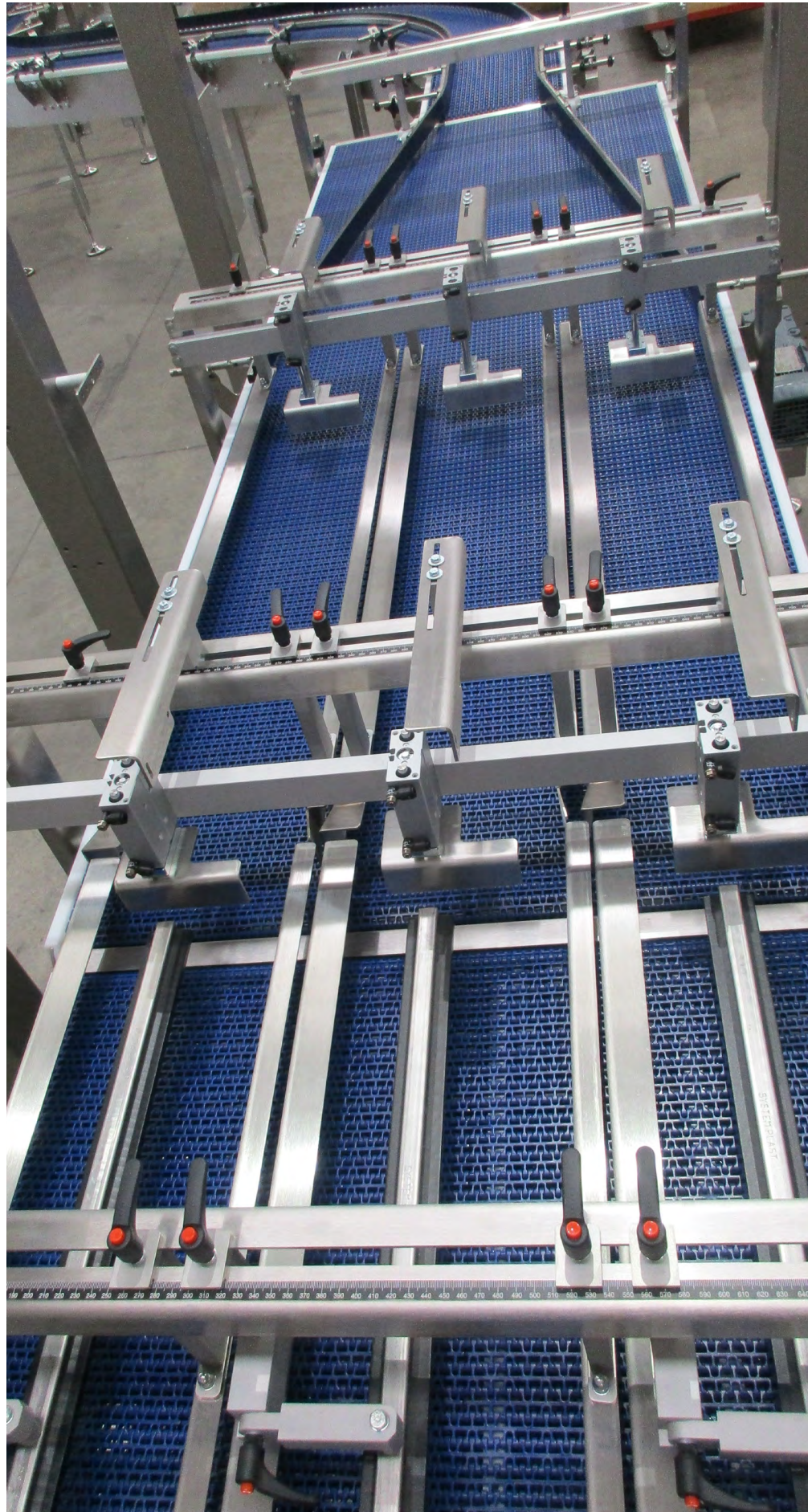


to handle the situation, or it is necessary to normalize the flow with a slow-down belt and an acceleration one after the unifier, which clearly requires more footprint, two extra motors and a more complex control logic.

When these premises are not verified and the products cannot be accumulated, due to the risk of overlapping (typically flowpacks or pillow bags) or damage due to excessive pressure or because the downstream machines require the products to be presented at a regular frequency with adequate distance between one product and another, then it is necessary to use a **dynamic system**.

A dynamic merger is a scalable system composed of a series of phasing belts that speed up or slow down the products arriving from the incoming rows in order to create the necessary gap to prevent two pieces from appearing at the convergence point at the same time. In these devices products are dealt with always one by one thus avoiding to have group of products while ensuring a regular spacing. As the production rate increases, the number of phasers required also increases. The fastest machine developed by MH is the HP dynamic systems that can reach throughputs up to 600 ppm for 150 mm long flowpacks. Depending on products' weight and packaging up to 5 phasing conveyors with brushless drive and vacuum suction can be used to handle the steep accelerations. 🏭

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



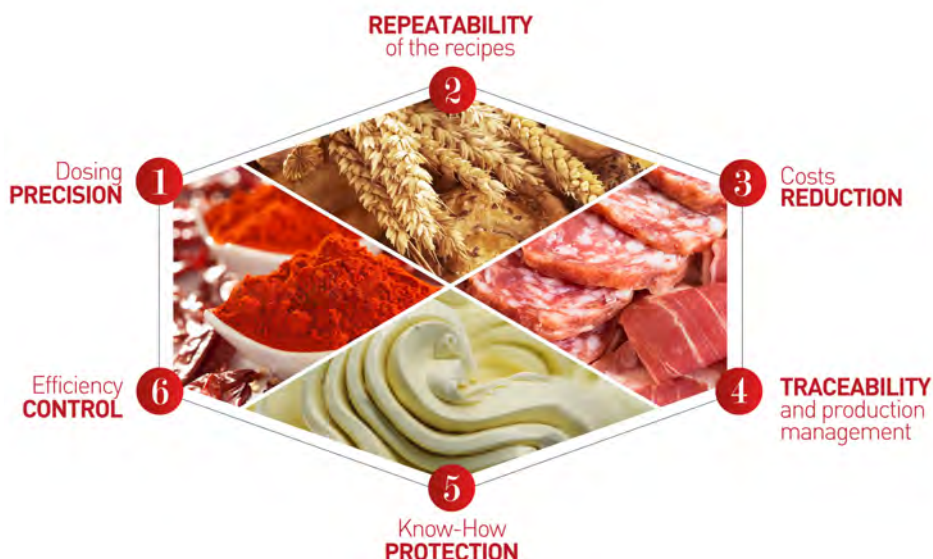
single raw material or each single recipe accessing to a protected area.

**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. SUPERSIN-CRO**), 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)



**LAWER®**  
dosing & dispensing systems



# EXHIBITIONS 2022-2023

## PROWEIN

19-21/03/2023   
DUSSELDORF

International wine & spirits exhibition.

## MECSPE

29-31/03/2023   
BOLOGNA

Fair for the manufacturing industry.

## VINITALY

02-05/04/2023   
VERONA

International wine & spirits exhibition.

## PROSWEETS

23-25/04/2023   
COLOGNE

Fair for the sweets and snacks industry.

## MACFRUT

03-05/05/2023   
RIMINI

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

## CIBUS

03-06/05/2023   
PARMA

Fair of food product.

## INTERPACK

04-10/05/2023   
DUSSELDORF

Technology focused on packaging, bakery, pastry technology.

## HISPACK

07-10/05/2023   
BARCELONA

Technology fair for packaging.

## TUTTOFOOD

08-11/05/2023   
MILAN

Fair B2B show to food & beverage.

## SPS/IPC/DRIVES/ITALIA

23-25/05/2023   
PARMA

Fair for industrial automation sector.

## BEER&FOOD ATTRACTION

19-22/06/2023   
RIMINI

Fair for beers, drinks, food and trends.

## FISPAL

27-30/06/2023   
SÃO PAULO

Fair for product from packaging.

## MCTER

29/06/23   
ROMA

Exhibition on energy efficiency.

## POWTECH

26/29/10/2023   
NUREMBERG

The trade fair for powder processing.

## MIDDLE EAST 2022/23

### GULFHOST

2023   
DUBAI

Fair of hospitality.

### GULFOOD

20-24/02/2023   
DUBAI


Fair for food and hospitality.

### GASTROPAN

17-19/03/2023   
ARAD

Fair for the bakery and confectionery.

### DJAZAGRO

05-08/06/2023   
ALGERI Fair for companies of the agro-food sector.

### IRAN FOOD+BEV TEC

10-20/06/2023   
TEHRAN

Fair for food, beverage&packaging technology.

### PROPACK ASIA

14-17/06/2023   
BANGKOK

Fair for packaging, bakery, pastry.

### PACPROCESS FOOD PEX

07-09/09/2023   
MUMBAI

Fair for product from packaging.

### ANUTEC

07-09/09/2023   
NEW DELHI

Fair for the food&beverage industry.

### HOSPITALITY QATAR

06-08/11/2023   
DOHA

Fair of Hospitality and HORECA.

### GULFOOD MANUFACTURING

07-09/11/2023   
DUBAI

Fair for packaging and plants.

# EXHIBITIONS 2022-2023

## HOST

**13-17/10/2023** 🏛️

**MILAN**

Fair for bakery production and for the hospitality.

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## SIAL

**19-23/10/2023** 🏛️

**PARIS**

Fair on food products.

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## IBA

**22-26/10/2023** 🏛️

**MONACO**

Fair for the bakery and confectionery industry.

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## CIBUS TEC

**24-27/10/2023** 🏛️

**PARMA**

Fair for food & beverage technologies trends.

---

## SUDBACK

**26-29/10/2023**

**STUTT GART**

Fair for bakery and confectionery.

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## BRAU BEVIALE

**28-30/11/2023** 🏛️

**NUREMBERG**

Fair of production of beer and soft drinks.

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## SIMEI

**2024** 🏛️

**MILAN**

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

---

## ANUGA FOODTEC

**19-22/03/2024** 🏛️

**COLOGNE**

Fair on food and beverage technology.

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## LATINPACK

**16-17/04/2024** 🏛️

**SANTIAGO CHILE**

International packaging trade fair.

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## FACHPACK

**24-26/09/2024** 🏛️

**NUREMBERG**

International packaging trade fair.

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## ALL4PACK

**04-07/11/2024** 🏛️

**PARIS**

Exhibition about packaging technology.

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## DRINKTEC

**2025**

**MONACO** 🏛️

Fair for the beverage, liquid food industry.

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## SAVE

**2026**

**VERONA** 🏛️

Fair for automation, instrumentation, sensors.

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**AMS FERRARI SRL**

103-104

Via Bazzini, 131  
41122 Modena  
Italy

**BALLUFF**

10

The Automatici! Centre,  
Finney Lane  
SK8 3DF  
Cheadle, Cheshrle  
United Kingdom

**CAMA GROUP**

42/44

Via Como, 9  
23846 Garbagnate Monastero  
LC - Italy

**CESARIN SPA**

26/29

Via Moschina, 3  
37030 Montecchia di Crosara  
VR - Italy

**COLOR SERVICE SRL**

70/72

Via Divisione Julia, 15  
36031 Dueville - VI - Italy

**COLUSSI ERMES SRL**

90/92

Via Valcunsat, 9  
33072 Casarsa della Delizia  
PN - Italy

**EMERSON**

**AUTOMATION FLUID**

60/63

Str. per Cernusco, 19  
20060 Bussero - MI  
Italy

**ENOMET IMPIANTI SRL**

101-102

Via Guazzi, 26/A  
Tavernelle  
61036 Colli al Metauro - PU  
Italy

**ERREPAN SRL**

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Via Terracini, 4  
24047 Treviglio - BG  
Italy

**ESCHER MIXERS SRL**

11/13

Via Copernico, 62  
36034 Malo - VI  
Italy

**ETIPACK SPA**

34/36

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20092 Cinisello Balsamo - MI  
Italy

**EUROPA SRL**

39-40

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36034 Malo - VI  
Italy

**GIUSTO FARAVELLI SPA**

20/22

Via Medardo Rosso, 8  
20159 Milano  
Italy

**GORRERI SRL**

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42041 Sorbolo Levante di  
Brescello - RE  
Italy

**ICI CALDAIE SPA**

86/89

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37059 Frazione Campagnola di  
Zevio - VR  
Italy

**IMA SPA**

66/69

Via Emilia, 428/442  
40064 Ozzano dell'Emilia - BO  
Italy

**LAWER SPA**

107-108

Via Amendola, 12/14  
13836 Cossato - BI  
Italy

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HANDLING SPA**

105-105

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20826 Misinto - MB - Italy

**MAKRO  
LABELLING SRL**

58-59

Via S. Giovanna d'Arco, 9  
46044 Goito - MN  
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**MINI MOTOR SPA**

73-74

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42011 Bagnolo in Piano - RE  
Italy

**NIRSO EZIO SNC**

37-38

Via Maroncelli, 67  
20038 Busto Garolfo - MI  
Italy

**NVC - NEDERLANDS  
PACKAGING CENTRE**

**46/49**

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PO BOX 164 2801 AK  
Gouda  
The Netherland

**ORION  
ENGINEERING SRL**  
**79-80**

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43036 Fidenza  
Italy

**OROGRAF SRL**  
**54-55**

Viale Industria, 78  
27025 Gambolo' - PV  
Italy

**OSTS TECHNICAL  
SERVICE SRL**  
**81-82**

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

**PIGO SRL**  
**82/85**

Via dell'Edilizia, 142  
36100 Vicenza  
Italy

**PNEUMAX SPA**  
**75-76**

Via Cascina Barbellina, 10  
24050 Lurano - BG  
Italy

**SOTTORIVA SPA**

**8-9**

Via Vittorio Veneto 63  
36035 Marano Vicentino - VI  
Italy

**TARNOS S.A.**

**4-5**

Calle Sierra de Gata, 23  
28830 San Fernando de  
Henares  
Spain

**TECNO PACK SPA**

**50/53**

Via Lago Di Albano, 76  
36015 Schio - VI  
Italy

**TECNOPOOL SPA**

**33**

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

**VELO**

**ACCIAI SRL - VLS**

**96/98**

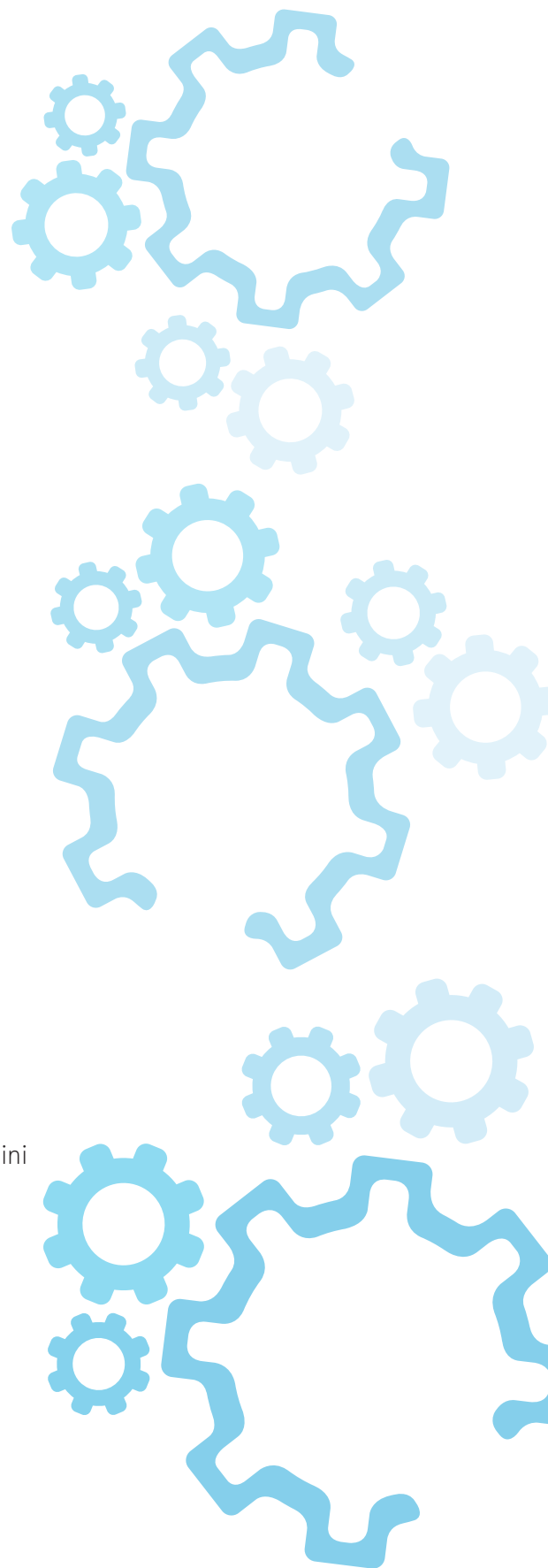
Via S. Lorenzo, 42  
Cà Rainati  
31020 S. Zenone degli Ezzelini  
TV - Italy

**WBL**

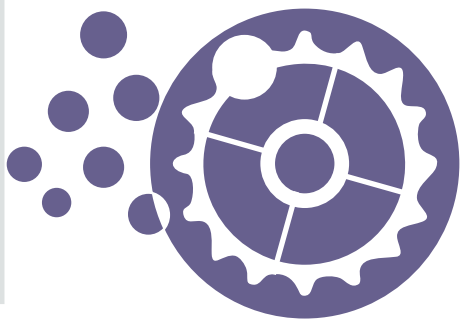
**SYSTEMS SRL**

**64-65**

Piazza Municipio, 12  
12060 Barolo - CN  
Italy







**BBTech expo**

**RIMINI**  
EXPO CENTRE  
**19 • 22 FEBRUARY 2023**

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

# THE BEER & BEVERAGE TECHNOLOGIES SHOW



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EXHIBITION  
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Providing the future

simultaneously with:

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**BEER &  
FOOD**  
ATTRACTION

# MACFRUT 2023



## FRUIT & VEG PROFESSIONAL SHOW

3-4-5 MAGGIO 2023  
RIMINI-EXPO CENTRE-ITALIA

ORGANIZZATO DA: **CESENA FIERA**

IN COLLABORAZIONE CON:

