

it. MAGAZINE

# FOOD

## processing

**beverage & packaging**

PROCESS  
AND PACKAGING



EDITRICE ZEUS - Via Cesare Cantù, 16, 20831 - SEREGNO (MB) - Tel. +39 0362 244182-0362 244186 - [www.editricezeus.com](http://www.editricezeus.com)  
Zeus tariffa R.O.C. - Spedizione in abbonamento postale - D.L. 353/2003 (conv. in L. 27/02/2004 n.46) art. 1, comma 1, DCB Milano TAXE PERCUE (tassa riscossa) Uff. Milano CMP/2 Roserio - ISSN 1827-4102

n° 6-2020



# One Stop Destination for all Your **PROCESSING & PACKAGING** Needs



**pacprocess  
food pex**

PROCESSING & PACKAGING  
MEMBER OF INTERPACK ALLIANCE



**09–11 DECEMBER 2021**

BOMBAY EXHIBITION CENTRE  
MUMBAI



**SWEETS & BAKERY**



**COSMETICS**



**PHARMA**



**BEVERAGE**



**NON-FOOD**



**FOOD**



**INDUSTRIAL GOODS**

## **IN DÜSSELDORF**

### **SENIOR PROJECT MANAGER**

**Mara Thierbach**

Phone: +49 211 4560 208

Fax: +49 211 4560 87208

Email: ThierbachM@messe-duesseldorf.de

### **JUNIOR PROJECT MANAGER**

**Joline Olbing**

Phone: +49 211 4560 274

Fax: +49 211 4560 87274

Email: OlbingJ@messe-duesseldorf.de

## **IN INDIA**

### **SALES MANAGER**

**Sharukh Khan**

Phone: +91 22 6678 9933, Ext. 104

Email: pacprocess@md-india.com

Powered by



**interpack  
alliance**

MADE FOR TOMORROW

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



Messe  
Düsseldorf  
India





*in love with the perfect shape*

baking pan for



croissants



baking pan for

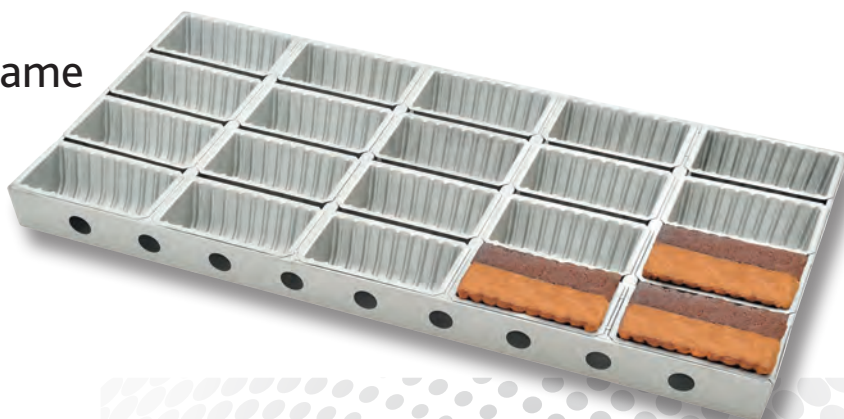


muffins

cake



baking frame



Equipment  
for bread  
and cake baking  
industries

ERREPAN s.r.l.  
Via Terracini, 4  
TREVIGLIO (BG) - Italy  
Tel. +39 0363 301806  
Fax +39 0363 303473  
[www.errepan.it](http://www.errepan.it) - [info@errepan.it](mailto:info@errepan.it)





**>1-40**  
SPECIAL

**>41-79**  
PACKAGING

**>80-114**  
NEWS

**>115-124**  
EXHIBITIONS



**TECNOPOOL SPA**

ENHANCED COOKING PERFORMANCE:  
THE FUTURE OF FOOD IS IN A SPIRAL OVEN  
**pg. 7-8**



**ETIPACK SPA**

SANDWICH PACKAGING: THE SOLUTION  
FOR THREE-SIDED LABELLING  
IN A SINGLE APPLICATION  
**pg. 42-43**

In partnership with:



NVC NETHERLANDS PACKAGING CENTRE



หอการค้าไทย-อิตาลี  
**THAI - ITALIAN**  
CHAMBER OF COMMERCE



# DRINK TECHNOLOGY MAGAZINE

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

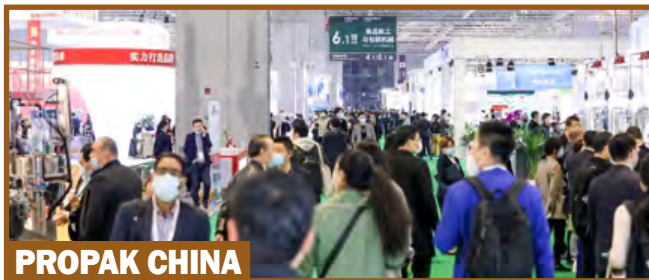


[www.drinktechnologymag.com](http://www.drinktechnologymag.com)





**GRACO**  
GRACO'S PORTFOLIO OF SANITARY PUMPS AND  
EQUIPMENT  
**pg. 84/88**



**PROPAK CHINA**  
TAPPING THE PROCESSING AND PACKAGING  
MARKET IN ASIA  
**pg. 115-116**

editorial management  
and registered office:  
Via Cesare Cantù, 16  
20831 SEREGNO (MB) - ITALY  
Tel. +39 0362 244182  
+39 0362 244186  
web site: [www.editricezeus.com](http://www.editricezeus.com)  
e-mail: [redazione@editricezeus.com](mailto:redazione@editricezeus.com)  
portal: [www.itfoodonline.com](http://www.itfoodonline.com)  
e-mail: [marketing@itfoodonline.com](mailto:marketing@itfoodonline.com)  
skype™: editricezeus

**Machineries, plants and equipment  
for food and beverage industry**

year XXXI - issue n. 6 - December 2020

**managing editor**  
Enrico Maffizzoni  
[direzione@editricezeus.com](mailto:direzione@editricezeus.com)

**editorial manager**  
S.V. Maffizzoni  
[redazione@editricezeus.com](mailto:redazione@editricezeus.com)

**editorial production**  
Sonia Bennati  
[bennati@editricezeus.com](mailto:bennati@editricezeus.com)

**account dep. manager**  
Elena Costanzo  
[amministrazione@editricezeus.com](mailto:amministrazione@editricezeus.com)

**project and layout design**  
ZEUS Agency  
[grafica@editricezeus.com](mailto:grafica@editricezeus.com)

**creative dep.**  
ZEUS Agency  
[grafica@editricezeus.com](mailto:grafica@editricezeus.com)

**translations**  
C. Natalucci translator

**printing**  
ZEUS Agency

Italian Magazine Food Processing  
Europe: single issue: Euro 25  
Annual (six issues): Euro 120  
Outside Europe: single issue: US\$ 30  
Annual (six issues): US\$ 170  
Subscription payment can be made in the name  
of Editrice Zeus sas, by bank money transfer or cheque.

**Italian Magazine Food Processing**

An outline of the suppliers of machines,  
plants, products and equipment for the food industry. Published:  
monthly

Registration: Court of Monza no.10 of 05.09.2018

Shipment by air mail art.2

comma 20/b law 662/96 - Milan

Panorama dei fornitori di macchine, impianti,  
prodotti e attrezzature per l'industria alimentare

Periodicità: mensile. Autorizzazione del Tribunale  
di Monza, n.10 del 05.09.2018

Spedizione in a. p. 45% art. 2 comma 20/b  
legge 662/96 Filiale di Milano

The reproduction of the articles and/or pictures published by this magazine is  
reserved (the manuscripts and/or photos sent to the Publisher will not be returned).  
The Editor declines all responsibilities for any mistake of photocomposition  
contained in the published papers of any magazine by EDITRICE ZEUS.

**EDITRICE**  
**zeus**





# 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, with a



download the  
catalogue



visit the  
website



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.

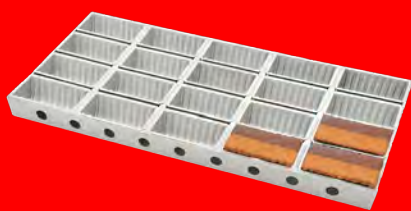
Whether you need a flat tray or a pan for muffins, croissants, plum-cakes or a set of moulds for white bread, at Errepan you'll find what you're looking for. As for the confectionery sec-

tor, there's a great demand for twinky 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**





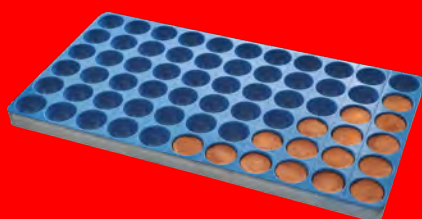
**Loaf pan with ridged containers**



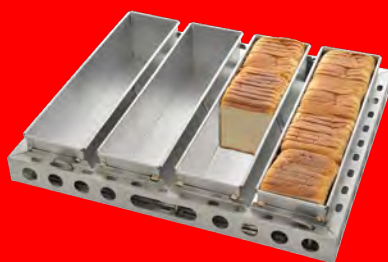
**Pan for croissants on a single aluminium tray or sheet**



**Flat sheet for high output machines**



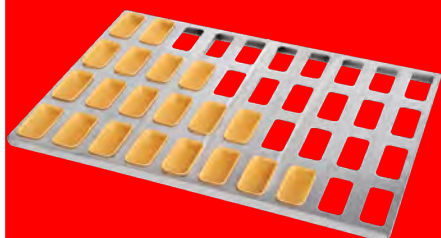
**Semi-spheric form with highly non-stick Teflon.**



**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**





# PIAB IS PROUD TO INTRODUCE THE PISOFTGRIP® 50-2

**P**iab once again extends the piSOFTGRIP® family with a new pinch gripper developed for the automation of the food/chocolate industry. The vacuum-based soft gripper can grip sensitive and lightweight oblong objects with odd geometries and/or objects with an unusual surface.

## Stockholm, Sweden

piSOFTGRIP® has two gripping fingers and a sealed vacuum cavity, all made in one piece, resulting in a simple and robust product. The product is not sensitive to dust and the gripping force is easily adjusted and controlled by the applied vacuum level. The gripper can easily be put in rows (multiple mode) to support picks of extended objects.

## Food approved

piSOFTGRIP® is made from silicone which is approved for direct contact with food (in accordance with FDA 21 CFR and EU 1935/2004 regulations). The food detectable gripper enables the food/chocolate industry to extend their automated food handling to include a wider range of products. Delicate food/chocolate items can be handled without risk of being spoiled due to crushing. Wash-down fitting options as well as



**piab** Evolving automation

a sealed vacuum cavity make it easy to clean and keep functioning even in challenging environments.

## Easy to use, control and clean

The soft gripping vacuum tool is as easy to control and install as a suction cup.

You can also use it for multimode applications, putting several piSOFTGRIP® 50-2 in rows or other grid structures, supporting the picks you want to make.

The piSOFTGRIP® 50-2 uses same fittings as Piab's piGRIP® suction cups. An optional stainless-steel fitting offers wash-down provision to assist cleaning (this gripper has the same interface as the piSOFTGRIP®

50-3). The intuitive and user-friendly design makes piSOFTGRIP® easy to integrate into automated procedures, which helps secure the quality of products and increase overall productivity.

## Great gripping solution for small, sensitive oblong objects

The piSOFTGRIP® 50-2 is an excellent and cost-effective solution for sensitive and difficult to grip objects.

The gripping force is controlled by simply adjusting the vacuum level. The new soft gripper can grip objects with a width of up to 50mm [1.18"]. 🏠

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





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

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



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

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

Such progress involves all sectors: industries such as refrigeration,

cosmetics and packaging have welcomed new technologies decade after decade.

The same applies to the cooking industry, which has experienced the development of sensors, airflow mechanics and the digitisation of controls and programmes.

Even the heart of the oven, namely the very dynamics of heat, has seen important innovations after having remained substantially unchanged for centuries. These include the UK-designed impingement oven and French clean-room technology. The next evolutionary leap in cooking

technology, however, will be taken by an Italian company.

Davide Deppieri, a master baker and R&D consultant for Tecnopool, explains, "Over the past few decades, industrial baking technology has still been very much linked to the needs of a growing industry: combining standards of quality with high productivity, a good shelf-life and the optimisation of treatment times was obviously very difficult. In recent years, needs have changed and a much more sensitive food culture has taken hold.

This scenario presents us with new opportunities not to be missed



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

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

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

Deppier explains, "The advantages are many, from efficiency to less space consumption on the ground, but the first and most important for me is that extra push to the product. I fell in love with these ovens while I was starting up a very large bakery plant near Ravenna.

Usually the difficulty is to have sufficient bread growth in the first baking phase in conjunction with the starch gelation: in that case I found myself having to calibrate the system to contain its development, because at the end of baking the forms were too much voluminous. Practically the problem that every producer would like to have. "

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

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

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

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

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

This also entails an improved life for end products, with more uniform cooling slower and improved moisture performance over time."

Another decisive factor that Tecnopool will use to change the market is the high heat efficiency of the new ovens.

Thanks to much reduced thermal inertia and more effective heat transmission with diathermic oil, they offer not only significant reductions in consumption but also flexibility of management that is unheard of with traditional ovens. The same applies to the risk of fire.

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

Mr. Deppieri concludes, "It has been clear to us for some time that we can reap huge benefits with this technology in terms of energy, management and quality: the solutions we are about to launch are already in operation at many of our customers' premises, developed on but a case-by-case basis.

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

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

I am very pleased that the third generation of our ovens is now ready: we have figured out how to develop them in a modular system in order to standardise the customisation of the ovens according to different recipes and various types of leavening.

I have no doubt that as soon as we have installed a few ovens, we will see an increase in demand." 🏠

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



# Make your spices even more valuable



**AVA**

[www.ava-huep.com](http://www.ava-huep.com)

**Dynamic  
Spices  
Sterilizers**





## THEEGARTEN-PACTEC DEVELOPS SEALING TECHNOLOGY FOR SUSTAINABLE PACKAGING

# GENTLE, ECO-FRIENDLY PACKAGING OF CHOCOLATE PRODUCTS

**D**resden. Coming up with the optimal packaging for sensitive chocolate products is no easy task. It requires an effective combination of technical precision and the ideal packaging material. Drawing on decades of experience, the Dresden-based company Theegarten-Pactec has now developed a special process called “suction supported sealing”. This not only allows chocolate products to be packaged more carefully, but also saves material to the benefit of the environment and makes processes more stable.

A European study on consumer preferences for packaging carried out in March 2020 revealed that almost 70 percent of respondents were actively trying to reduce their use of plastic packaging (Two Sides: “The Packaging Report 2020”). Particularly in the market for flexible packaging, i.e. the primary packaging of products offered to the end consumer in retail outlets, sustainable and recyclable packaging is becoming increasingly important. This has led to a corresponding interest among brand owners, and thus among players in the packaging industry, to switch to sustainable materials such as recyclable mono-materials and to packaging processes that have been designed precisely for these materials.

This is a switch that is challenging to implement, especially in the packaging of chocolate products. Two traditional methods of effectively packaging sweets are outlined below.

A variety of bars are packaged using composite materials, e.g. a base of

plastic or paper in combination with an aluminium layer. The products can therefore be easily packaged by fold wrapping and do not require any additional securing of the packaging by sealing or glue. However, packaging materials made of composite materials are not recyclable and are therefore not sustainable in view of market developments. It therefore makes sense to switch to the use of recyclable mono-materials for packaging processes. However, these materials have poor dead-fold properties, i.e. the packaging must be closed and fixed after folding by sealing or with the aid of glue so that it cannot open again.

For well-known brand products, a second packaging variant is traditionally used: a combination of two packaging materials – aluminium paper laminate and plastic packaging. This first “packaging layer”, the inner wrap of aluminium paper laminate, is required as a barrier to protect the sensitive chocolate products during the actual packaging process. When closing the outer wrap using contact sealing technology, the chocolate could otherwise be damaged by the heat that is generated or by the sealing tools used. As an alternative to this process, packaging has hitherto been glued with hot melt. The packaging specialists at Theegarten-Pactec have now developed a technology called “suction supported sealing”, which offers numerous advantages over these conventional processes.

### **Risks of conventional processes such as sealing or gluing with hot melt**

The chocolate is packaged in a material such as plastic, by means of fold wrapping. However, since plastics have poor dead-fold properties, i.e. the packaging opens again after folding, it must be actively closed and fixed by sealing or with the use of glue.

For this purpose, during the sealing process, the sealing tool is pressed against the packaging material from the outside to connect the outer and





inner flap of the plastic packaging with each other. This ensures that the packaging is fixed after folding but is still easy for the consumer to open. The problem with this procedure is that when the sealing tool is applied, the packaging material lies close to the product. In order to effectively dissipate the heat generated, the inner wrap of aluminium paper laminate is used. However, the use of two packaging materials – aluminium paper laminate plus plastic packaging – is neither environmentally friendly nor particularly cost-saving or recyclable. Therefore, the use of a sealable, and ideally even recyclable, mono-film is recommended.

The alternative, which involves the application of glue dots, ensures a permanent closure of the plastic packaging, but also has disadvantages. Clogged glue nozzles or contamination can lead to an increased susceptibility to malfunction and to the need for additional work with respect to cleaning and maintenance

of the packaging machine. This reduces the efficiency of the packaging process and generates additional costs. Furthermore, the application of glue not only involves risks for the machines and aggregates, but also for the product itself. Incorrectly adjusted glue nozzles and the resulting distortion of the packaging material due to excessive glue application can result in the glue being transferred to the chocolate product and thus contaminating it.

#### **Suction supported sealing technology – integration into the packaging process and machines**

The sealing station developed by Theegarten-Pactec is located directly after the actual wrapping or packaging station. As soon as a product has reached the sealing station, the sealing tool moves to the product to be sealed at a distance of 0.5 mm to 1 mm. Negative pressure then causes the package to be sucked onto the sealing stamp. In this way, there is no

direct contact between the packaging and the product during the sealing process. The heat required for the sealing process is thus distributed selectively and evenly over the entire sealing surface, thereby ensuring that there are no pressure marks or other damage to the chocolate product. Active cooling of the environment ensures additional product safety. After sealing for approx. 50 - 60 milliseconds, the contact between the packaging material and the sealing jaw is terminated when the sealing stamp moves away – which may be assisted if required by switching off the vacuum. The packaging material detaches from the sealing station and once again rests directly on the chocolate product which has now been completely packed. The sealing seam only comes into contact with the product again after it has sufficiently cooled. The innovative technology can be easily integrated into the standard packaging machines of the Dresden-based company, with implementation being



Theegarten-Pactec's innovative technology offers numerous advantages: Material costs can be reduced by eliminating the need for aluminium laminate to dissipate heat and protect the chocolate.

© Theegarten-Pactec GmbH

possible for various service areas and products such as chocolate bars and pralines. In addition to the compact and flexible CWM2 wrapping machine for chocolate products with a capacity of up to 600 products/min, the sealing station can also be integrated into the CFW-S for chocolate bars in letter fold with or without packaging band with up to 850 products/min. Implementation in the CFW-D double-lane high-performance packaging machine for chocolate products in letter fold with packaging band and up to 1,400 products/min is also possible without great effort. Moreover, even existing machines such as the U1-C high-performance packaging machine can be retrofitted with this new technology.

**Sustainable alternative: material-saving, cost-reducing and environmentally friendly**

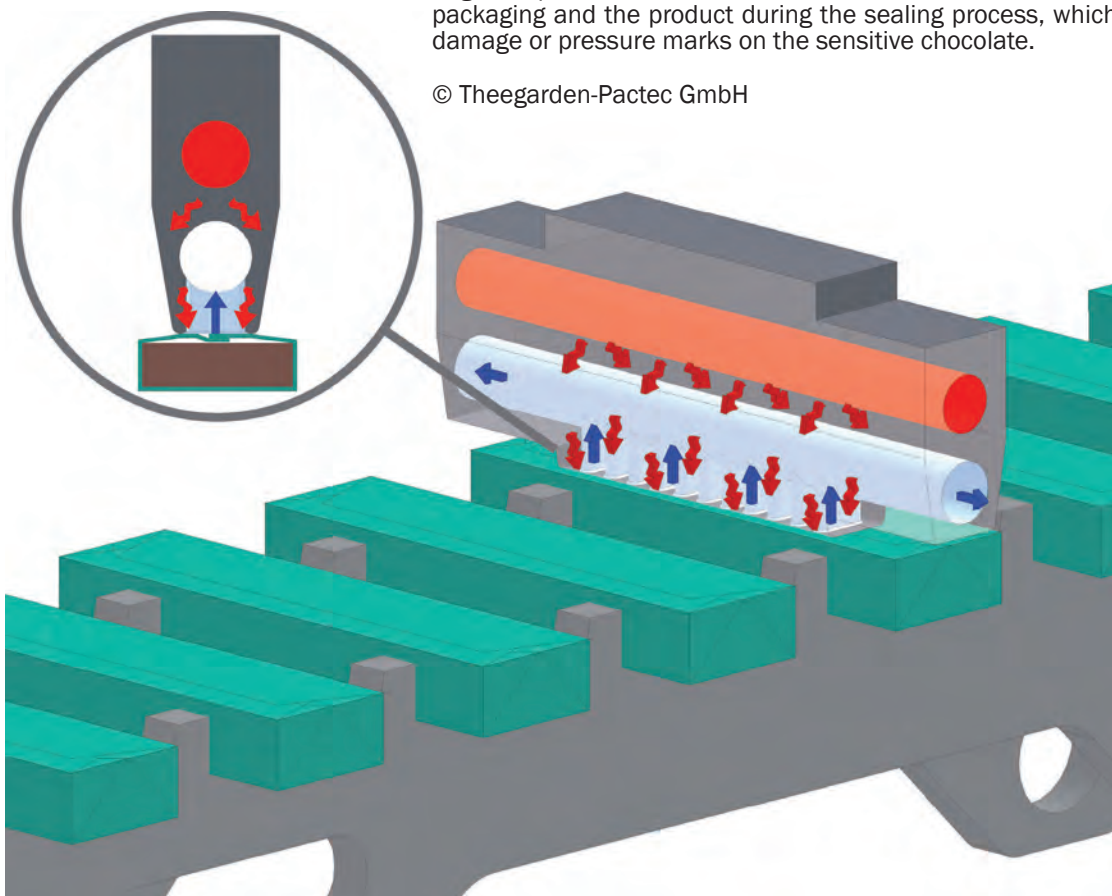
Theegarten-Pactec's innovative technology offers numerous advantages: Material costs can be reduced by eliminating the need for aluminium laminate to dissipate heat and protect the chocolate. At the same time, negative environmental influences caused by the production of the material are reduced. In addition, there is no need for an unwinding unit for aluminium paper or aluminium-PP composites in the packaging machine. This saves set-up and adjustment times and makes the packaging process more stable and therefore less susceptible to faults.

Thanks to the innovative suction supported sealing technology, there is also no need to apply glue dots to permanently seal the plastic packaging. Costs for glue and for cleaning and maintenance of the packaging machine can be saved. In any case, the costs for the installation of a

suction supported sealing station are much lower than those for the purchase and maintenance of gluing units. Even the contamination of chocolate products with glue is a thing of the past thanks to the new technology. The new type of suction supported sealing not only ensures process safety but also additional product safety for manufacturers. The purchase of a suction supported sealing unit is therefore profitable in the long run.

Initial tests with common sealable plastic mono-films have so far produced good results. With this novel technology, Theegarten-Pactec offers manufacturers that which to score points at the POS with sustainable alternatives completely new possibilities to optimally adapt to changing consumer behaviour. 🏠

**[www.theegarten-pactec.com](http://www.theegarten-pactec.com)**



The suction supported sealing process developed by Theegarten-Pactec: The packaging material is sucked in by the sealing tool with the aid of negative pressure. There is therefore no direct contact between the packaging and the product during the sealing process, which prevents damage or pressure marks on the sensitive chocolate.

© Theegarten-Pactec GmbH





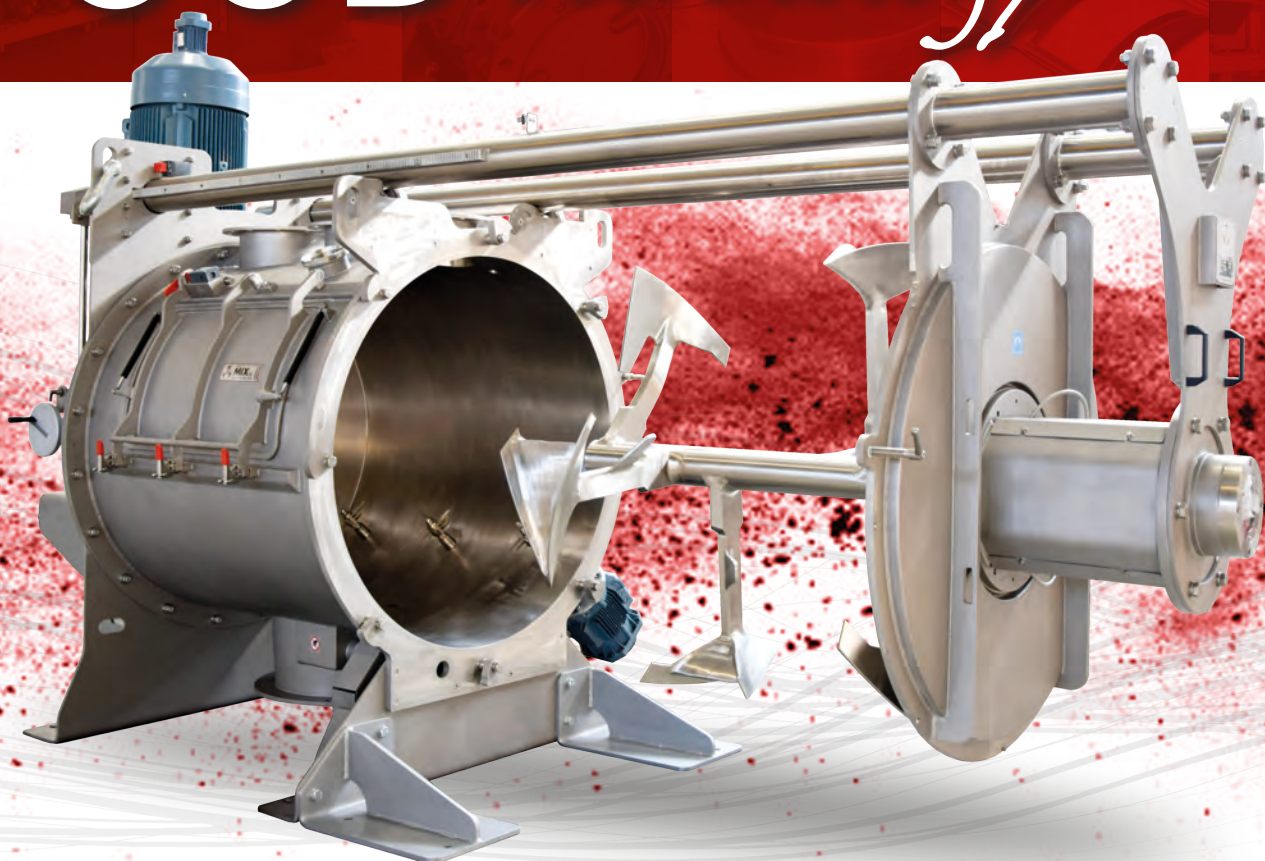
*Mixing systems and components for plants*  
**CERTIFICATE SYSTEMS** ISO 9001 - ISO 14001 - ISO 45001

*www.mixitaly.com*



# FOOD

*In compliance with 1935/2004/EC*  
*Technology*



# TOMRA FOOD MERGES BEST-IN-CLASS ENGINEERING AND INTELLIGENCE WITH LAUNCH OF THE **TOMRA 5C**

## Revolutionary Upgrades to Sensors and Insight Tools Lead to Better Bottom Lines for Processors

**T**OMRA Food is proud to launch the TOMRA 5C, a groundbreaking optical food sorting system that will transform nut and dried fruit processing.

The TOMRA 5C premium optical sorter combines industry-leading sensors with machine learning and

big-data analysis to ensure the most accurate foreign material removal possible.

With the TOMRA 5C, operators can view a clear picture of each and every individual product and foreign material — setting processors up to make real-time decisions that boost chances

of a better profit, higher-quality yield, and fast equipment payback.

“Our new machine redefines processing,” says Brendan O'Donnell, Global Category Director – Nuts at TOMRA Food. “We’ve developed state of the art technologies that make sorting more efficient, more effective, and







more cost-conscious – all while addressing some of the biggest challenges of the nut and dried fruit industry such as labor, food safety and product quality. The future of sorting begins now.”

The TOMRA 5C has incredible capabilities to see and analyze defects - detecting even the smallest imperfections, such as insect damage, due to its higher resolution lasers.

These sensor design improvements also allow clearer visualization and more precise color sorting – a degree of detail unseen in machines of its kind.

The TOMRA 5C has been engineered to examine mass quantities of nuts and dried fruit with ease — greatly reducing the need for additional la-

bor while maximizing the amount of higher-quality product. Processors can expect to minimize handling, re-processing, and labor costs.

The Almond Company in Madera, California, shares the impact the TOMRA 5C has had on their operation’s efficiency:

“We have increased this specific product’s production by 20 to 25 percent, producing at higher volumes, in less time, with less labor required.”

This easy-to-use machine is designed to grow with a business’s needs while handling up to twice as much capacity. Additionally, thanks to simple clean up and maintenance, the TOMRA 5C is a durable investment that will provide savings for years to come. TOMRA 5C’s unparalleled

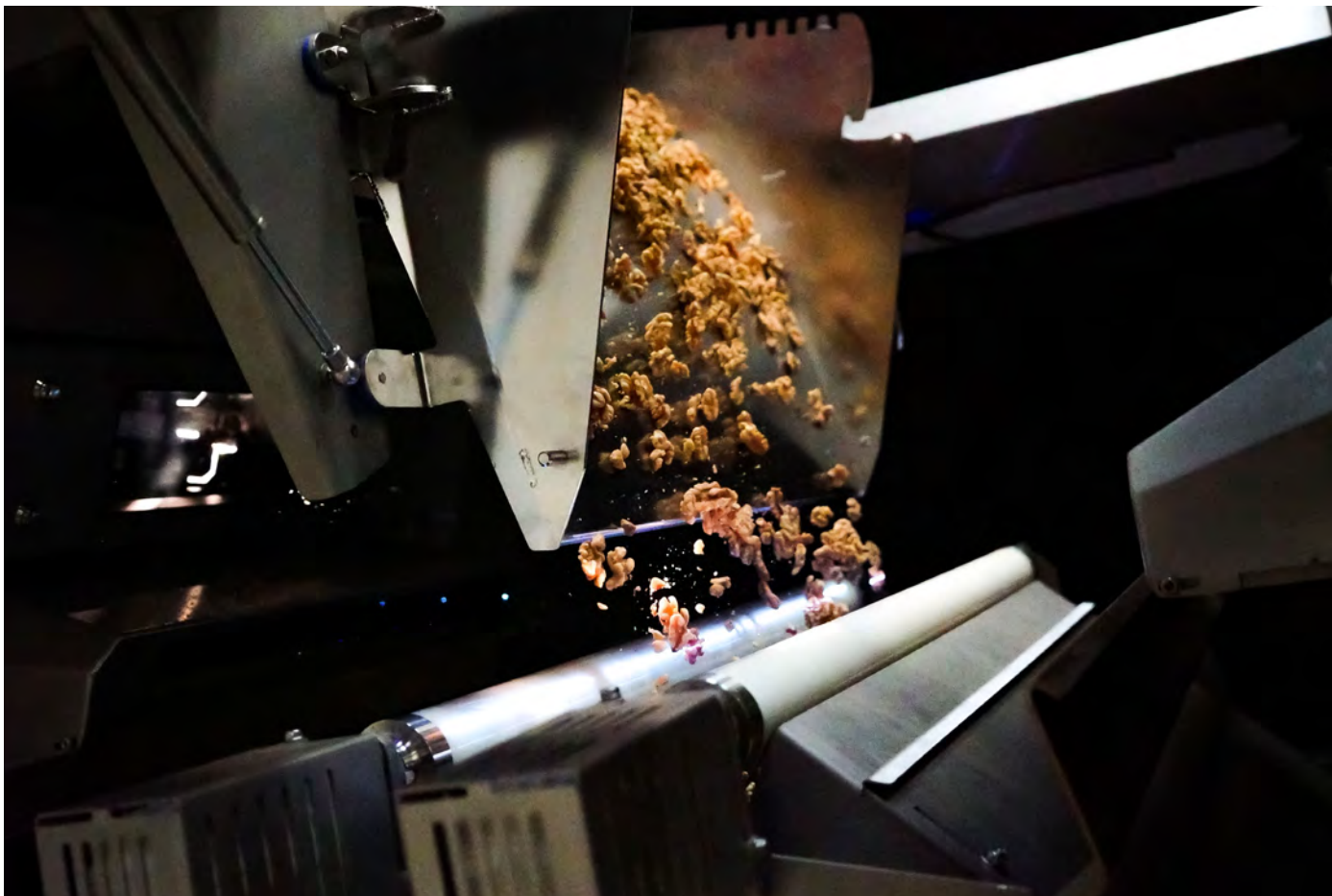
design is also backed by a customer-centric service team that works directly with customers to understand their businesses’ unique needs.

TOMRA Insight, the cloud-based data analysis platform connected to the TOMRA 5C, allows processors to access actionable data that can be used to make informed business decisions.

This powerful and integrated data platform proves its value month after month through improved output, greater efficiency, more uptime, and enhanced troubleshooting.

The launch of this sorting machine comes at a time when the market is expected to grow immensely. According to Jason Schenker, Chairman of the internationally-respected Futurist





Institute and President of Prestige Economics, global calorie demand is expected to rise by 44 percent in the next few decades.

Reducing waste and improving efficiencies is essential for the sustainability of the world's food supply and processors' bottom lines.

"The release of our new sorting machine couldn't come at a better time," says O'Donnell.

"Processors must take action now to stay ahead of the global market's demands. With the TOMRA 5C, processors will be ready to tackle the rapidly changing expectations of consumers while protecting the viability of their own businesses." 🏠

To learn more about the TOMRA 5C, visit [tomra.com/TOMRA5C](http://tomra.com/TOMRA5C).





# 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 short-cuts, 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 and a range of weight range from 25 to 600 g. It is a machine suitable to divide and round dough to make



Athena Plus, divider rounder suitable for industrial production



Dinamica, divider rounder suitable for medium production

round and stamped bread, hamburger bun, long-loaf bread, pita, pizza, tortilla and many others. Athena Plus can also be equipped for the treatment 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



# INTEGRATED PACKAGING TECHNOLOGY



**W**ith engineering and project management that really understands the challenges of today's packaging industry TSW Industries Group is the most comprehensive technological hub providing integrated packaging solutions to a Customer's base seeking for a true partner to help them compete effectively in today's demanding markets. Our Group has become a major supplier of Integrated Packaging Technology to key industry sector including food and beverages, bakery and biscuits, chocolate and confectionery, frozen foods, pharma



and consumer goods. From chocolate moulding to products buffering, from handling and distribution systems to flow wrapping, foil wrapping and roll wrapping, from flexible vertical packaging of solids, powdery and liquid products to our innovative packaging solutions for stand up and flat pouches, from cartoning to full automated demanding secondary packaging ends of line, time after time the world leading companies are placing their trust in the TSW Group Integrated Packaging Technology. A common design platform with universal me-

chanical and electrical standards are adopted group wide. Our shared R&D successfully brings together cutting edge technologies to offer clients the benefits of placing a single contract with a fully accountable partner who is able to provide a turn key system project managed from initial concept to site acceptance and beyond. Whether your requirement is a stand alone machine or a sophisticated totally integrated solution TSW makes the ideal partner. 🏢

[www.tsw-industries.com](http://www.tsw-industries.com)

## PLANTENEERS UNITES INDULGENCE AND HEALTH

# PLANT-BASED CHEESE ALTERNATIVES WITH IMPROVED NUTRITIONAL PROFILE

**A**ccording to Innova Market, “plant forward” is a world-wide phenomenon and one of the Top Ten Trends for this year. The rising popularity of plant-based products, especially among flexitarians, will according to industry experts lead to growing demand for new formats, plant proteins and higher-end alternatives. One example is cheese alternatives, a product category of high interest to flexitarians. Cheese is often a part of the diet that’s hard to give up. Planteneers doesn’t just focus on taste and texture, but also on the nutritional profile.

With the all-in compounds in the fiildDairy range, Planteneers offers a selection of plant-based alternatives to cream cheese, pizza cheese, and hard cheese in slices and blocks.

Alternatives to cheese fillings, for example for plant-based schnitzel and the like, are also no problem. In the development of plant-based products Planteneers is careful to keep ingredient lists short.

For example, the latest highlights include a plant-based alternative to shepherd’s cheese that has no

E-numbers. New for cultured products are special alternatives to granular cream cheese (cottage cheese).

These are based on either almond or oat protein, and so are soy-free. Planteneers also addresses the free-from trend in its plant-based alternative to quark.

This clean label system has no E-numbers and can also be used to produce a plant-based version of sour cream. The products are made using almond drinks or almond paste, and thus are also free from soy.





### Networked research around protein qualities

The market research results from Innova Market Insights show the potential that plant-based cheese alternatives have.

Consumers like cheese very much, and it is an important product category in the plant-based alternatives market.

Dr. Dorotea Pein, Director Product Management at Planteneers, comments, "in terms of technology, plant-based products have reached the point where they are very similar to their animal equivalents.

They have the flavour and texture people want, brown well, and with their melting behaviour make any pizza a delicious treat. However, their nutritional value has room for improvement, since unlike with meat alternatives, plant protein cannot be readily used in cheese technology."

To change this, Planteneers continuously researches new solutions in the company's own Plant Based Competence Center.

With its sister company Hydrosol, Planteneers is also a cooperation partner with the NewFoodSystems innovation space supported by the German Ministry of Education. Other members include the

Fraunhofer Institute, the Max Rubner Institute and various universities and research institutions.

"As a partner of this expertise network, we are in constant communication with leading scientists in the field of plant protein," reports Dr. Pein. "We're also increasing our own research and development work.

To this end we're adding a cheese area to our Plant Based Competence Center, where we can research new technologies. Simultaneously we're

adding to our expert team. Our goal is to make plant proteins more usable for cheese alternatives, ultimately in order to improve their nutritional value."

### Nutritious cheese alternatives address growth trend

With plant-based alternatives to cream and hard cheese, manufacturers can add new trend products to their offerings.

If, in addition to positive technical attributes, these also feature nutritional profiles with the essential amino acids needed by the body, they meet consumers' desire for healthy nutrition, which is important because healthy indulgence remains one of the mega-trends on the international food market.

The market for enriched milk alternatives is the best proof of this.

"Plant-based drinks enriched with special nutrients are the strongest category by a wide margin," comments Dr. Pein. "In close collaboration with our sister company Stern-Vitamin we have already developed enriched plant drinks for special target groups, and so gained experience in this area. Now we're building on these approaches to improve the nutritional profile of plant-based cheese alternatives. 🏠

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



# The state of German packaging machinery manufacturing

## Positive results in 2019, positive expectations for 2020

by  
*Chiara Natalucci*



**F**rom its headquarters in Frankfurt am Main, the Mechanical Engineering Industry Association (VDMA) announces that 2019 was the ninth consecutive year of growth for packaging machinery manufacturers in Germany. The Federal Statistical Office confirms the general increase in the production of packaging machinery, even if sales were not steady throughout the year. According to data, the approximately 250 mainly medium-sized companies produced packaging machinery worth around 7.3 billion euros, with an increase of 2 percent; the production of beverage packaging machines increased by 4.3 percent to 2.3 billion euros, and the production of other packaging machines increased by 1.2 percent.

While the production figures for packaging machinery in the first three quarters of 2019 still showed a total increase of 8 percent, the numbers fell in the fourth quarter by 10 percent below the previous year's figure. Half of all German packaging machinery exports were destined to European countries. The delivery volume reached a value of 3 billion euros and was thus 3.1 percent above the previous year. Asia purchased machinery and equipment worth just over 1.1 billion euros (plus 16 percent) and North America's buying was worth 886 million euros (plus 8 percent). Deliveries to Africa amounted to 351 million euros (plus 1 percent). Less positive was the development of the export business to Latin America, the Near and Middle East and Australia. Exports fell by a double-digit percentage.

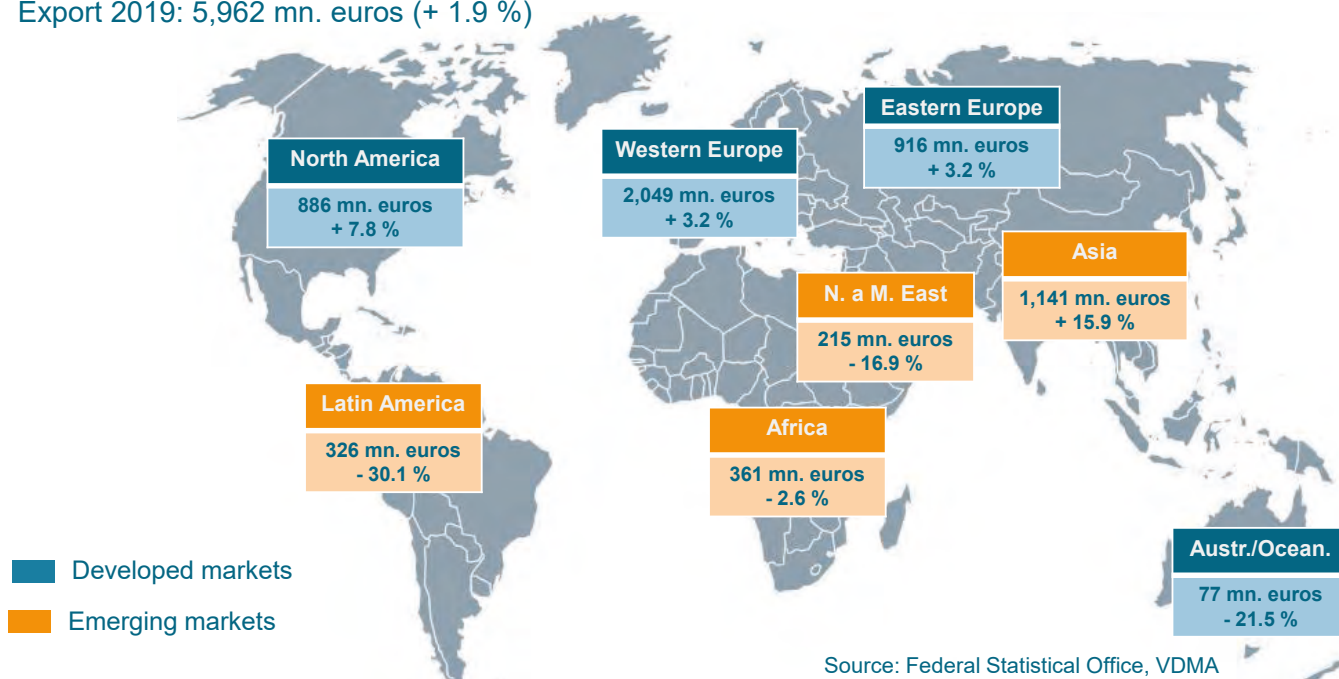
With an export volume of 786 million euros (plus 7 percent), the USA remained the largest single sales market for packaging machines made in Germany in 2019. China got the second place with 451 million euros (plus 23 percent), followed by France (309 million euros, plus 3 percent), Poland (296 million euros, plus





## German Packaging Machinery Export 2019 by Regions

Export 2019: 5,962 mn. euros (+ 1.9 %)



9.5 percent) and the United Kingdom (248 million euros, plus 18 percent). Exports to Russia increased by 5 per cent, making the country the eighth place among the ten largest export markets, right after Spain (234 million euros, up 24.5 percent) and the Netherlands (219 million euros, up 29.1 percent).

It is currently impossible to estimate or quantify how the packaging machinery industry will develop in 2020. Due to the weak order activity in the second half of 2019 and, in particular, the drop in foreign orders, the German Food Processing and Packaging Machinery Association already assumed in its November 2019 forecast that production of packaging machinery would decline in the current year.

"The extent of the decline caused by the outbreak of the corona crisis and the consequences associated with it will only become really clear in the coming months," says Richard Clemens, Managing Director of the VDMA Food Processing and Packaging Machinery Association. Companies are increasingly feeling the effects of the corona pandemic. In addition to disruptions in the supply chain, especially in Europe, disruptions on the demand side have increased further. Not only are fewer orders coming from Europe, but also from Asia and North and Latin America. However, Clemens firmly affirms that they are optimistic

and that "demand will recover quickly following the easing of government restrictions. The increasing global demand for hygienically packaged and safe food and pharmaceutical products is a major contributor to this".

The VDMA represents around 3,300 German and European companies in the mechanical engineering industry, making it the largest industry association in Europe. It represents the interests of medium-sized companies in the mechanical engineering industry and employs around four million people in all Europe. VDMA sees itself as a platform that provides its member companies with various networks where they can discuss technological challenges, interdisciplinary issues and many other topics. The association was founded in 1892. 🏛️



# PROFESSIONAL BAKERY, PASTRY AND PIZZA OVENS

**F**or nearly 30 years, EUROPA Srl has been selling professional ovens to an ever larger number of bakeries, pastry shops, hotels 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 the 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 workgroup 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 materials, guarantees the high quality of the products.

Over the years, EUROPA has consolidated world-wide its own position thanks to a constant renewal of the range with increasingly more advanced products. It continues to grow year by year, increasing 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 "Green 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, they can pass through common doors and they can be fitted into premises with very low ceilings.

The special "FREESTYLE" version (patented) allows reducing the consumptions from 33% to 66% when the baking of a complete rack is not needed: 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, are subjects that make the BELL and

COOPER series suitable for all customers expecting great performances from a small oven. 🏠

**Visit:**  
**[www.europa-zone.com/en](http://www.europa-zone.com/en)**



# A UNIQUE AND COMPLETE HIGH-TECH WORLD

**G**ORRERI Food Processing Technology® is worldwide known for its ability to manufacture customized and designed turnkey solutions and to produce machineries and technologies unequalled for performance and results.

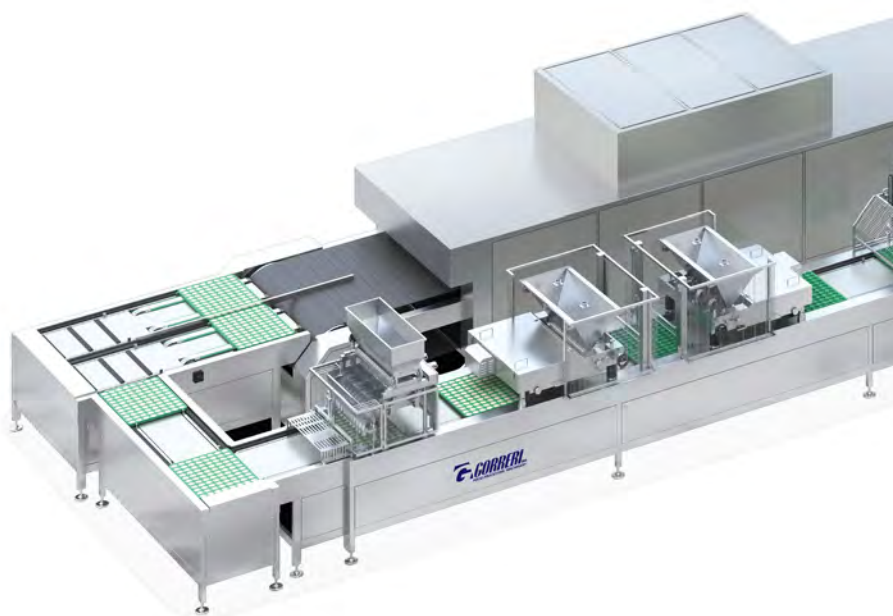
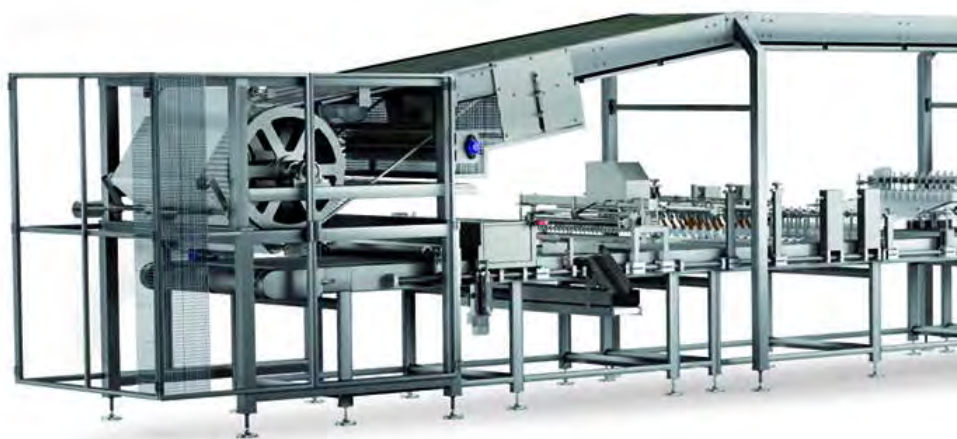
**GORRERI'S RANGE** is very wide and complete.

The company offers to its customers innovative and high performing solutions for many different applications like Compact and semi-automatic Lines for the production of Round And Rectangular Layer-Cakes and each kind of Dosed Products, Muffins, Eclairs and Shaped Cakes; both Vertical and Horizontal Injection Devices, Ultrasonic Cutting Systems for any need, Depositors, Enrobing and Decorating Devices, different solutions of Depanning Systems, Robotic arms to decorate and Printing Systems with edible inks as well as Customizable Machineries Made On Request.

## **MATCHLESS MIXING SYSTEMS.**

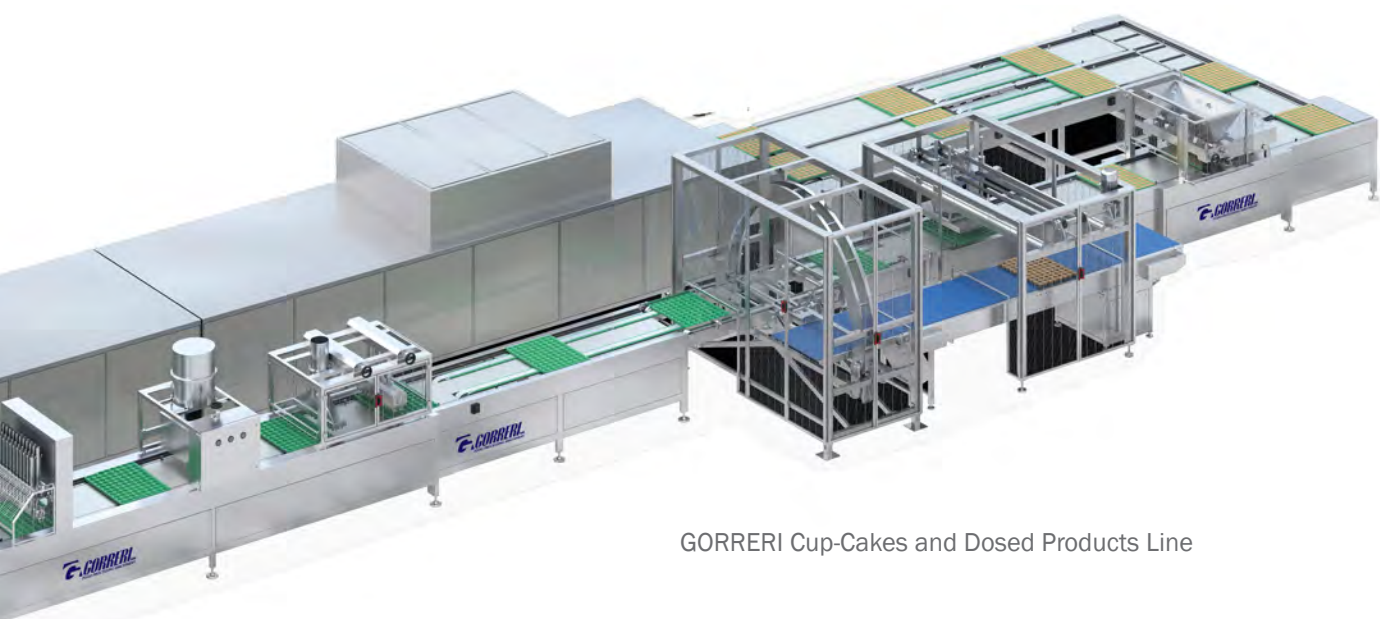
GORRERI TURBOMIXER®, the famous and unique turboemulsifier with vertical head is an innovative in-continuous mixing system, fruit of many years of experience that through a bright solution like VERTIMIX TECHNOLOGY® is able to emulsify, in few minutes, batters, cream, mousse, sponge-cake with a final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

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



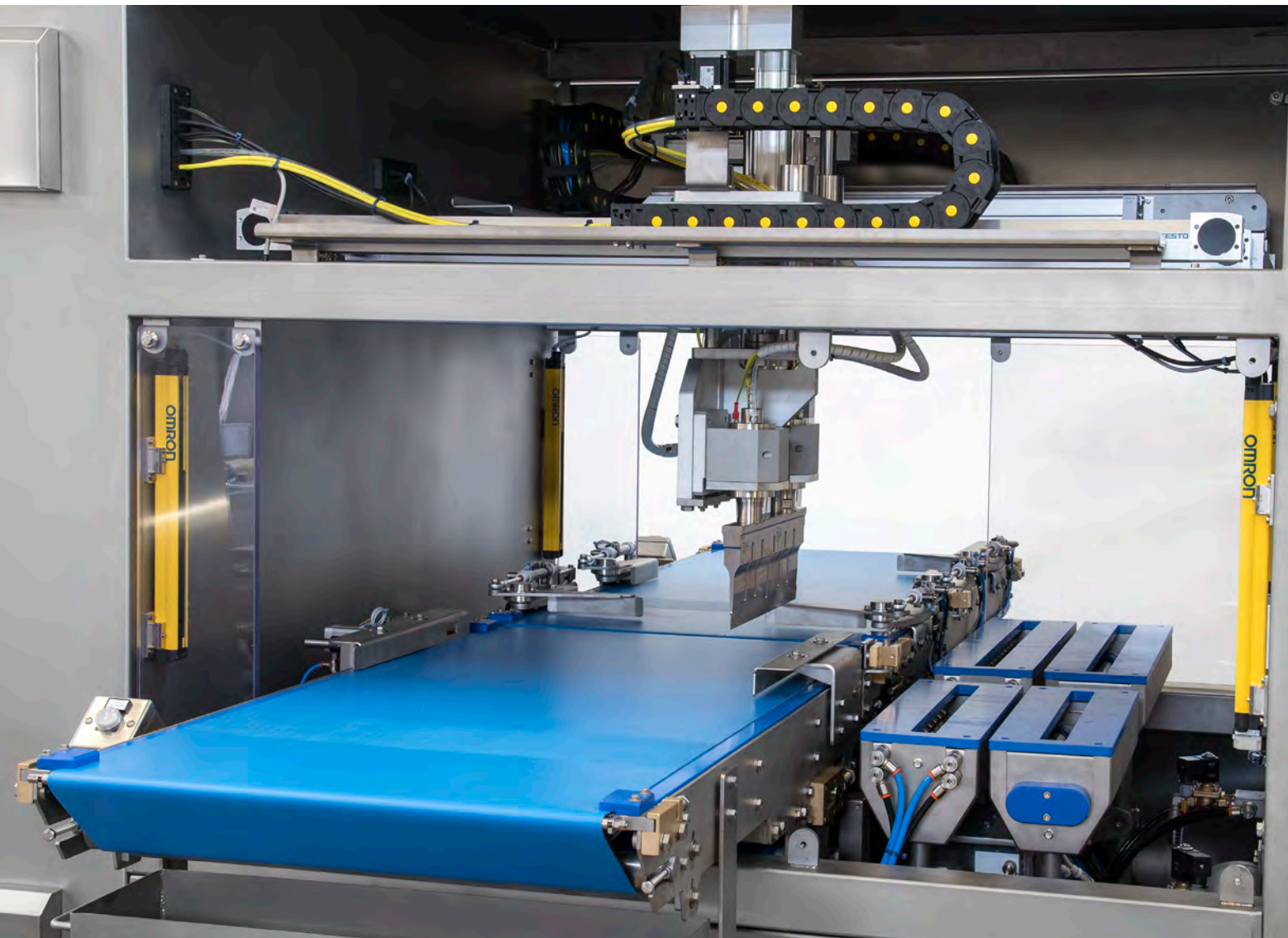


GORRERI Sponge-cake Line



GORRERI Cup-Cakes and Dosed Products Line





tive solutions to replicate complicated and craft processes, impossible to replicate with any other mixing device on the market all in continuous. This means space, time and money saving! Lady Fingers, Chiffon Cakes, Angel Cakes, Special creams, with or without inclusions, Chantilly, special batters without emulsifiers or pre-

servatives, egg-free batters and egg-free sponge cake, special products... It is incredible the number of products you can obtain with GORRERI TURBOMIXER TECHNOLOGY®.

GORRERI® is also widely known for PLANETMIXER SERIES®, a range of indestructible pressurized planetary

mixers, available in 6 different capability (from 120 to 800 lt) with a complete range of optional and devices to satisfy each single production need.

A complete mixing solution with steam cooking device, cooling device, transferring pumps, bowl lift-







Gorreri TURBOMIXER GMG Series



ers, automatic uploading and downloading of the ingredients and much more.

#### **COMPLETE PRODUCTION LINES.**

More than 50 years of experience in the confectionary sector process make Gorreri Company able to design turn-key and tailored solution for the production of Sponge Cake based products, Layer-cakes, Pies and Tarts, Muffins, Eclairs and each kind of Dosed Product. It is only when you know perfectly the produc-

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

#### **A PHILOSOPHY THAT MAKES GORRERI'S MACHINERIES UNMISTAKABLE.**

Gorreri's lines and machineries are all designed with a specific and unique philosophy that makes each product highly recognizable and optimized for the use for which it has been studied.

Simple and fast maintenance, assembly and dismount without using keys or tools, High-tech touch screen panels interconnectable with the business management, Installation of the best components on the market, High flexibility, Entirely sanifiable; High performance with reduction to minimum of the waste, Installa-

tion of the most recent and innovative technologies, Clean, simple and essential design to avoid contamination and dust.

**A complete and innovative world, where INNOVATION and RELIABILITY** are the main key-words. An historical Company that is still quickly growing and that in 2019 will inaugurate a new and innovative Company Site in the center of the Food Valley and of the Food Tech Valley, in the north of Italy where in 1987 it all began.

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

**Visit:**

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



# 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 donut-like 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:

**food@faravelli.it**







# COLUSSI ERMES

Advanced Washing Systems

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

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

## Continuously innovating to improve your safety

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

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



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



# COLUSSI ERMES TAKES CARE OF YOU AND YOUR LOVED ONES!



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

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

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

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

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

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

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

New technologies in the service of hygiene.





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

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

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

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

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

Colussi Ermes is continuously innovating to improve your safety

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



# SIGMA AUTOMATIC INDUSTRIAL PIZZA LINE



**S**igma continues its technical and technological evolution in order to be a point of reference in the production of dough for big artisans and small and medium industries.

Sigma has been offering competitive customized solutions for the mixing process and dough production for more than 45 years.

## Industrial Automatic Pizza Spreading Line

Sigma Pizza Industrial Line is a cold system for spreading pizza dough. The patented micro-rolling system designed by Sigma reproduces the soft manual dexterity of the pizzaiolo respecting quality of dough and the gluten net.

Sigma system is tested and approved by expert pizzaioli all over the world. It provides craftsmanship quality in industrial production.

The Pizza Industrial Line supplies pizza soft bases adjustable in diameter and thickness already with the edge. The use is simple and practical. The shapes are always perfect.

The machine is composed of a 5m long conveyor belt, variable in width according to the number of produc-



tion rows and hourly product quantity requested. Pizza Industrial Line provides until 800-900 pieces/hour per single rows. The machine can be configured from 1 to 5 heads in parallel for a maximum production of 4000-4500 pizzas / hour.

One of the advantages of the line is its versatility: it allows to realize different diameters with different ball weights handling dough very gently.

The Pizza Industrial Line comes with an automatic flour duster for the belt and another one for dough balls. A

centering device correctly places dough balls on the conveyor belt that carries them to the first spreading head; afterwards obtained discs are floured again and taken to the final spreading head.

The machine is designed to be integrated with a balls feeding system and a subsequent process of topping with tomato and mozzarella.

### Technical specifications

- Brushless motor for continuous process
- N° 3 flour dusters
- Flour dusters adjustable in speed and quantity.
- Electrical touch screen panel for storing work cycles and recipe management.
- Sensors for safe access to the moulding area
- Oil free sliding support
- Structure in AISI 304 Stainless steel.
- Scraper and tray for recovering excess flour (Optional)
- Camera Vision technology for quality control of shapes (Optional).



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



# OPTIMISATION OF LINEAR GUIDES IN FOOD PRODUCTION

## BAKERY ENJOYS TENFOLD INCREASE IN SERVICE LIFE

**W**hen linear guides in the food and packaging industry fail to last for their expected service life, it can make sense to use solutions equipped with integrated lubrication units. These units release lubricant continuously over a long period of time. By switching to this type of linear system in its dough slicing machines, a large bakery is saving more than €200,000 a year in maintenance and downtime costs.

The linear guides serving the process-integrated band cutters in the bakery's dough slicing systems were failing every three weeks on average. Despite being coated with an Armoloy finish – and using food-grade grease – the desired performance criteria could not be met.

To overcome its issues, the bakery sought a linear guide that would not only offer long service life, but be capable of higher speeds as the company planned to boost the productivity of its dough slicers from 250 to more than 300 cycles per minute.



*A bakery was able to increase the service life of linear guides in its dough slicers by more than tenfold thanks to stainless steel NH/NS linear guides with K1 lubrication units*



*The new NSK K1-L lubrication unit offers twice the service life of the K1 series*

MOTION & CONTROL™  
**NSK**

Within the framework of NSK's AIP (Added Value Programme), company experts performed an on-site assessment of the application's environmental conditions, as well as linear guides that had failed. Once complete, the team recommended the use of NH/NS series stainless steel linear guides in combination with a K1 food-grade lubrication unit. After an initial trial had been completed successfully, it prompted the bakery to fit all of its dough slicing machines with this proven solution. The NH/NS series is designed to perform precise linear motion (even at high speeds), with stainless steel versions particularly suited to food and beverage manufacturing environments. Long service life is not compromised even when subjected to frequent and deep cleaning cycles.

NSK's K1 lubrication units provide a clean and FDA-approved solution in the truest sense of the word because the lubricant is incorporated in a carrier medium and released little by little to ensure supply over a long time period. Meticulous sealing prevents

contaminants from reaching the running surface, and far less lubricant is released into the surroundings than with conventional solutions.

Feedback from the bakery speaks for itself. Since changing to the NH/NS series, the company performs maintenance routines after 32 weeks at the earliest, which compares extremely favourably with replacing the linear guides every three weeks. This outcome represents a more than tenfold increase in service life. Annual savings of €206,000 have been achieved thanks to the need for far fewer replacements, along with reduced maintenance and machine downtime.

To further extend the potential benefits, NSK has recently introduced the K1-L lubrication unit. The K1-L houses a new polyolefin-based carrier material with a much larger reserve of lubricant, leading to a service life which is typically double that of the K1 series. Fully compatible with NH/NS series linear guides, the K1-L acts as a direct replacement for existing K1 units. 🏠

# 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 ap-



# BALLUFF

plication 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. 🏠

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







www.caleidos-nexus.it

WE DESIGN  
MACHINES

WE BUILD  
RELATIONSHIPS

WE  
ARE  
ETIPACK

LABELLING. CODING. CARING.

We design, build and sell  
technically advanced industrial systems  
for product labeling and dispensing.

**That's what we do.**

But machines aren't  
the only things we design.  
We have always built solid  
relationships by placing people  
at the center, all times.  
Because ethics means caring about them  
and because innovation, the real one,  
comes from their thoughts and their work.

**This is how we do it.**

**And it makes all the difference in the world.**

Etipack.it/en

 **etipack**<sup>®</sup>  
labelling, coding, caring

Elisa - Warehouse Administration, Jarin - Mechanical Workshop Manager, Alberto - Technical Service

# SANDWICH PACKAGING: THE SOLUTION FOR THREE-SIDED LABELLING IN A SINGLE APPLICATION



## **T**he challenge: to label triangular sandwich packaging efficiently and quickly

A special shape, that of sandwiches, is the subject of a special project that has enabled Etipack to satisfy the need of a company, producing the well-known triangular snacks, to effectively label a product with packaging that is anything but standard. The application of labels on the top and bottom of the packaging is quite usual for the food sector. So what makes this process special? Precisely the shape of the packaging which, for ease of reading, requires the **label to be applied not only on two sides, but also on the third side with the familiar slanted shape, all in a single application.**

## **The Etipack proposal: customized labelling machine thanks to modular design**

In order to achieve the required result, Etipack has applied its **distinctive design methodology: starting from a consolidated standard to develop the customization requested by the customer.**

The project has integrated **System 4**, a model of the Etipack range of devices, specifically designed for the **application of double-sided labels**, which, thanks to its modular design, allows the integration of applicators and devices to configure a machine tailored to the customer's needs.

This system, which combines automatic labelling machines with an in-

tegrated product conveying system, is conceived as a small, **self-sufficient labelling line that handles and labels the product, either off-line or connected to other packaging machines** such as filling and thermoforming machines.







The **special feature of System 4 is its double-belt conveyor**, which allows the product to be hooked so that the bottom part is exposed downwards and the pack is accessible from both sides.

In order to carry out the labelling, the system integrates two Energy 100 labelling machines, positioned above and below the belt, which allow both the lower and upper labels to be applied simultaneously as the product runs through.

### **3-sided labelling and variable data entry**

In order to achieve in the same application even the labelling on the oblique side, Etipack worked on the customization of the labelling machine located at the bottom. In order to allow both sides of the pack to be involved in the same application, **System 4 has been customized by integrating an Energy 100 labeller programmed to carry out a “seal” application.**

Together with the creation, by the client, of a layout that would allow

the necessary information to be contained on a single label, it was thus possible to achieve the required result: **labelling on both the under-side and the oblique side in a single application.**

The labeller is equipped with a diffuse start photocell that is specifically designed for labelling transparent products.

**A Datamax A-4408 thermal transfer printing** unit has also been integrated for overprinting variable text and/or barcodes on the labels.

The system as designed presents:

- **Flexibility** - thanks to a labelling machine that can handle different

product formats, labels and application types.

- **Compact dimensions** - openfree carpentry, allows to obtain in only one meter the function of top and bottom labelling
- **Ease of use** - with intuitive touch screen operator panel
- **Integration** - with ERP and line data, also in Industry 4.0 perspective
- **Robustness** - through the use of rugged materials and industrial design

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/) 🏭



# GREINER PACKAGING PARTNERS WITH SABIC TO CREATE FIRST BOUILLON PACKAGING MADE FROM CIRCULAR POLYMER FOR UNILEVER

**T**hese days, plastic packaging manufacturers are faced with ever increasing demands to incorporate more sustainable and more recycled materials, such as r-PP. For the first time, Greiner Packaging has now teamed up with global petrochemical leader SABIC and brand owner Unilever in a pilot project to produce tubs and lids for Knorr™ bouillon powder that are made from 100 percent certified circular PP from postconsumer plastic material. The new solution is already on the market.

Kremsmünster, Austria, December 2020. Greiner Packaging has already been testing various recycled materials for some time to determine their suitability for the production of its cardboard-plastic combinations. Now, the company has selected certified circular polypropylene from SABIC's TRUCIRCLE™ portfolio to realize a test project for Unilever. SABIC's material uses post-consumer mixed plastic as feedstock which is broken down into its molecular building blocks, to create virgin plastics which are then used to produce these new recyclable tubs and lids.

The goal is to produce about 1 million Knorr™ bouillon powder packages for Unilever from 100 percent circular polymer. As the availability of circular polymers will grow in the future, the number of circular tubs will grow alongside. "By producing some of the tubs from certified circular polypropylene, we want to set a

new standard on the market together with our partners and demonstrate what is possible with recycled materials in the food segment. We also want to keep pushing forward with this development. Here at Greiner Packaging, we are not only focusing on certified recycled PP – we are also working on our first projects and tests with mechanically recycled PS," explains Jens Krause, Sales Director at the Swiss Greiner Packaging site in Diepoldsau.

## No compromises in quality & performance

Knorr™ bouillon powder has now been marketed in the same cardboard-plastic combination for many years. The outer appearance, functionality and safety of the new packaging is exactly the same, and the quality is likewise as high as ever. The difference is that it is made using recycled plastic, making it much more sustainable and environmentally friendly. Nothing has changed







from the consumer's perspective, in other words, and they can still simply remove the cardboard sleeve from the actual tub when the packaging is empty before disposing of the two components as usual. "Our goal is to continue making our packaging more environmentally friendly together with partners like Greiner Packaging and SABIC – especially in the food segment – without consumers having to lower their standards in terms of design, performance, quality, user friendliness, and food safety. We are now testing this using material produced from 100 percent circular polymer, with the goal of expanding across our portfolio by 2025," says Mike Ross, Senior Packaging Manager at Unilever.

#### Advanced recycling: an opportunity for the future

The certified circular PP polymer from SABIC's TRUCIRCLE™ portfolio is produced through the feedstock recycling of used and mixed plastic that could otherwise be destined for incineration or landfill. Difficult to recycle used plastic is broken down and taken back to the molecular level by heating it at a high tempera-

ture in an oxygen-free environment, producing pyrolysis oil. The pyrolysis oil then enters SABIC's production chain just like fossil-based feedstock to deliver new materials in compliance with strict quality requirements, such as the hygiene standards for food packaging. The resulting PP polymer is verified and authenticated under the International Sustainability and Carbon Certification (ISCC PLUS) scheme, which uses a mass balance approach. Greiner Packaging sees chemical recycling as an ideal supplement to mechanical recycling. The new Knorr™ bouillon powder packaging is made from certified circular version of SABIC® FLOWPACT PP impact copolymer that is phthalate-free, safe for food contact while offering robust performance for high stackability and easy processing. The ISCC PLUS accredited material is a drop-in solution for replacing fossil-based plastics in the packaging industry without compromising product purity and food safety.

#### K3®-F packaging: the perfect design solution

Knorr™ bouillon powder comes in K3®-F packaging, which is supplied

to Unilever as separate plastic tubs and folded cardboard sleeves. The sleeves are unfolded by a machine and slipped over the tubs directly before filling at the company. This process is especially suitable for global brand manufacturers like Unilever who offer their product in various markets or under different brands and therefore work with a wide range of decoration solutions. This gives them a high degree of flexibility in terms of the design and keeps stocks to a minimum. Plus, the packaging is perfectly stackable, which saves space during transport, as well as making this process more sustainable. The packaging solution is ideal for powdered foods, cereals, pet food as well as various non-food applications. Once empty, the consumer can easily remove the cardboard sleeve and dispose of the two packaging components separately. Alternatively, the resealable and dishwasher-safe tubs can also be used to store foods once the original product has been consumed – either at home or for day-to-day use in the food service industry. 🏠

[greiner-gpi.com](https://greiner-gpi.com)

# LABELPACK LABELING SYSTEM

**W**ith this important project we have developed an integrated solution for the labeling and identification of ice cream preparations commissioned by an emerging company in this sector.

The project includes a labeling system for the application of a label on the body and one on the lid of conical plastic buckets with online variable data printing. Built on a sturdy structure in AISI-304 stainless steel, the labeling system is equipped with a flat belt conveyor with a gear motor controlled by an electronic inverter where a static bucket rotation system is installed, designed specifically for conical products.

The rotation system allows the orientation of the position of the label body with respect to the print on the container by a fiber optic photocell that reads a notch printed on the container.

The system is equipped with two LABELX 250 ES labellers, the first for applying the label on the body of the container and the second for applying a label on the lid, both equipped with a 6-inch thermal transfer printing module.

Honeywell to print all the variable data on the labels directly connected to a centralized







**LABELPACK®**  
LABELLING EVOLUTION

equipped with Ind.4.0 remote connection.

To complete the automatic packaging line, we have provided a COMPACT series labeling system equipped with a Panda model print & apply unit with rotary arm applicator for the application of labels on the front side of the boxes containing the buckets arriving from the automatic taping machine.

The Panda unit is also equipped with a Honeywell printer that receives print data from the centralized management system. 🏢

data management software. All the speeds of the labeling machines are automatically synchronized with the speed of the conveyor and the rotation system.

The electronic control of the labeling system includes a Mitsubishi PLC with touch screen operator panel, which saves the configuration recipes for each product and label and is

**Visit:**  
**[www.labelpack.it](http://www.labelpack.it)**



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

Label your world, label your life.



LABELX

**LABELPACK®**  
LABELLING EVOLUTION

A perfect choice for food industry.

Labelling solutions for cans, jars, bottles, trays, boxes and bags.  
Print & Apply solutions for boxes and pallets.





# Made in Italy in favour of Ukrainian food processing

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

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

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

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







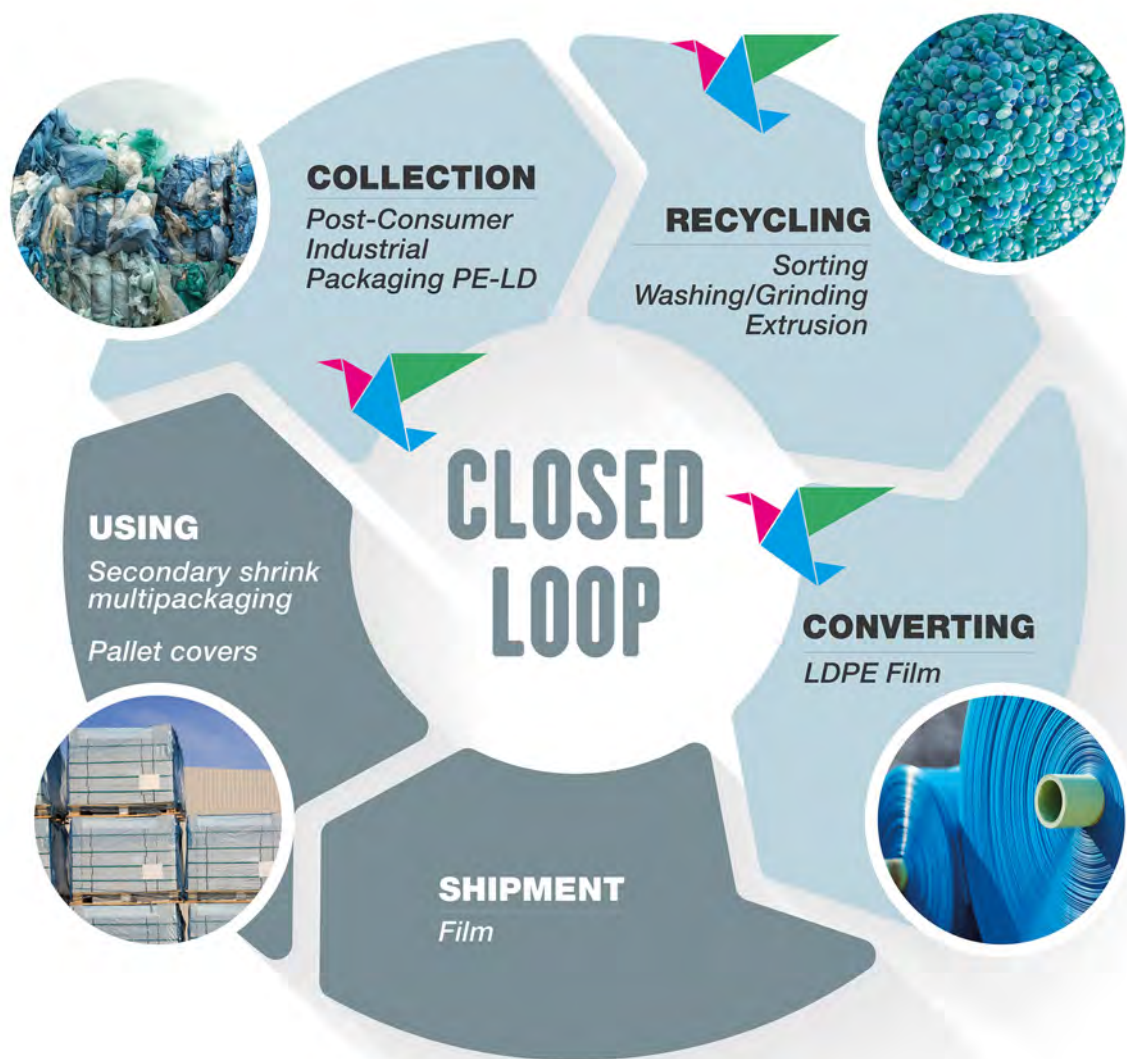
processes. For 2021, the Chamber Institution has designed the Food Processing Ukraine program which, in addition to training through a course about internationalization of sales, aims at three main goals, which mark the phases of the project: promotion, web contact and definition. Subscription to an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





# CLOSED-LOOP:

The Aliplast “recipe” for reusing plastic packaging



**A** circular system that allows for the introduction of plastic materials in the recycling cycle, reducing costs and impact on the environment. Its name is “closed-loop” and it has been developed by Aliplast, a Gruppo Hera company and European leader in the production of flexible PE films, PET sheets and regenerated polymers. The closed-loop system can be leveraged by companies in industries such as packaging (for food and beverage) and ceramics.

## Cutting costs while giving new life to plastic waste

There are two main benefits of the recycling economics achieved by Aliplast, a Gruppo Hera company and European leader in the production of flexible PE films, PET sheets and regenerated polymers.

The first, more immediate one, is about the ecosystem. The adoption of the circular model offered by the company leads to an indefinite extension of the lifespan of plastics, promoting its re-

covery and limiting its release into the environment. This leads to a considerable reduction of the potential pollution caused by this material, whose perception is also transformed, from problem to resource. The second benefit is of an economic nature and results from the adoption of a closed-loop process. Taking advantage of a closed-loop system allows to get the most of your plastic waste, while also guaranteeing the continuous availability of quality-controlled material.





### Closed-loop's virtuous circle

Designed for the treatment of special waste, that is, waste produced by companies, the closed-loop system is a vertical process for the recovery and recycling of plastics which consists of several stages. First, the waste is collected in the customer company's production center, where the most suitable equipment to separate them and reduce their volume is located by Aliplast. The next stage involves transport to one of Aliplast's processing centers (the company has several facilities in Italy and branches in France, Spain, and Poland). Here the material is selected, ground and regenerated. The finished product that comes out of the process is a material comparable to virgin plastic in terms of quality and that can then

be processed to obtain flexible PE films or can be kept in granules in order to be converted at a later date, as necessary. Aliplast offers a turnkey service, taking care of the whole waste material processing cycle: from the collection of the disposed product at the customer company center to the delivery of regenerated material.

### When flexibility rhymes with quality: the example of the ceramic district

The closed-loop processes designed by Aliplast boast great flexibility, to the point of meeting not only the needs of a single company, but of a whole industrial district.

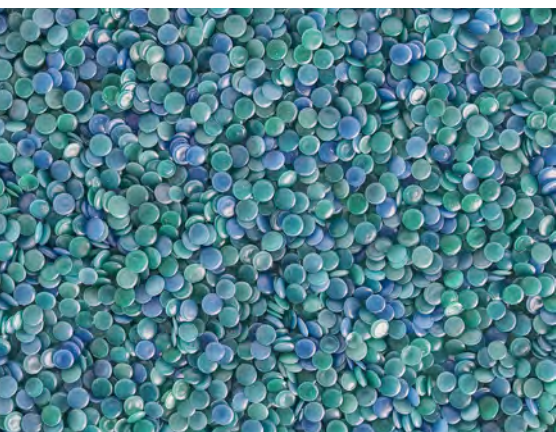
An example is that of the Modena ceramic supply-chain. For product types and quality, this is a unique area in the world, with a high number of contractors who cover different process, such as the tile decoration stages. During the different phases of production, ceramic products are enclosed in inner and outer packaging, stored, and brought to the sub-contractors, where they are unpacked and, once treated, packed once again. This procedure leads to the production of high quantities of waste films that are recovered

and processed by Aliplast in the region, and they are then handled by the Treviso plant. The resulting films are returned to the supply chain and used again for the inner and outer packaging of ceramics.

### The benefit of working with Herambiente

The closed-loop project fits perfectly with the offering aimed at companies from Herambiente - a Gruppo Hera company and the first national provider of waste treatment - and widens the portfolio of "green" solutions the company offers. In addition to having a series of technologically cutting-edge plants for waste disposal and recovery, Aliplast and Herambiente work hand in hand, sharing a unique wealth of expertise in the industrial waste industry. A wealth which is made available to our customers and offers real added value. 🏢

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



# COMEXI INSTALLS A SECOND COMEXI SL2 LAMINATOR AT THE YUSUNG PACK FACILITIES IN SOUTH KOREA

In comparison to other brands, the Korean company values the safety offered by Comexi, as well as its ability to facilitate the training and education of workers

**C**omexi, a specialist in solutions for the flexible packaging printing and converting industry, has successfully performed the installation of the second Comexi SL2 laminator at the facilities of Yusung Pack, a Korean manufacturer of plastic packaging for household goods, food, cosmetics, and facial masks.

This operation strengthens the relationship between the two companies, which began in 2017 with the acquisition by Yusung Pack of the first Comexi SL2 laminator.

“We have chosen Comexi because we believe, in comparison to market competitors, it provides us with more security,” says Mr. Hong Inseok, the CEO of Yusung Pack. With 40 years of experience in the packaging manufacturing sector, he especially values the ability of Comexi to teach and train employees, stressing that “being able to easily train means reducing the training period of new employees. In other words, the company can maintain productivity even if workers are replaced.” Respect for the environment is another strength of the relationship between Comexi and Yusung Pack. “We are constantly studying environmentally friendly methods to manufacture packaging. As a result, this has led us to choose the Comexi SL2 laminator.”





Yusung Pack, which counts LG Household & Health Care, CJ and Kyochon among its clients, was founded in 2007 in a small factory with five employees.

The company has continued to grow for the past thirteen years, and is currently planning to open a third plant. Presently, Yusung Pack has approximately 50 employees and exports a variety of products worldwide. Despite the difficulties generated by the Covid-19 pandemic, the installation was possible due to the involvement

of Hankook Comexi, the Comexi's representative in South Korea. "As a result of this installation, we have shown the market that we can offer complete technical service with Comexi's online support", explains Mr. Hong Dukkyu, from Hankook Comexi. Furthermore, when considering the current health environment, he emphasizes the difficulty of delivering and installing foreign machinery in South Korea.

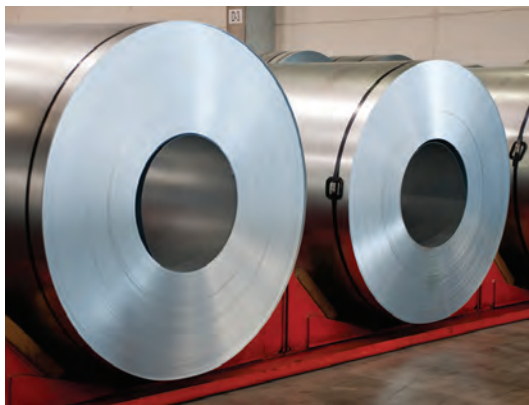
The design of the Comexi SL2, due to its uncomplicated ability and state-of-the-art controls, is the ideal

short and medium run laminator for a wide variety of materials, as well as the perfect solution for solventless lamination. This machine has been designed to comply with productivity concepts and operation simplicity. The Comexi SL2 possesses an extremely intuitive environmental nuance and has an exclusive applicator head design, which consists of complete motorisation, metering sleeves usage, and the option of incorporating automatic change turrets. 🏢

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



# STEEL FOR PACKAGING, CANNED FOODS, RAW MATERIAL FOR THE FOOD INDUSTRY SINCE EVER



**B**ased in Lugano (Switzerland), Seal of Quality is a trading and consultancy company worldwide recognised as a top marketing and sourcing advisor in the fields of packaging and food. The company employs a young team of some 30 professionals people across Switzerland, Italy and Spain. It is also proud of a 50 years experience in the tinplate and food business.

Within the metal packaging business, Seal of Quality has strong relationships with tinplate and flat carbon steel producers in Europe, Asia, North and Latin America. They provide steel for a wide range of products; from food and aerosols to general line and speciality cans, as well as for easy open ends, twist off closures, crown caps.

In addition to its tinplate activity, Seal of Quality is a leading player in the international trade of food raw materials, with a particular specialisation in dry pulses. The company



*Seal of Quality*

holds an import/export network that connects raw material producers and canneries across Asia, Europe and America.

The company is also involved in the design and implementation of export strategies for over 30 different canneries in Italy and Spain. Through its key relationships with the world's leading retailers, Seal of Quality offers an effective sales

network for all sort of metal packaging related finished goods, such as canned tomatoes, beans, vegetables and fruits.

"We are very pleased to join INTERPACK, a forward-looking exhibition which is actively contributing in promoting the many advantages of metal packaging.

Our aim is creating value across the global supply chain for the food industry" said Davide Padovani, Seal of Quality's Managing Director. 🏢

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





# Creating value across the global supply chain for the food and packaging industry.

Our key trading activities generate sustainable value across the global supply chain of metal packaging and raw materials for your daily operations in the food industry. We successfully exploit opportunities in the commodities trading markets.



***Seal of Quality***

Seal of Quality Ltd.  
CH - 6900 Lugano

Ph: +41 (0)91 922 02 35  
[contact@sealquality.com](mailto:contact@sealquality.com)

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

# TUBITEX SOLUTIONS FOR FOOD FILM PRODUCERS

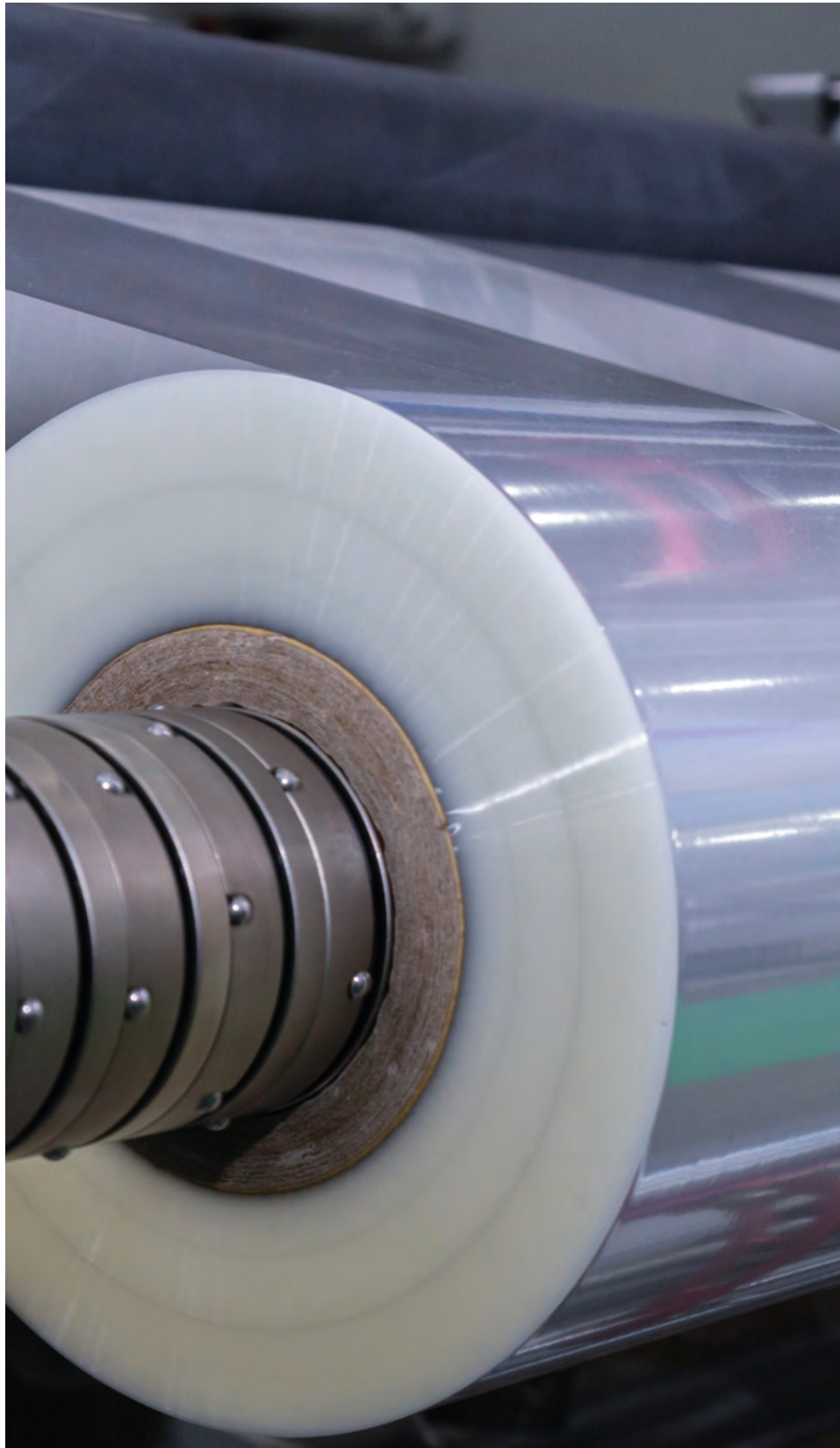
**T**ubitex is an Italian company specializing in the design and sale of industrial cardboard tubes. Established in 1976, Tubitex is among the leading European manufacturers of tubes, coils and cores in spiral and rectified cardboard for the producers of plastic food film, the paper and graphic industry, the textile sector and packaging. Its products are appreciated in Italy and throughout the world for their quality and the guarantee of high performances in the heavy and high speed windings of paper, plastic film or synthetic yarns.

## Products for the food packaging sector

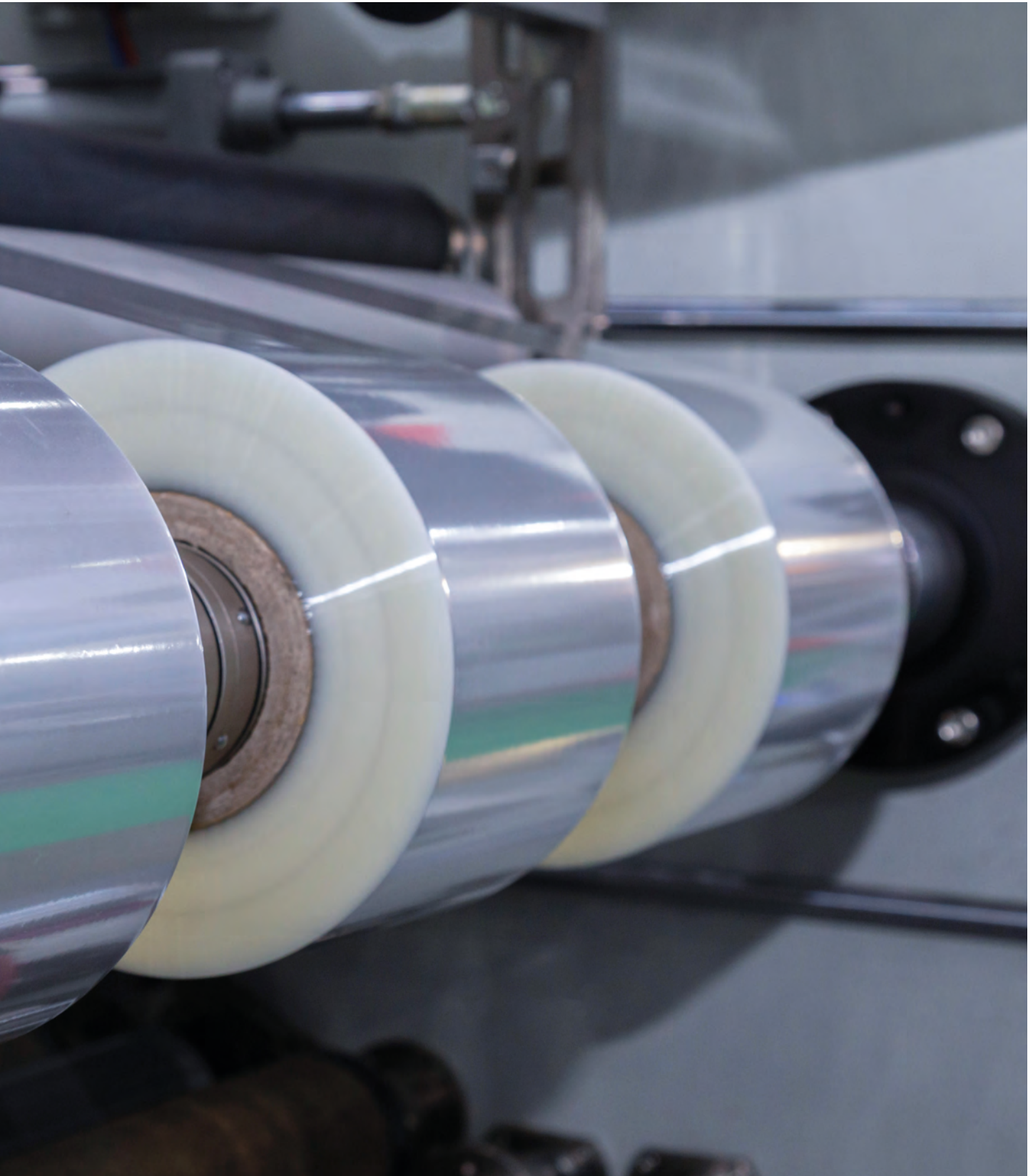
Tubitex addresses the food packaging sector with a wide range of plastic film tubes for fresh food packaging. The products are made of 100% recyclable cardboard and can be reused one or more times, depending on the type of use. The cardboard core material consists of 90-95% recycled fibers and 5-10% natural vegetable and inert substances, to allow their disposal together with the paper, in compliance with the optimization logic of industrial food packaging and the regulations in force concerning packaging. Tubitex cardboard cores for polypropylene, PVC, polythene and polyester films, coupled films and printed films are characterized by high wrapping speed and high mechanical resistance. These qualities make them suitable also for extreme processing. Tubitex cores are designed respecting the specific needs of the food and non-food industry, in full compliance with the sector's technical standards and the national and European health and hygiene standards.

## The commitment to environmental sustainability

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









goals in terms of energy efficiency. In 2016, the Tubitex production plant in Barbarano Vicentino (Vicenza) was equipped with a photovoltaic system capable of producing up to 785,000 kWh/year, equivalent to 68% of the company's energy needs. The use of the photovoltaic system prevents emitting 256,933 Kg of CO<sub>2</sub> into the atmosphere every year, and represents a fundamental step in the environmental sustainability journey undertaken by the company.

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







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

#### **A customer-focused approach**

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

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

#### **Versatile products for different production sectors**

Tubitex cardboard tubes are suitable for many uses, from the wrapping of various types of paper for the paper industry to the spools for the spinning of chemical fibers for the textile sector, from the production of labels and adhesive tapes to that of cardboard containers for the packaging industry, the graphic and paper industry. In addition to the normal spiral tubes, Tubitex produces ground cores with a smooth surface, without the undulations resulting from the matching of the finishing papers. This type of product is suitable for films with limited thickness, or in all the applications that make it necessary to rewind quickly both plastic and special films. 🏭

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



# SYNTEGON ADDS NEW SIGPACK TTMD CARTONER WITH INTEGRATED DELTA ROBOTS TO ITS PORTFOLIO

**S**yntegon has expanded its secondary packaging portfolio with a machine for even more flexibility: the Sigpack TTMD combines core technologies of the TTM platform with one or more seamlessly integrated Delta robot cells – hence the D in the product name. The robotic solution's camera-based vision control system detects products on the infeed belt. The delta robots pick single or multiple products arriving in random order and reliably place them in cartons, trays or other containers according to specifications. To enable additional packaging flexibility, the new toplevel cartoner can also simultaneously pack different products from several infeed processes. The Sigpack TTMD uses the proven tool-less format changeover concept from the TTM platform, enabling a vertical restart after each format change. "Since its launch ten years ago, the TTM platform for integrated toplevel cartoners has proven its worth at manufacturing companies all over the world and has been continuously developed further. Our customers are especially impressed by its high reliability and flexibility. Thanks to the integrated Delta robots, even more product and pack style variations are now possible," says Michael Haas, product manager for secondary packaging at Syntegon.

## Modular integration of Delta robot cells

The highlight of the Sigpack TTMD is its carton loading by seamlessly integrated Delta robots. Each cartoning machine can be equipped with one or more Delta robot cells. A camera-based vision system detects the po-

sition of the individual products on the infeed belt. The pick rate of the delta robots depends much on the product. Typically it's between 60 and 90 products per minute, and can go up to as many as 120 products per minute. Following the single- or multi-pick process, the robotic arms pick the products from the belt and place them in the cartons either in a flat or on-edge position. The process is organized according to the counterflow principle: the cartons move in the opposite direction to the product. This reduces the reject rate and makes sure that each carton is filled correctly. The Delta robots can track on the infeed conveyor and the carton transport, which allows the products to be continuously loaded into the cartons. The core of the Sigpack TTMD consists of a TTM1 or TTM2 toplevel cartoner for forming and closing. The Sigpack TTMD has a maximum output rate of 150 cartons per minute.

Integrated Delta robots for more flexibility in product feeding

Processing of different products from several processes

Flexible product presentation thanks to flat or on-edge carton loading

Patented tool-less format changeover for vertical restart

## Flexible presentation at the point of sale

Consumers ask for a wide selection of products, which is mirrored by a broad retail offering. The Sigpack





TTMD cartoner increases presentation options at the point of sale: it offers the possibility of inserting the products either flat or on-edge into the carton.

Since products from several process sources can be fed into the TTMD, a selection of different products, such as small bags containing different snacks, can be packed into one carton.


### Quality assurance thanks to end-to-end carton control

Another core technology of the TTM platform is its full carton control, which is also used in the Sigpack TTMD. "Each carton is placed on a separate carton carrier and is actively controlled: from forming to loading to closing, the cartons are transported safely through the entire packaging process," Haas says.

### Fast format changes and less rejects

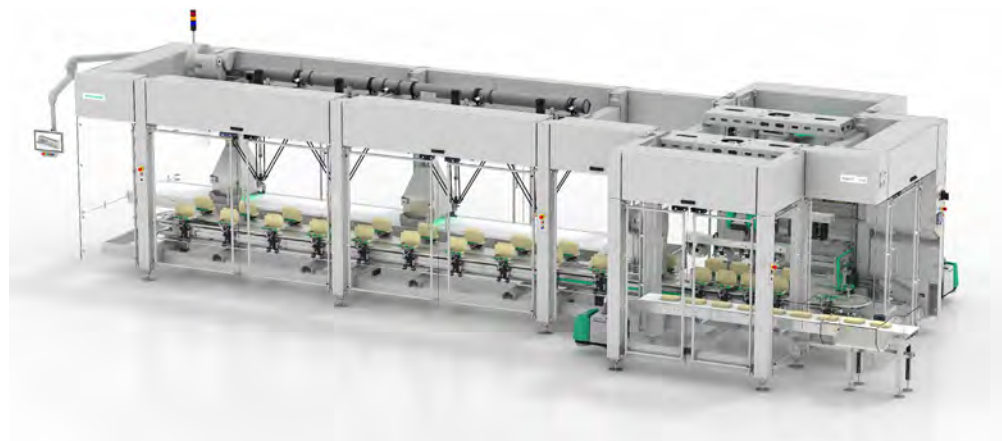
The Sigpack TTMD is easily accessible, easy to clean, and uses Syntegon's patented tool-less format changeover concept. Thanks to pre-set format rods, the settings are clear and sources of error can be minimized. A single operator is able to perform format changes independently and restart the machine with-in a very short time without having to readjust the format parts. Thanks to simple and fast changeover, the Sigpack TTMD provides a high overall equipment effectiveness.

"The Sigpack TTMD expands our portfolio by a cartoning machine that uses the proven core technologies of the TTM platform, while the integrated Delta robots increase the range of products and pack styles.

We are pleased that we have already been able to sell the first Sigpack TTMD and further inquiries are already being processed," Haas underlines. 



The Sigpack TTMD cartoner offers the possibility of inserting the products either flat or on-edge into the carton – this enhances presentation options at the point of sale.



Syntegon's newest cartoner, Sigpack TTMD, combines core components of the TTM platform with one or more seamlessly integrated Delta robot cells – this allows flexible packaging of different products.



The robotic solution's camera-based vision control system detects products on the infeed belt. The delta robots then pick single or multiple products arriving in random order and place them in cartons or other containers.

# PET TO PET SIGNIFICANTLY INCREASES CAPACITIES FOR FOOD-GRADE RPET WITH **NEW STARLINGER LINE**

“It is also thanks to the new Starlinger pelletizing line that PET to PET is one of the most modern facilities in PET recycling worldwide. Since the foundation of the company we ensure that PET bottles in Austria are continuously recycled in a resource-saving way, contributing significantly to the circular economy in the country” comments PET to PET General Manager Christian Strasser on the capacity increase.

PET to PET Recycling Österreich GmbH recycled around 1.13 billion PET bottles (equals more than 28,200 tons of PET material) in 2020, also due to the newly installed capacities. The company was able to increase throughput by 7.3 % despite the COVID-19 pandemic with subsequent lockdowns and the price decline for virgin PET resin. The recoSTAR PET 165 HC iv+ bottle-to-bottle recycling system is the second line from Starlinger in operation at PET to PET. It has a throughput of 1,800 kg/h and achieves excellent decontamination results. The produced regranulate can replace virgin PET at a rate of 100 %. “The high quality of the recyclate is especially important to us. The Austrian beverage industry is continually increasing the share of recycled content in new PET packaging. Some of the producers even use bottles made of 100 % secondary raw material”, Christian Strasser explains.

## Food-grade without compromise

The solid state polycondensation in the viscoSTAR 180 SSP reactor at the end of the recycling process is decisive for decontamination. It restores the mechanical characteristics of the recycled PET and increases the intrinsic

viscosity to the level of virgin material. The PET recyclate is now food-safe and can be used for food packaging such as beverage bottles. More than 50 positive EFSA opinions, the US FDA as well as numerous brand owners in the food industry confirm the extraordinary decontamination results of the Starlinger iv+ process. The installation of the 14 meters high Starlinger SSP reactor in an enclosure attached to the production hall at PET to PET's recycling facility was captured on film: The spectacular scenes – partly shot from bird's eye view with drones – can be watched in a video by clicking the following link:

<https://vimeo.com/502640873>

## PET-Recycling know-how from scratch

“Our customers all over the world appreciate the fact that we have been building up our know-how on PET and bottle-to-bottle recycling in-house for more than 25 years and continue expanding it based on our experiences”, says Paul Niedl, Head of Sales at Starlinger recycling technology. “From ex-

The Austrian recycling company installed another Starlinger bottle-to-bottle recycling system including SSP (solid state polycondensation) reactor at their production site in Müllendorf, Austria.

trusion to decontamination to refinement – and here I mean food safety – of recycled PET we can provide substantial support to our customers in all areas. Especially concerning food-grade regranulate there is no compromise: the safe and hazard-free packaging of our foods has highest priority. The Starlinger decontamination process – which we also call super-cleaning process – creates a closed packaging loop where used PET bottles provide a valuable resource for safe and hygienic packaging.” 🏢

[www.pet2pet.at](http://www.pet2pet.at)







# 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.

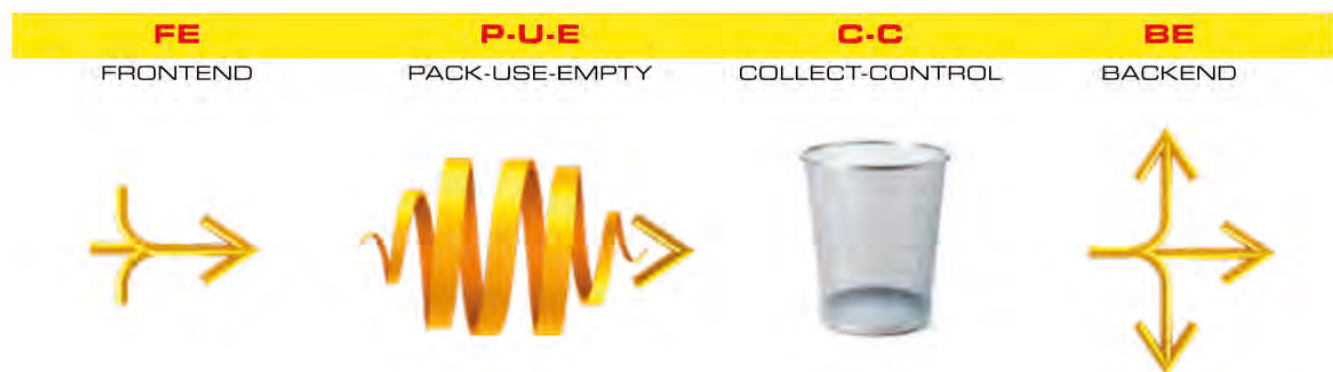


*Holistic innovation is needed as we are all interconnected in packaging*



## 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.



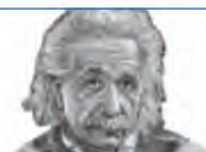
	FE	P-U-E	C-C	BE
Litter			✓	
CO <sub>2</sub>	✓			✓
Inadequate pack optimisation Product Packaging material + Total environmental impact				
Future issues	✓	✓	✓	✓



# 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)**





# HOLYGRAIL 2.0 LAUNCHED:

## Mondi trials digital watermarking to separate waste for a circular economy

**M**ondi, a global leader in packaging and paper, has joined forces with AIM, the European Brands Association, and other partners across the value chain to prove the viability of digital watermarking for sorting waste at scale. The HolyGrail 2.0 initiative has the ambitious goal of assessing whether this pioneering digital technology can enable better sorting and higher-quality recycling rates for packaging in the EU, thereby driving a truly circular economy.

Mondi was a founding member of the original Pioneer Project HolyGrail, facilitated by the Ellen MacArthur foundation. Now over 85 partners across the value chain are working together to refine and commercialise this concept, with Mondi continuing its active role in trialling the innovative technology.

Postage stamp sized watermarks on packaging – which are not visible to the naked eye – make it possible to effectively sort the material into specific waste streams. Conventional sensor technologies (e.g. near infrared spectroscopy) are not able to reliably identify multi-material packaging, so they can end up as contaminants when recycling mono-materials. With this new technology, it becomes possible to separate materials more accurately and generate new waste streams, which then can be recycled with enhanced recycling technologies. These digital watermarks also provide other opportunities. For example, consumers can use a smartphone app to find details about the packaging and how to recycle it, and brand owners can add product details as well.

Mondi has played an important role in this project since the beginning.

- AIM, the European Brands Association, has launched HolyGrail 2.0 with Mondi and other partners across the value chain to prove the viability of digital watermarking for sorting waste at scale.
- Digital watermarks have the potential to revolutionise the way we sort and recycle waste, increasing the commercial value of waste so that it can be reused again as a resource.
- Mondi was a founding member of the Pioneer Project HolyGrail and continues to play an active role to validate the technology. This includes running trials with partners across the value chain.

the Pioneer Project, HolyGrail, to life. At Mondi, we believe packaging should be sustainable by design and we see the need to improve the sorting and separation of packaging waste as part of a circular economy. Digital watermarks have the potential to make this a reality. Improved recycling will increase the value of packaging waste, driving higher collection rates and making it a valuable commercial resource for the future.”

As HolyGrail 2.0 progresses, Mondi is well positioned to contribute to its success by validating digital watermarks with partners along the value chain. Mondi will be conducting full-scale industrial trials with key customers in the near future. 🏢

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

Graeme Smith, Head of Product Sustainability for Flexible Packaging and Engineered Materials, explained: “As members of the Ellen MacArthur Foundation’s New Plastics Economy, we were part of the initial team to bring



(Photo: Mondi, PR159)

# VERSATILITY, COMPACTNESS AND RELIABILITY

The new line of heat sealing machines: Foodpack Hyper

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

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

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

## FOODPACK HYPER



HIGH  
PRODUCTION



ENERGY SAVING



EASE TO USE

INDUSTRY  
4.0

READY







introduced as the “Hyper” Foodpack model.

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

ness and reliability, high production throughput.

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

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

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

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

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

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

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

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

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

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

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

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

**Visit:**  
**[www.ilpra.com](http://www.ilpra.com)**



# CMZ ITALY, 30 YEARS OF MOTION CONTROL FOR PACKAGING

CMZ is an Italy-based company specialized in industrial motion control since 1976, with 30 years of experience in the packaging industry by developing powerful custom libraries IEC 61131-3 for flowpacks



EtherCAT®

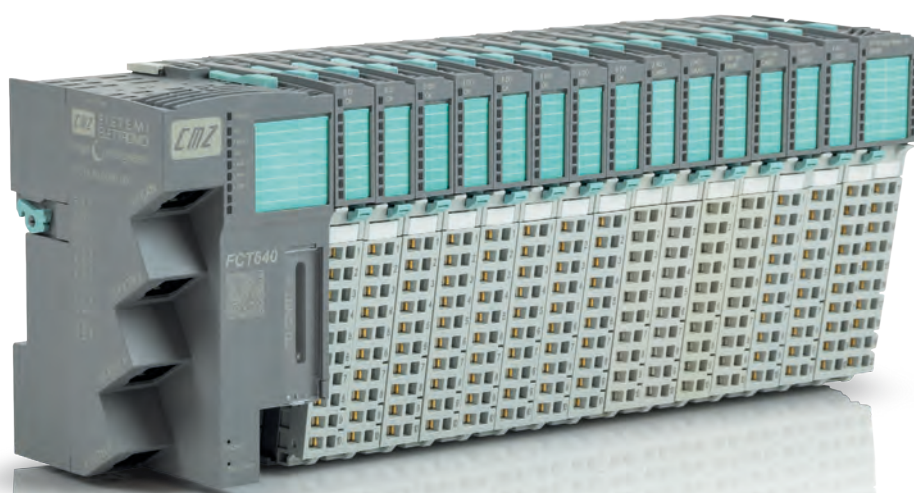
CANopen

**F**LOWPACK represents an excellence in terms of CMZ know-how for the software experience and also for hardware technologies, very scalable according to the needs of the customer to satisfy both the dynamics of the machine and cost savings.

By using the newest controller FCT640 with Codesys v3.5 and CMZ motion libraries, every machine can be ready to pack any format depending on the mechanical tool that the manufacturer decides to install on his project.

The hardware span from the Steppless technologies, to the standard Brushless, ending up to the integrated solutions where drive & motor are built in the same compact case.

FlowPack can be designed either Horizontal or Vertical, including the weighing and dosing of the product before sealing and cutting the pack.



FCT640 master controller

CMZ portfolio of solutions is splitted in 3 FlowPack versions:

**BASIC** | SPEED PRODUCTION:  
350 bpm

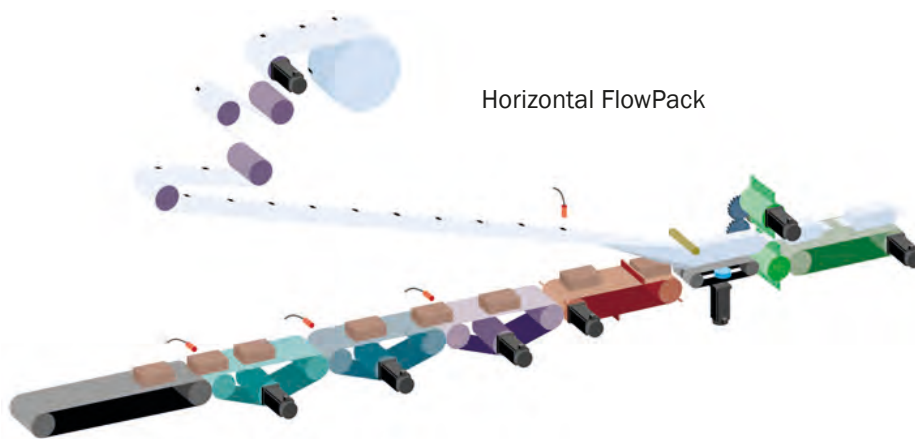
The application provides the functionalities of all the different zones of the machine:

- Inlet: signals control line, stack

belts, sync belt (total max 5 axis)

- Load: mat or paddle belt, vibrant loader (up to 4), aligner device of the items, item presence control, item dimension product, reject items on belt, brush, 3 general electric cams
- Creation of the pack: welding wheel and film trail, unwinding film coil, No-product No-bag,





Horizontal FlowPack



Vertical FlowPack

thermoregulation  
(external or integrated)

- Sealing and Cutting of the pack: programmed-cut, No-product No-bag, bellows, output rush
- Unload: outlet belts and control signals toward other zone
- Industry 4.0

**PLUS | SPEED PRODUCTION: 350 bpm**

- Basic version functionalities (3 axis more)
- Sync belts with double motors
- Reel for introducing items

**HIGH DYNAMIC | SPEED PRODUCTION: 900 bpm**

- Basic and Plus version functionalities
- Advanced movements path profile, simulation and PC monitoring

**BOX-MOTION | Optional, for horizontal packaging machines**  
With this optional device, the

**Brushless**  
High dynamic

**Stepless**  
Low cost

**Separated version**

- drive inside protected zone: IP degree and temperature
- drive easily accessible for maintenance



**Integrated version**

- reduced cable lenght
- reduced space needed inside cabinet



transversal welding and cutting takes place with a motorized translating device that moves the welding grippers following the moving forward of the film. The closing of the grippers can be motorized or pneumatic.

This solution allows to increase the welding time as well as to work particularly high products, with a productivity normally lower than HFFS with a rotary crimper.

### INDUSTRY 4.0

For Industry 4.0, complete documentation is provided regarding the compliance of the application with international Standards requirements.

The following features are available:

- Management of the MODBUS-TCP protocol reserved for interconnection to IT systems Configuration:
  - monitor is provided
  - supply of a list of variables in MODICOM format
  - FTP server for exporting or

importing files with recipe data and statistical data.

- UDP protocol with Client and Server functionality for automated integration:
  - Configuration and monitor are provided.

With a PC tool "CMZ\_DataConnection" which interfaces with the machine, it is possible to:


- read the data from the machines at a configurable time interval
- save the data from the machines on a MySQL file with a configurable time interval
- load the recipe file into the machine and remove it
- take the statistical data file from the machine.

### SOFTWARE FEATURES

- Multilanguage interface
- Unique configurable software for all size solutions (no need to upgrade)
- Dynamic mapping of HW directly on the HMI

- Setting all parameter according to the access privilege
- 100 recipes on SD card removable
- Full diagnostic
- Updating software easily by SD card.

4 hardware solutions are identified from the cheapest one to the most compact and dynamic in terms of Motion:

- Stepless standard: SVM drive with Motor Encoder Box
- Stepless Integrated: ISD (Integrated Stepless Drive)
- Brushless standard: LBD drive with Brushless motor
- Brushless Integrated: IBD (Integrated Brushless Drive). 

More details at

[www.cmz.it](http://www.cmz.it) | [cmz@cmz.it](mailto:cmz@cmz.it)



# Brushless and Stepless servo drives & motors with integrated electronics.

## ITALIAN ART IN MOTION CONTROL

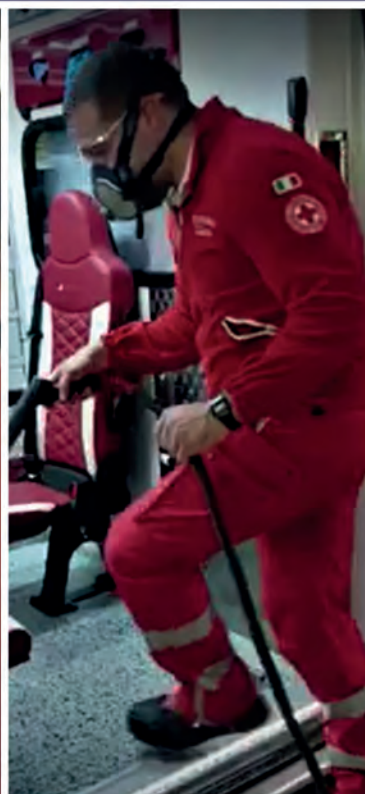
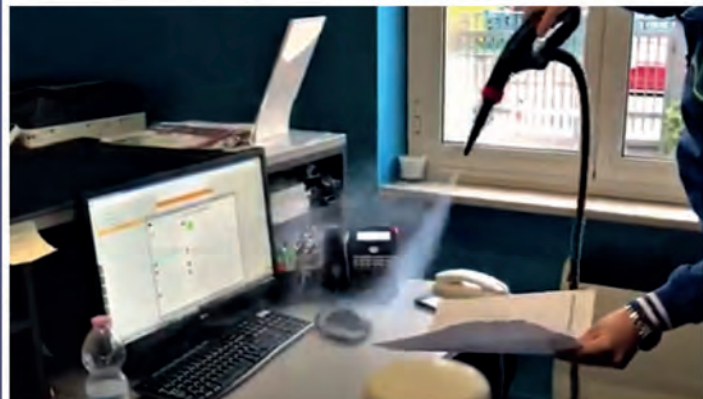
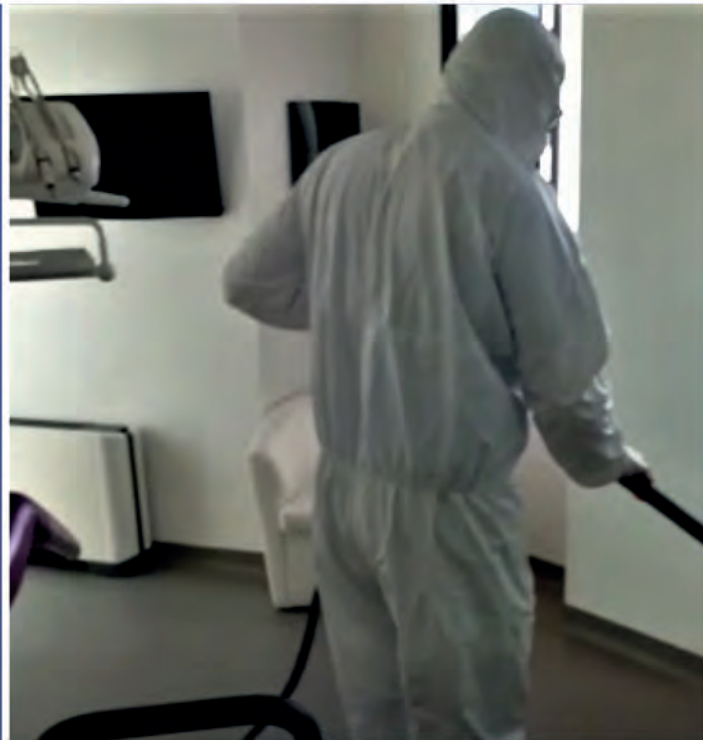


IBD 1.2 to 30 Nm



ISD 4.6 to 12 Nm







# PVC-free is the future

**T**hree pioneers talk about what they have experienced in recent years in the area of metal vacuum twist-off seals featuring the PVC-free PROVALIN® sealing materials:

Actega DS, developer of the PROVALIN® sealing materials, Pano, producer of the first PVC-free seals and Feinkost Dittmann, the first company to place glass jars with PROVALIN® on the market.

**Mr. Lassek (MD, Actega DS), looking back on recent years, how would you describe them?**

“They were very demanding years for us all. Back then, we offered what the market demanded, i.e. PVC-free alternatives. There was no question about the fact that PVC-free materials are better than materials containing PVC.

The changeover involved investments on the part of the manufacturers of seals which were not only focused on health (plasticizers) and environmental (PVC) aspects – they were also obliged to guarantee the function of such seals. We have invested a lot in research and development and are continuing to do so.

Developments on the market, particularly over the past three to five years, have shown that we have succeeded in gaining our customers’ confidence. Growth last year was >30%. This is also reflected in the processing plants available on the market which are capable of covering a capacity of almost 5 billion seals until the end of 2021.”

**Ms. Ochalek (Product Manager, PROVALIN®), what do you think are the reasons for changing over to PVC-free materials?**

“Consumer demands have changed a lot. People are living more healthily and more consciously. When the changeover to PROVALIN® began, the main focal point was the topic of migration.

There was a general consensus that the plasticizers contained in PVC can migrate into fatty or greasy foods and be harmful to health.

That alone was reason enough for the changeover. This was also compounded by the aspects of

sustainability and environmental friendliness which are even more topical today than migration. People are now more responsible when it comes to health and the environment. When better alternatives are available, they like to avail of them.”

**Pano Verschluss GmbH already changed its production of Twist-Off® seals (TO) to become entirely PVC-free as early as 2018. Mr. Eberhardt (owner of Pano), what motivated you to take this brave step?**

“Full conversion to PVC-free with PROVALIN® enabled us to decommission all gas-powered kilns required for drying the liquid PVC compounds with a very high expenditure of energy.

The sustainability performance speaks for itself: 70% energy savings mean 40% less CO2 during the manufacture of seals.”

**Was that not 100%?**

“In our case, we can save 100% CO2 by using green electricity during the manufacture of our seals. But the basis is sustainable savings of 70% energy.”

**Your trademark is a blue ring.**

“Yes, that’s true. We can say that a blue ring always marks sustainability and the lid is free of harmful plasticizers.

The blue PROVALIN®BLUESEAL® enables consumers to swiftly, unambiguously, and easily detect products which are PVC-free.”

**The market for PVC-free seals has developed rapidly in recent years. Mr. Stock (MD, Pano), how do you regard further market developments?**

“More than 35% of TO seals in Germany are already PVC-free today.

For the future, we envisage a market share of 60-70% for PVC-free seals. In any case, seal manufacturers have already developed the requisite capacities for this.”

**Mr. Reichold (MD, Feinkost Dittmann), where the original focus was on oily contents, PVC-free seals can meanwhile be found in practically all**



**areas of food. Do you think there are any restrictions to using PVC-free seals?**

"No, there are none at all. We have processed millions of PVC-free seals in recent years. It goes without saying that new beginnings are marked by gaining experience but we cannot report of any restrictions."

Would you have thought that the percentage of PVC-free seals would grow so strongly and would already account for the lion's share in your company today? "We were convinced right from the start that the topic of migration could be comprehensively solved by PROVALIN®. What's more, the issue of sustainability was already on the agenda at Feinkost Dittmann back then and it was simply a good fit for us. Meanwhile, it is the requirements on sustainability by the food retail trade that are driving the trend to become PVC-free. As a sustainable company, we can only welcome this trend."

**The PVC-free sealing compound is not only available for Twist-Off® seals but also for so-called P/T seals (Press-on Twist-Off®). Ms. Ochalek, why were they developed and how long have they been on the market for?** "Infants and small children require special protection and this also applies when it comes to food. Parents are extremely sensitive in this regard and take care to ensure that their little ones only receive the best. Therefore, it is practically a no-brainer to offer PVC-free alternatives in this area. Which we have been doing since 2016. The corresponding compound going by the name of ACTGreen® PROVALIN® has been available since 2020 and this compound is green to make it easier to identify."

Sustainability has become a key issue, including when it comes to packaging.

Actega DS, Pano, and Feinkost Dittmann engaged with this topic at an early stage. 🏠



**About PROVALIN®**

PROVALIN® is a sealing material for glass jars which has been developed and patented by ACTEGA DS. It is a thermoplastic elastomer (TPE) which does not require any plasticizers and therefore displays extremely low-migration characteristics. Long-term tests have shown that PROVALIN® is safe and complies with the new EU and FDA regulations.



**About ACTEGA**

ACTEGA is a division of the internationally operating specialty chemicals group ALTANA and develops and produces coatings, sealants, printing inks and adhesives for flexible and rigid packaging as well as the graphic arts industry. These products do not only provide materials such as paper, cardboard, plastics or metal with an attractive surface, but also with functional properties such as chemical and physical resistance. ACTEGA's main customer for the products developed, produced and marketed is the packaging industry.

# TOYOICHEM ACHIEVES NEW ADHESIVE WITH UP TO 80% BIOMASS CONTENT

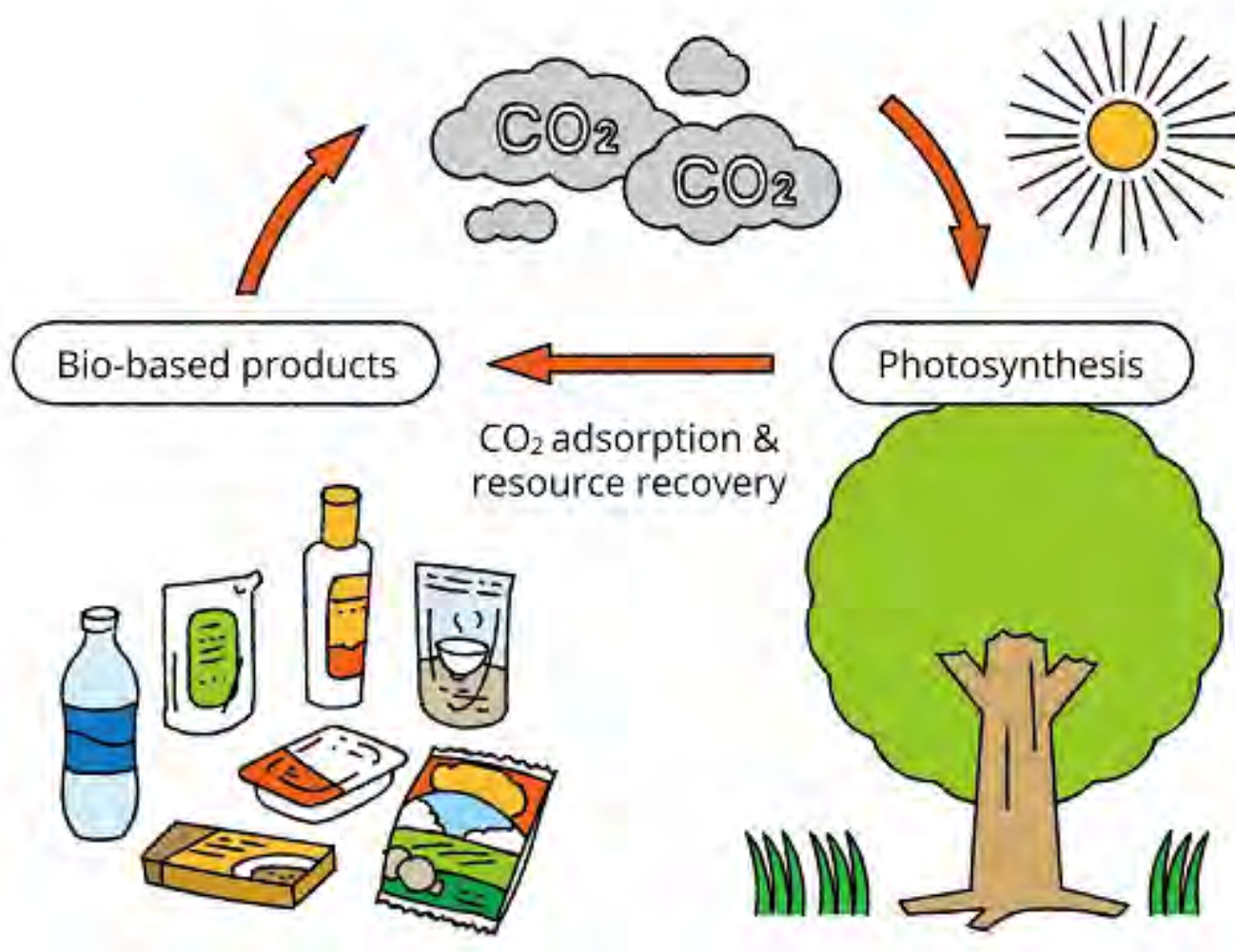
Biomass content dramatically increased by synthesizing polymers from bio-based raw materials

**T**oyochem Co., Ltd., a member company of the Toyo Ink Group, has developed a new pressure-sensitive adhesive (PSA) with a high bio-based content for use in packaging, labels and tapes. The bio-based content for the company's Cyabine™ series of polyurethane adhesives recorded values up to 80%, while the Oribain™ series for acrylic

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

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

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





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

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


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

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

#### About Toyochem Co., Ltd.

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

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

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

[www.toyo-chem.com/en/](http://www.toyo-chem.com/en/)

For more information about the Toyo Ink Group  
[schd.toyoinkgroup.com/en/](http://schd.toyoinkgroup.com/en/)



**TOYO CHEM**  
Something New, Close to You



# WALKI'S NEW REEL WRAPPING PAPER, WALKI® REEL WOOD, IS ENTIRELY WOOD-BASED

**W**hen graphical paper for magazines is transported to the printer, the paper reels need to be protected. Walki has developed a 100% wood-based reel wrapping paper, where the protective polymer barrier is made with tall oil.

“Walki® Reel Wood is made of 100% renewable raw materials: plant-based tall oil and paper.

In addition, we can potentially reduce the amount of the polymer component by more than 20%.

Considering the scale of the board and paper industry, this kind of

With a wood-based reel wrapping paper entirely made of wood, Walki is helping the publishing industry to minimise its carbon footprint

change does make a difference”, says Carlo van Houtum, Vice President, Sales & Marketing at Walki.

As tall oil is a side product from pulp production, no additional forest needs to be harvested to acquire it.

The Walki® Reel Wood was developed in collaboration with a customer. Other customers have also shown a great interest in the fossil-free wrapping paper as it helps them and their customers, such as publishing houses, to reduce carbon footprint.

Walki uses the wrapping paper also for its own use in the Valkeakoski and Pietarsaari plants in Finland and in Steinfurt in Germany, in an effort to cut down on the company's own carbon footprint.

There are also plans to start using Walki® Reel Wood in Walki's UK plant in Garstang. 🏢

**walki.com**





# KIDV RELEASES THE STATE OF SUSTAINABLE PACKAGING:

## Packaging without harming people or the environment

**T**oday, the Netherlands Institute for Sustainable Packaging (KIDV) releases *The State of Sustainable Packaging*. In this publication, the KIDV explores how the international packaging industry can use recycling and circularity to ultimately achieve intrinsic sustainability. "One hundred percent circularity is a utopia," says KIDV director Chris Bruijnes. "We should therefore be working on packaging methods that do not harm people or the environment."

*The State of Sustainable Packaging* offers a strategic perspective on the necessary collaboration and innovations with regard to sustainable packaging.

The publication identifies the social and economic bottlenecks that stand in the way of sustainable packaging. The causes are diverse; con-

sequently, there is no easy solution to be found.

To tackle these bottlenecks, the KIDV has developed a strategy with three innovation tracks that offer short-, medium- and long-term effects. These range from more and better recycling - which has already been achieved in some countries - to increased circularity and ultimately to intrinsic sustainability. Chris Bruijnes: "The entire chain has to get involved. Parties should not be afraid to completely overhaul their production, logistics and consumption. This method of innovation is incompatible with the going concern in business operations; instead, it requires a focus on the future. We advocate the development of new chains with entrepreneurs, researchers, policy makers and citizens/consumers to substantiate and realise the transition towards an intrinsically sustainable society."



This autumn, the KIDV will begin executing the strategy outlined in *The State of Sustainable Packaging*. An online event with various European organisations will be held on September 17. Following this event, activities with and for these international partners will be organised in order to further concretise the road towards intrinsically sustainable packaging. 🏛️



Tracy Sutton

Founder  
and Lead  
Consultant at  
Root



Tom Szaky

CEO at  
TerraCycle



Robbert  
de Vreede

Executive  
Vice President  
Global Foods  
at Unilever



Hildagarde  
McCarville

CEO at Veolia  
NL



Roland  
ten Klooster

Professor  
Packaging  
Design at  
University of  
Twente

# ANUGA FOODTEC POSTPONED TO APRIL 2022 DUE TO PANDEMIC

**T**he pandemic and associated travel and event restrictions have also had an impact on Anuga FoodTec, which was originally scheduled for March 2021. After extensive discussions with industry participants and the German Agricultural Society (DLG), the professional and conceptual sponsor of the trade fair,

Koelnmesse sees no alternative but to postpone Anuga FoodTec. The next Anuga FoodTec will take place from 26 to 29 April 2022.

“We sincerely regret that we have to postpone Anuga FoodTec until 2022 despite good preparation and encouragement from the industry. In

the past few weeks, however, it has become apparent that there is growing skepticism and concern among all involved. As a result, many companies have pulled out in view of the infection situation and current uncertainty. However, Anuga FoodTec cannot take place without the important key factors of internationality and cross-industry participation. With this in mind, we have responded to the industry’s wish to postpone the trade fair with the new date,” says Oliver Frese, Chief Operating Officer of Koelnmesse. “The new event date is the best possible solution, taking into consideration the international trade fair calendar, and the available time and space capacities. This allows us to provide the industry with a vision and planning security”.

In 2022, the trade fair will take place as a hybrid event, combining both an in-person and digital platform. The addition of a digital platform to the physical component creates the foundation for as many people as possible from Germany and abroad to have access to the latest technologies and processes in the food and beverage industry and for promoting sustainable networking within the industry.

“Like the companies, we will use the time to fully prepare ourselves for the upcoming trade fair and boost the industry’s restart further with digital tools and additional reach. Koelnmesse will of course continue to count on the presence of international exhibitors and visitors in April 2022,” continued Frese. “Trade fairs offer the opportunity for products and the people behind them to be







experienced through personal interaction and exchange. This is the ideal basis for successful business.”

“As the professional and conceptual sponsor of Anuga FoodTec, we very much regret that the leading international supplier fair for the food and beverage industry will not be able to take place in March 2021 as planned. As a platform for professional exchange across industry boundaries, Anuga FoodTec is a central partner for the entire food sector, focusing on current topics and providing important impetus with the presentation of forward-looking technologies and innovations. We are therefore even more pleased that in spring 2022 Anuga FoodTec will once again be the meeting place for the international food technology and supplier industry under the guiding theme ‘Smart Solutions - Higher Flexibility’”, says Simone Schiller, Managing Director of the DLG Food Technology Center. Koelnmesse is the organiser of Anu-

ga FoodTec. DLG is the professional and conceptual sponsor of Anuga FoodTec.

#### **Koelnmesse - Global Competence in Food and FoodTec:**

Koelnmesse is an international leader in organising food fairs and events regarding food and beverage processing. Trade fairs such as the Anuga, ISM and Anuga FoodTec are established world leaders. Koelnmesse not only organises food and food technology trade fairs in Cologne, Germany, but also in further growth markets around the globe, for example, in Brazil, China, Colombia, India, Italy, Japan, Thailand and the United Arab Emirates, which have different focuses and contents. These global activities enable us to offer our customers a network of events, which in turn grant access to different markets and thus create a basis for sustainable and stable international business. 🏛️

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



Internationale Zuliefermesse für die Lebensmittel- und Getränkeindustrie

*International supplier fair for the food and beverage industry*

[www.anugafoodtec.de](http://www.anugafoodtec.de)  
[www.anugafoodtec.com](http://www.anugafoodtec.com)

**KÖLN | COLOGNE, GERMANY**  
**26.-29.04.2022**

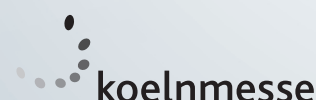
**ONE FOR ALL.  
ALL IN ONE.**

Food Processing | Food Packaging | Safety & Analytics | Intralogistics  
Digitalisation | Automation | Environment & Energy | Science & Pioneering

#### **Koelnmesse GmbH**

Messeplatz 1  
50679 Köln, Germany  
Tel. +49 1806 578 866\*, Fax +49 221 821 99-1020  
[anugafoodtec@visitor.koelnmesse.de](mailto:anugafoodtec@visitor.koelnmesse.de)

\*(0,20 EUR/Anruf aus dem dt. Festnetz;  
max. 0,60 EUR/Anruf aus dem Mobilfunknetz)





# Dinnissen Process Technology continues to innovate: High-care filling and low-care palletizing in one station

**M**eet Dinnissen's cutting-edge technology for filling Big-Bags in high-care zones. This innovation combines high-care filling with low-care palletizing. It meets all requirements for high-care, medium-care and low-care filling, processing, sealing and transporting Big-Bags. Moreover, this solution is equipped with a fully automatic palletizing station.

### The process

The filling of Big-Bags takes place in a closed filling process. Compaction and weighing both take place in one position, during filling. And no hydraulics are used in the high-care zone.

To keep the oxygen level below 0.5%, stretching spout technology and triple sealing are used. This results in stable 'high' Big-Bags without gas inclusions. The entire system of high-care filling and low-care palletizing is designed, built and tested in-house.

For more information about this new way of filling and palletizing, please visit the website of Dinnissen Process Technology. To see the machine in action, watch the video.

### Reliable production

Dinnissen Process Technology is known worldwide as a reliable player in the field of process technology for powders, grains and granules. With the latest innovation in high-care fil-







ling and low-care palletization, this is no different. Dinissen Process Technology uses seventy years of expertise to innovate and to take care of the quality that customers and employees are used to. They stay close to

the basics: the entire process from design to final product is done in-house. In this way, Dinissen Process Technology assures itself of the quality that the company expects of itself day after day. 🏠



# GRACO'S PORTFOLIO OF SANITARY PUMPS AND EQUIPMENT

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

**G** raco's SaniForce®2.0 range is designed to handle the most difficult materials quickly and safely.

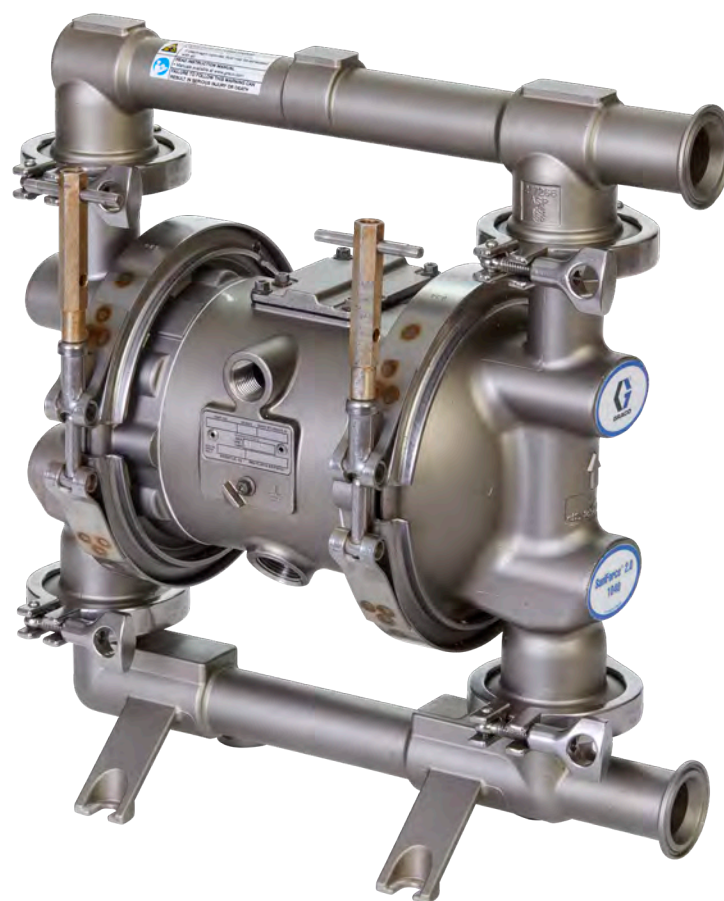
It includes air- and electric-operated double diaphragm pumps, electric-operated drum pumps, and piston transfer pumps. Beside these stand-alone pumps, it also includes drum and bin unloaders.

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

- Food: Low to high viscosity ingredients including juices and flavored drinks, salad dressings & condiments, sauces, edible oils, snack food flavorings, frostings, beer & wine, caramels & chocolate syrups, jams & fruit fillings, tomato paste, peanut butter, and more.
- Personal care: Lotions & creams, cosmetics, and high care food.
- Dairy: Yogurt, cottage cheese, ice cream ingredients.
- Meat and poultry.
- Pharma: Medical creams & lotions, organic reagents, blood products, bio pharmaceuticals, alcohol and solvent transfer.

## Food Grade Air Operated Double Diaphragm Pumps

Designed for rigorous, continuous use with quick knockdown design



for easy cleanability and sanitation, SaniForce® FG pumps are ideal for applications requiring high flow rates and portability.

A three-way pilot valve ensures non-stick operation, and all fluid contact areas are FDA compliant and meet CFR Title 21.

## High Sanitation Pumps

SaniForce® HS pumps are designed

to meet the most stringent sanitation requirements.

Mounted on a floor stand and equipped with a leak detector, these pumps can be rotated 360° to drain any excess material. Ideal for applications such as personal care and high care food transfer.

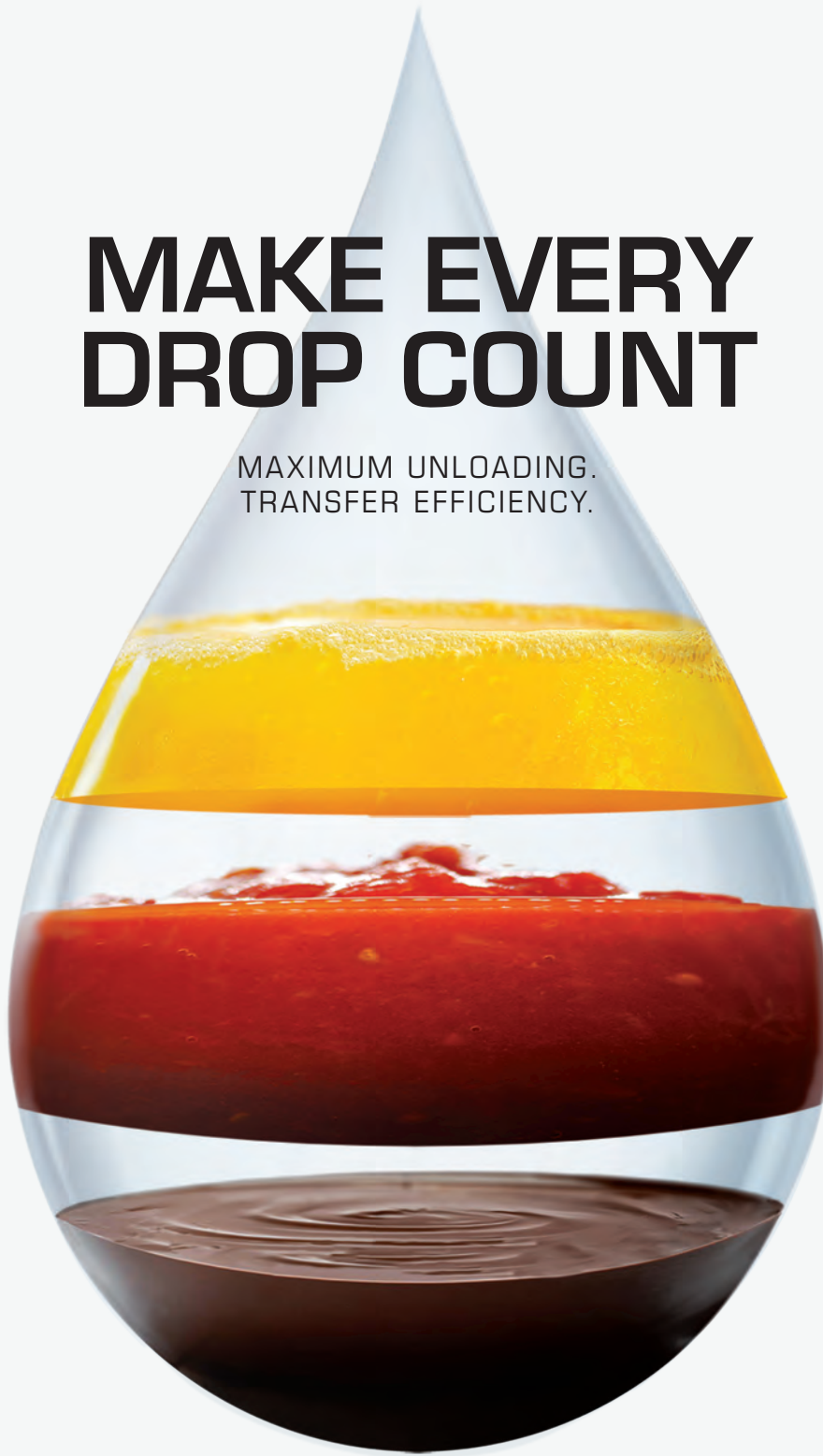
## Large Particle Pumps

These pumps are built to handle



# MAKE EVERY DROP COUNT

MAXIMUM UNLOADING.  
TRANSFER EFFICIENCY.



## **SANIFORCE® 2.0**

A COMPLETE SANITARY PUMP LINE  
TO HELP YOU SAVE MONEY

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



**DISCOVER ALL ADVANTAGES**

**[WWW.GRACO.COM/SANIFORCELINE](http://WWW.GRACO.COM/SANIFORCELINE)**



to stall under pressure, preventing pump failures from clogging or closing lines. Their energy-efficient electric drive reduces energy consumption up to 5x compared to traditional air-operated diaphragm pumps, while their seal-less diaphragm pump design eliminates leaking and failures due to run-dry pump conditions. Moreover, Graco has over-molded the fluid side diaphragm plate with PTFE on the fluid side and EPDM on the air side. This improves wear, durability and cleanability, making these pumps one of the easiest to clean in the market.

### **SaniForce® Piston Pumps**

Graco's powerful line of piston pumps move extremely difficult materials that other pumps cannot. They have fluid pressures up to 82.7 bar and are ideal for low to medium viscosity materials. The air motor improves serviceability, increases efficiency and offers a lower cost of ownership. The quick knockdown design allows fast, easy cleaning, and smooth maneuverability around a plant. They are manufactured with corrosion-resistant stainless steel for long-lasting durability.

solids up to 9.65 cm in diameter without crushing or damaging the material. The durable pump construction handles particulates and abrasives without damage to the pump. And thanks to fewer parts, they allow accelerated cleaning, sanitizing and minimal downtime.

pumps are designed to eliminate unnecessary pump failures in the most demanding applications. They improve a facility's energy efficiency and create a quieter and cleaner work environment for employees. Patent pending technology allows the pumps

### **SaniForce® 3A and Pharmaceutical Pumps**

Graco's 3A approved and pharmaceutical pumps feature a single piece manifold that reduces clamps and areas for food/bacteria to hide, for easier cleaning and enhanced safety. Few moving parts increase their durability and reduce repair time. They come installed with leak sensors, while a control box is optional. The pharmaceutical pumps also feature a 20 Ra electropolished finish.

### **SaniForce® 2.0 Electric-Operated Double Diaphragm Pumps**

Each model of the SaniForce® 2.0 pump range is offered in both air- and electric-operated versions, where available. The SaniForce® EODD







### **SaniForce® Electrical Drum Pumps**

Reduce downtime with Graco's quick knockdown SaniForce® centrifugal and progressive cavity drum pumps that feature easy Tri-Clamp connections and a simple design. They are designed for operational flexibility throughout a facility – simply plug in the pump and start transferring the material. Their lightweight design allows operators to move pumps quickly and smoothly between drums to increase output.

### **SaniForce® Elevator**

Graco has the ideal solution for manual and often unsafe unloading of containers. The SaniForce® Elevator is ideal for companies that currently unload fewer than two containers per hour by either scooping or dumping. It's designed to lower pumps into and lift pumps out of drums, bins, and totes. Flow rates range from 5.7 to 53 lpm (1.5

to 14 gpm), depending on which SaniForce® piston pump is used.

### **Pail Unloader**

Graco's new Pail Unloader is specially designed to unload medium to high viscous materials out of 20 liter pails (buckets). It's thus a safer alternative to the old-fashioned way of lifting and dumping. Once the pail is put in place, the plate with wiper seal is lowered into the pail, hermetically sealing the bucket. When the pumping starts, the product is moved out of the pail and the plate travels down, scraping product from the sides. After the pail is emptied, the plate and pump can be lifted out by simply switching a button.

When using the pail unloader, the product is hermetically sealed and guided from beginning to end, which prevents any external contamination. The 6:1 priming piston pump design ensures an evacuation rate up to 99% and the portable, stainless

steel construction allows easy maintenance and an overall improved ergonomic work environment.

It's designed for easy operation, cleaning and maintenance. Disassembly is quick; its Tri-Clamp connection makes it possible to easily disconnect the pump lower for cleaning and maintenance purposes. The wiper seals are available in PTFE and Buna, giving a solution for almost all food, beverage and personal care applications. What's more, this small, lightweight unit is equipped with wheels to make it easy to move around the factory.

### **Drum Unloaders**

Graco's new Drum Unloaders are ideal to unload medium to high viscous materials out of 200 liter drums. The range offers an extensive selection of both diaphragm and piston pump options, ensuring a solution for every application, from low to very high viscous products. An evacuation rate of up to 99% is achievable. The drum unloaders are designed with cleanliness in mind. The sloped control top makes cleaning easier. Instead of physical labels, the use of laser etched graphics avoids any unwanted product contamination. The follower plate and inflatable seal hermetically seal the drum, keeping the product covered during transfer.

A wide range of control options is available, from exposed manual controls to fully automated LED control systems, via a touchscreen control panel. Capabilities include a fully automated unloading sequence; ingredient/recipe storage; pump prime feature; batch output control; and ram jog feature.

The AODD drum unloader should be used when the viscosity is between 35,000 and 100,000 cps; when large particles (e.g. diced tomatoes) need to be transferred; when high flow rates are required (>50 liters per minute); or when the material needs to be protected from the atmosphere.

Use a piston pump drum unloader when the viscosity is between 35,000 and 500,000 cps; when material needs to be pumped for distances greater than 10 meters, has many elbows or has a small diameter line that causes too much pressure drop; or when the material needs to be protected from the atmosphere. Use a priming piston when viscosity exceeds 250,000 cps.

### Bin Evacuation System

Save time and money in your facility by unloading materials efficiently from 1100-liter (300-gallon) “bag-in-bin” containers, eliminating manual scooping or bin dumping. Once the bin is placed below the BES, the ram plate and pump are lowered into the bin, just above the product. The seal is then inflated to hermetically seal the bin. When pumping starts, the product is moved out of the bin and the plate with inflatable seal travels down, scraping product from the sides of the drum. After the drum is emptied, the plate and pump can be lifted out by simply switching a button.

The SaniForce Bin unloader is designed with cleanliness and safety in mind. The sanitary flange clamps offer an easy and fast cleaning solution. Safety latches enable you to lock the follower plate when you are not using the unit, preventing any possible injuries when working under the plate or when changing bins.

This system is ideal to unload medium to high viscous materials out of 1000-liter bins. It's available in piston pump and AODD pump design. Use a piston pump BES unit when the material comes in a tote or bin; when the viscosity is too high for an AODD pump; when the material needs to be pumped long distances; or when too much pressure loss exists in the line. Use the AODD BES unit when the material comes in a tote or bin; when high flow rates are required; when the number of drums used daily

exceeds 15; or when the viscosity is under 100,000 cps and contains large particles (a flapper valve may be required).

The AODD pumps used on the BES are available in both ball and flapper check design. The flapper check design provides a delicate, shear-sensitive operation and gently transfers products. This low-shear operation ensures product quality is not damaged or compromised, resulting in the proper transfer of critical high-value fluids and materials.

The unit comes with a wide range of control options, from exposed manual controls to fully automated LED control systems.



### Hydra-Clean® Pressure Washer

Graco has thought of everything for sanitary applications.

To clean and sanitize food, beverage and pharmaceutical processing facilities, the Hydra-Clean® air-driven or hydraulic pressure washers can be used with hot or cold water, detergents or strong chemical solutions.

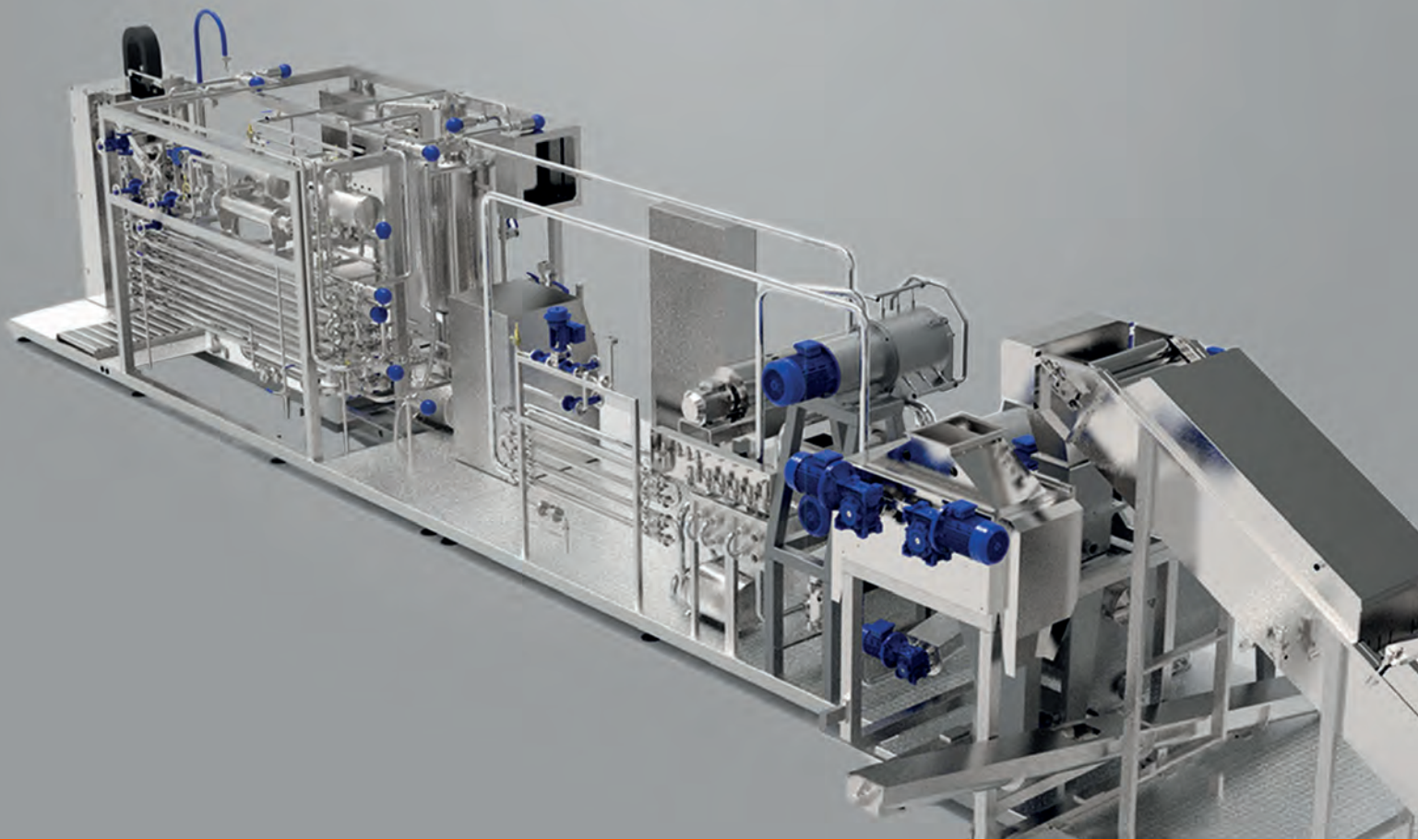
### Further information

To discover more about Graco's full portfolio of sanitary equipment, check out the Graco webpage [www.graco.com/saniforceline](http://www.graco.com/saniforceline) or contact Bart Clerx at [bart.clerx@graco.com](mailto:bart.clerx@graco.com). 





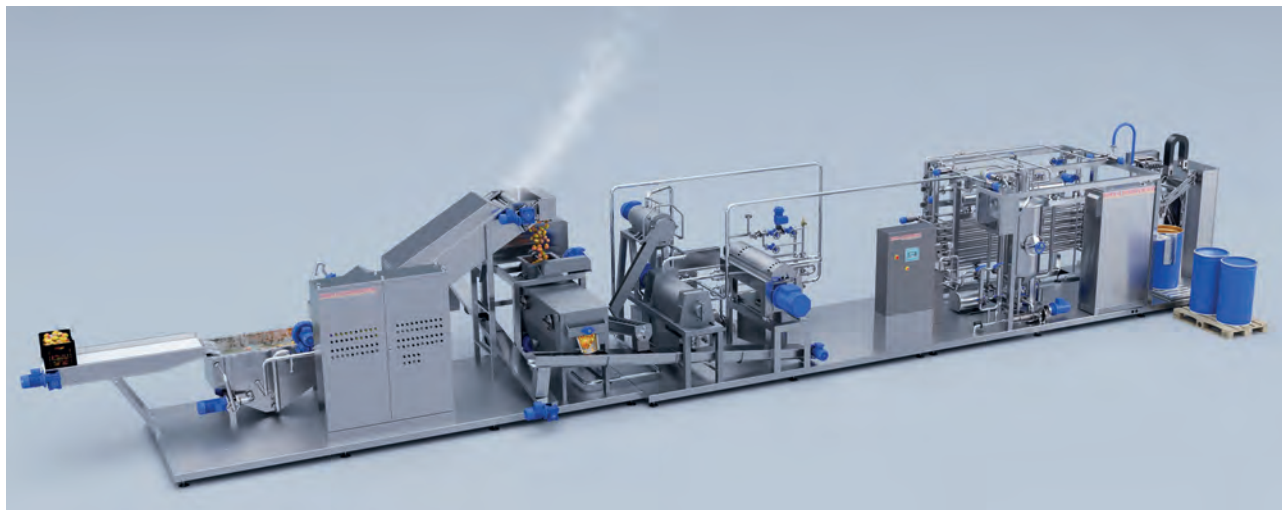
# FRUIT PROCESSING TECHNOLOGY



**TROPICALFOOD**  
MACHINERY

MULTIFRUIT LINE 1000 • [www.tropicalfood.net](http://www.tropicalfood.net)

# LEADING COMPANY IN THE GLOBAL FIELD OF **FRUIT PROCESSING MACHINERY**



**W**ith decades of field experience on its back, the Italy-headquartered Tropical Food Machinery is a leading company in the global field of fruit processing machinery. Founded in the late 1970s by a pioneering Italian entrepreneur, the company currently boasts an operating branch in the Brazilian state of Minas Gerais, two-fruit processing plants located in the north of the country, as well as liaison offices in India, Costa Rica, and across the Asia-Pacific and West Africa regions.

As the fruit market is set to account for nearly 5 percent of world GDP by 2030, with much of this remarkable growth taking place in the emerging markets of Middle East, Asia and Africa, the company is looking to further shore up its international operation with the aim to be closer to its customers. "Rising demand for fruit worldwide represents an unparalleled opportunity to spur innovation, employment and prosperity," said Stefano Concari, the company's general director.

Tropical Food Machinery's corporate philosophy revolves around the notions of flexibility and versatility. The company always seeks to identify the most appropriate solution in any particular case as it is well cognizant that customers' needs depend on a wide range of factors, such as geography, ready access to market and a working supply chain. This allows the company to meet the needs of a wide range of clients, from family-owned businesses to large-scale industrial producers.

Thanks to its decades-long know-how accrued on the field, Tropical Food Machinery is able to offer a wide range of multi-purpose technological solutions, starting from very low capacity systems such as small-size plants on skid or mobile plants to large-scale, automated plants for the industrial process of tropical, deciduous fruit and tomato. Every line is designed in-house and then built and tested before every and each delivery, enabling a complete control over quality and productive speed and creating a strong sense of responsibility within the company's workforce.

**TROPICALFOOD**  
MACHINERY

Some of the jewels of this range that have enjoyed particular success recently are the Mini Industry Line 200 and the Multifruit Line 1000. Mini Industry Line 200 arose from discussions with international organizations and was designed to be used by small-scale producers and farmers in decentralized areas, reducing waste, diminishing costs of both management and maintenance and generating local economy. With this line, farmers can process themselves any fruit and produce "ready-to-drink" fruit juice, jam, fruit salad and tomato paste packed in glass, pet or tins and sell this production on the retail market.

Mini Industry Line 200 is approximately 12-meter-long and has a very low energy consumption. The system is supplied already assembled in one single container, preventing bothering assembling issues. Mini Industry Line 200 can be therefore moved





from location to another if the season requires so, allowing producers to refine seasonal fruits directly on site, avoiding extra transport prob-

lems and related problems. A further upside is that its high manufacturing quality and standards allow the use of non-specialized personnel.

Multifruit Line 1000 is designed for the same use in remote areas and highly flexible situations.

The system is the smallest of the company's fully automatic lines. It has a working capacity up to 1 tons/h of any fruit and can produce aseptic natural juice/purée and concentrate as well.

The aseptic pulp or juice is a semi-finished product which is filled in 220 L bag in drum, it is very long-lasting even when stored at room temperature and is then supplied to blending – juicing – baby food companies and even to the HORECA chain.

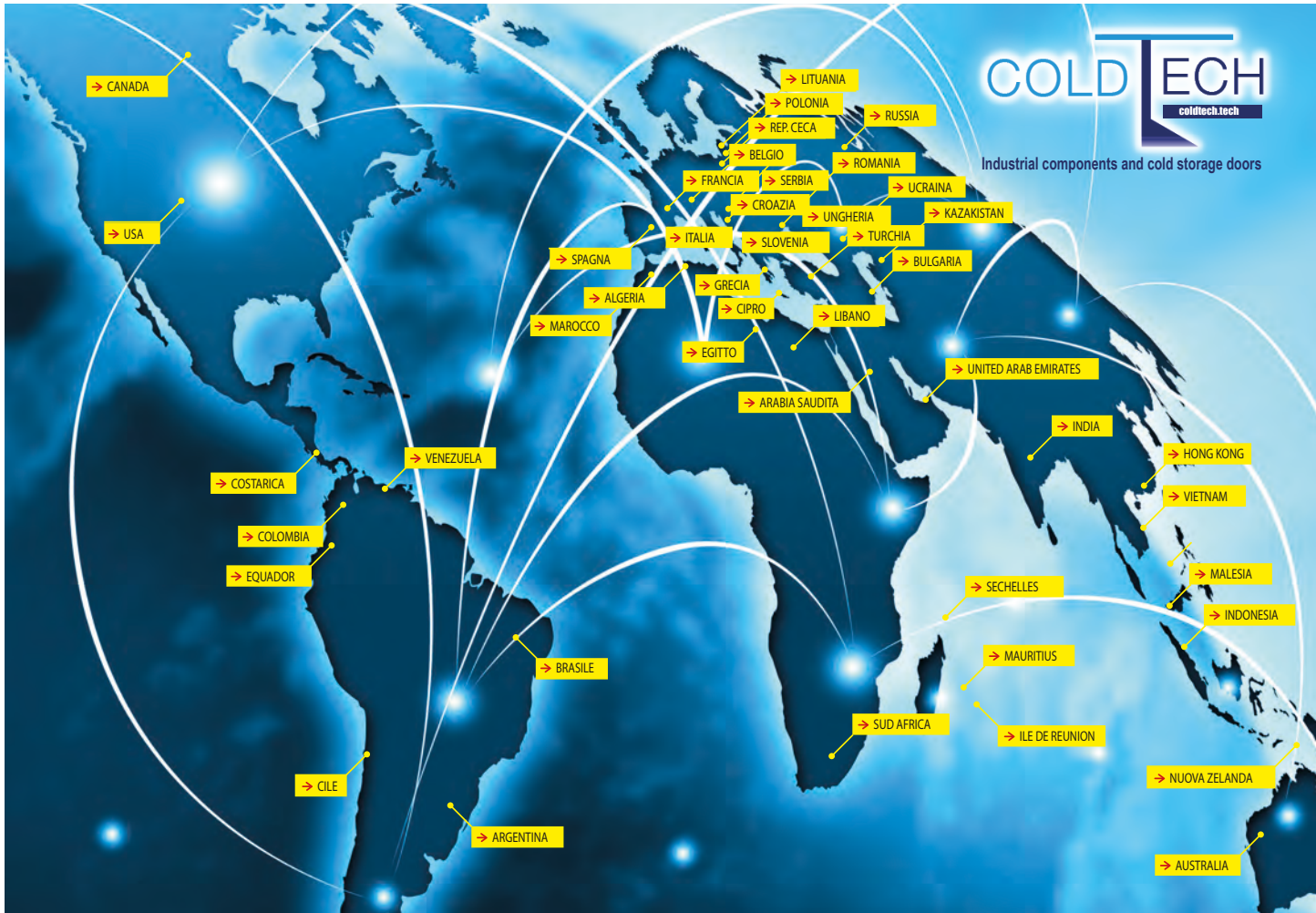
This line is particularly recommended for those entrepreneurs who are not regularly supplied with big quantity of fruits.

Given its already deep-rooted presence in most of the largest markets, Tropical Food Machinery boasts also a comprehensive after-sales support service that is able to provide spare parts and a prompt technical support if the need should arise. As Concari put it: "This is what drives our company: relentlessly working with our customers to improve our technologies and offer even higher yields and more efficient production." 🏠

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



# INDUSTRIAL AND COMMERCIAL COLD STORAGE DOORS



**C**oldtech was established in 2006 on the founders' experience acquired in the sector of industrial and commercial cold storage doors for the preservation and freezing of food products since 1991.

A team of in-house engineers for whom providing a service implies listening to the customer's voice, sharing and interpreting their needs, assisting them in selecting the single accessories up to and including final shipment of the components or of the cold storage doors. Constant dialogue that makes it possible to identify problems as they occur and to incorporate the right improve-

ments in Coldtech products. A 360° service combined with a portfolio of products with an extremely competitive quality/price ratio.

Coldtech is able to provide assistance and consulting for the construction and start-up of a cold storage door factory, including layout, machinery, the selection and training of operators, selection of suppliers.

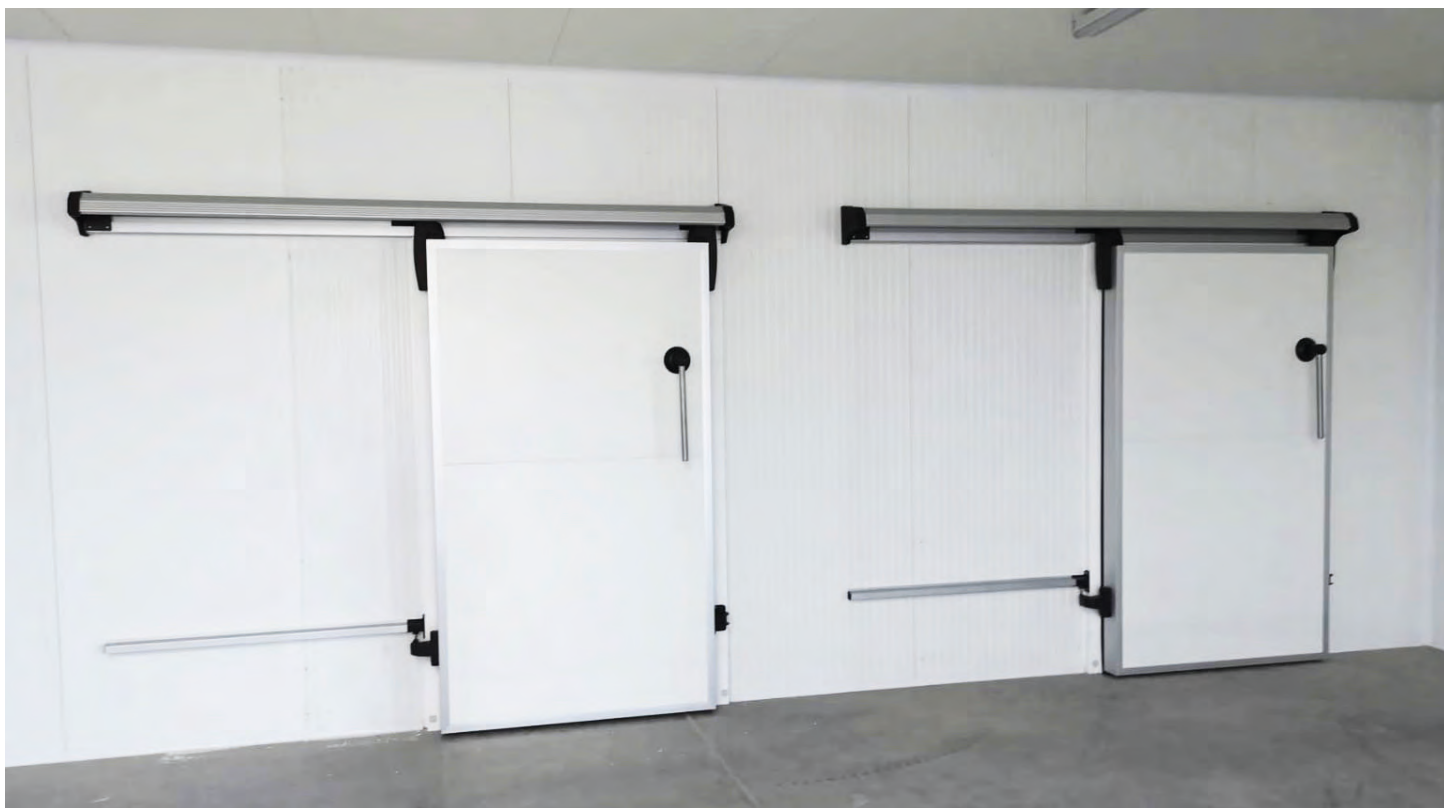
On a rapidly-changing market, cutting-edge innovation is one of its main assets. Continuous development in the freezing and refrigeration of food plays a decisive role for Coldtech and represents a major investment for its business strategy.

## Customer services

With a firmly-entrenched international presence and in-depth knowledge of refrigeration requirements, this company is in the best position to propose its services for the construction of industrial cold storage doors.

All the components of industrial cold storage doors are developed and industrialised according to customers' product specifications making it possible to produce hinged or sliding, vertical sliding and fold-up doors... for both positive and negative temperatures and also thermo-acoustic insulation materials for the food packaging industry.





#### **A scenario in constant evolution**

Many challenges lie ahead and to outperform our increasingly fierce competitors, it is essential to continue to develop new products and improve existing offerings.

Spurred by the experience acquired in recent the years in international markets, Coldtech has recorded 90% of its turnover mainly in emerging countries. Working closely to the customer, Coldtech draws up a specific analysis plan in order to assess and investigate any production problem. The company also makes an in-depth analysis of the customers and the market, providing specific training in refrigeration-related aspects and associated pollution problems. 🏠

**[www.coldtech.tech](http://www.coldtech.tech)**

**COLDTECH**



# Learning from 2020 to Profit in 2021



**Paul Lerigo**  
Marketing Manager,  
Mettler-Toledo Product Inspection

**A**round the world, few people will be sorry to see the end of 2020. The COVID-19 pandemic has left an indelible mark on the way we live, and the way we work. For food manufacturers, the events of the year have brought home some forceful lessons. Prominent among those is the need to be adaptable, so that sudden changes in circumstances and market demands can be tackled quickly and effectively.

Flexibility in terms of product types and formats has been shown to be key. The pandemic, and the national lockdowns it prompted, saw new trends in food consumption appear, and existing ones accelerated. For example, with many restaurants and hospitality venues shut down, there were dramatically fewer people eating out. Consequently, demand for bulk food supply to restaurants and catering operations collapsed and continuing to package food products in bulk made no sense. Instead, with people spending so much time indoors, including their working hours, they needed food products that suited their new way of life – healthier products for a more sedentary routine, for example, or greater access to ingredients that allowed them to create their own dishes.

A classic example of this came in the UK, where a TV programme (The Great British

Bake Off) has inspired large numbers of people turn to home baking in recent years. When the UK went into lockdown in March 2020, this trend went into overdrive, as the nation sought to bake its way through the pandemic. It quickly became apparent that the food supply chain was unable to cope with this explosion in interest in baking: supermarket shelves were bare of packs of flour. It transpired that there was plenty of flour in the mills, but not enough of the packets required to sell it in smaller quantities via retail outlets.

This example serves to illustrate how quickly things can change. Food manufacturers have discovered that they need to be ready to pivot rapidly, and to do so, their production line must be flexible. Many food manufacturers have therefore considered how to integrate product inspection technology such as metal detection, x-ray, checkweighing and vision inspection into their production lines, so that they can operate both flexibly and in compliance with food safety requirements.

Another impact of COVID-19 for the food industry – as with many others – is the restrictions on workplaces and face-to-face contact that have come with the need for social distancing. On one level this has affected factory staffing levels and operational guidelines as people have been en-





couraged, where possible, to work remotely. On a different level, when food manufacturers have been looking for technology to enhance their production line performance, there have been no trade shows, such as Interpack, for them to connect face-to-face with suppliers. In addition, in-person demonstrations have generally not been possible.

Technology developers such as those in the product inspection area have been forced to harness electronic and virtual technology to bypass these new barriers to their business, so that food manufacturers can properly assess how these systems fit their needs. This has resulted in an influx of virtual trade shows, webinars and e-demonstrations – all 'COVID-19 safe'.

#### Turning the page to 2021

As 2021 begins, COVID-19 remains a hugely significant factor in many parts of the world, and it is expected to continue to impart stresses on the food sector at least for the first half of the year.

For European food manufacturers, another major influencer could well be Brexit and its fallout. As we write, there is no trade deal agreement between the UK and EU, so uncertainty over the future relationship between the two parties goes on.

What we can say is that food manufacturers, whether exporting from the EU or into it, will have ever greater needs for proving due diligence with their products, to demonstrate traceability and food safety compliance.

As a consequence of Brexit, they might also be faced with rising costs, e.g. to source ingredients from other suppliers, that their supply chain partners are reluctant to carry. These food manufacturers will seek answers in technologies that enable them to be more flexible and more efficient in production, without losing any control or visibility of safety or labelling standards.


With remote working now of unparalleled importance, the technology to facilitate this – for

example, virtual networks – will rapidly increase in sophistication. This was already happening, but areas such as robotics, automation and artificial intelligence will leap forward. Whether traditional tradeshow ever return as we have known them must be debatable. They are already moving online, and product demonstrations are doing likewise.

With shops closed or subject to social distancing restraints, online shopping will also increase, and for the food sector, this might mean the potential for unlicensed or unsafe foods to find a foothold in the marketplace. Consumers will quickly realise the importance of food safety compliance and give their loyalty to brands that they know are of certain provenance. Product inspection systems will make a measurable difference here.

They will also do so for food manufacturers looking to improve their sustainability credentials, with the latest systems helping to reduce carbon footprints towards net zero and playing a part in measuring emissions from cradle to grave. Human resources will also be given a stronger emphasis going forward, with companies rationalising yet optimising what they have, investing in young people and looking for creative ideas to achieve new breakthroughs.

It is clear that the challenges of 2020 will not just disappear. They, and other challenges, will keep testing the food manufacturing industry in 2021. We do not live in an altogether predictable world, and the COVID-19 pandemic has shown us that things can change quickly. Food manufacturers must be ready to embrace change with minimal disruption, and to do so, they must have a flexible mind-set, see opportunity in evolving product trends, and invest in smart technology that will take them forward into this uncertain future.

The famous saying "change is the only constant in life" has been proven in the year 2020 like few others before. Food manufacturers must be primed to adapt to whatever comes next and technology can help them do that. 



# STAINLESS STEEL TANK MANUFACTURER SINCE 1958

**B.G.** Cisterne is an Italian company based in Noce-to, in the province of Parma - Emilia Romagna, in the heart of the Food Valley of Northern Italy.

Since 1958 the company has been producing stainless steel tanks, gaining through the years more and more experience, giving a special attention to the customers' requests.

We create customised solutions working closely with our clients during both the designing and the manufacturing process.

All our tanks are the result of a synergistic creation between our experience and our customers' requests.

Our certificates clearly show the high quality of our products.

From 2001, B.G. Cisterne design and produce stainless steel tanks, including power supply and feeding systems, for processing and storing food liquids.

Our most successful products are the horizontal tanks (standard or light - isolated or simple walled) and the vertical tanks (with hatch or bolt-on lid). Their capacity goes from 1,000 lt up to 35,000 lt.



We use high-quality materials, with their own certificates of origin, chemical analysis and certificated mechanical characteristics.

B.G. utilizes cutting-edge machinery for the processing of stainless steel and the following welding: TIG-MIG-SAW-LASER-CONTINUOUS SEAM. A digital rendering is provided for each product in order to better verify the product compliance with the customer's requests and criteria.

BG SRL offers services too, not only products.

Our philosophy has always been oriented to the customer's scrupulous satisfaction, which lead us to develop the manufacturing of water tanks, in addition to our original milk tanks.

- Water emergency
- Refrigerated tanks
- Storage tanks

## FOCUS ON THE WATER PRODUCT

### Possible practical uses:

- BOWSERS FOR DRINKING WATER STORAGE AND DISTRIBUTION
- BOWSERS PROVISION
- EQUIPMENT AND CUSTOM TECHNICAL FEATURES
- TANKER ARRANGEMENT CONSIDERING THE MAXIMUM CAPACITY OF THE TRACTOR
- SELECTION AND GUARANTEED ALIGNEMENT FOR A BETTER BALANCE OF THE VEHICLE

Designing and manufacturing of stainless steel tanks for the transport, the storage and the supply of water resources.

Fields of application:

- CIVIL SECTOR
- AGRICULTURAL SECTOR
- INDUSTRIAL SECTOR. 🏭

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





# KOCH SEPARATION SOLUTIONS ACQUIRES LEADING DAIRY TECHNOLOGY PROVIDER RELCO

## Acquisition positions KSS as comprehensive solutions provider to serve dairy, food and beverage industries with cutting edge technology and service

**K**och Separation Solutions (KSS), a global leader in separation technology, today announced the acquisition of RELCO, a top provider of cutting-edge process technologies for the dairy and food industry. The acquisition allows KSS to better serve customers and leverage the synergistic capabilities of its various complementary technologies in the dairy, food, and beverage markets.

“The acquisition of RELCO marks an important step in KSS’s transformation to become an integrated solutions provider, delivering superior value to existing and new customers,” said Manny Singh, President of KSS. “We believe that separation challenges in the dairy, food, and other industries are complex and rarely solved with one technology. The acquisition of RELCO adds complementary evaporation and drying technologies to the existing membrane and ion exchange offering of KSS. This combined product offering, along with deep applications knowledge, will ensure a seamlessly integrated solution while delivering maximum value to our customers.”

KSS has a long history in providing innovative membrane products to the food and dairy industry, having

pioneered the development of the sanitary spiral wound membranes commonly used today. KSS seeks to drive technological innovation to meet market needs through the vertical integration of KSS’ advanced membrane filtration and ion exchange capabilities with RELCO’s proven evaporation, spray-drying and crystallization processes.

The acquisition of RELCO expands KSS’ scope of capabilities, allowing for a meaningful partnership with customers through greater choice and flexibility in selecting separation technologies best suited for their unique operations.

The addition of RELCO’s proven thermal technology enhances KSS’ overall solutions offering to better serve dairy as well as food and beverage customers in fruit-juice, biotechnology, starch and sugar, nutraceutical, and both plant- and animal-based protein applications.

“I founded this company almost four decades ago offering only sanitary welding services and came to realize the greater need for custom designed and engineered systems in the dairy market,” says Loren Corle, Founder and Owner of RELCO. “Since then, I have proudly watched RELCO grow and evolve its technologies to

ensure that we are always the first call when customers are faced with a challenge. I am thrilled that KSS shares that same mentality and desire to work collaboratively with their customers to develop strong, long-lasting relationships.”

Mark Litchfield, President of RELCO, adds “To be acquired by a company as successful and respected as KSS is a vindication of our vision, the dedication of our teams, and the relationships we have developed.

This acquisition will allow us to offer integrated and innovative membrane filtration and ion exchange systems with our solutions targeting value addition, energy efficiency, and waste minimalization.

KSS offers ideal growth conditions for an innovative and quality-focused company like RELCO and we are excited to be a part of this expansion.”

For more information on this acquisition and KSS’s separations offerings, please contact

[getinfo@kochsep.com](mailto:getinfo@kochsep.com) 🏠

**KOCH**  
SEPARATION SOLUTIONS

# HYGIENIC DESIGN. TORQUE LIMITERS AND SHAFT COUPLINGS MADE OF STAINLESS STEEL.

**E** NEMAC from Kleinwallstadt, supplier of rustproof torque limiters and shaft couplings for almost 40 years now, has always followed the strict hygiene regulations of food production as well as medical and pharmaceutical technology. This has resulted in a wide range of stainless steel coupling variants.

Completely made of stainless steel, and therefore ideally suited for clean rooms, are the type ECR safety coupling, the EWC and EWR shaft couplings, and the EWLC distance coupling.

The type ECR torque limiter, designed for indirect drives and steplessly adjustable disengaging torques between 15 and 350 Nm, is made of stainless steel on the outside and inside (disc spring). The locking balls are lubricated for life according to the NSF registration. This torque limiter is particularly characterized by its compact design, which ensures space-saving installation.

The metal bellows coupling type EWC, available for nominal torques between 5 and 1,000 Nm, consists of stainless steel bellows (1.4571 / A4), stainless steel hubs (1.4301 / A2) and stainless steel screws. In order to meet the high hygiene regulations, ENEMAC dispenses with the conventional adhesive process and connects the parts in a micro-plasma welding process, which guarantees unlimited fatigue strength between 223 K and 623 K. This extremely short coupling with the 4-shaft bellows is versatile; above all in sterile and even acidic environments.

The type EWR half-shell version made of stainless steel is new to the range. It is also made of A4 or A2 stainless

steel and has the same properties and advantages as the type EWC which is already established on the market. It is also particularly suitable for use in systems that are difficult to access, where space is very limited and the

drive and output units are rigid or cannot be moved in axial direction.

With type EWR, the two lower halves of the hub can be disassembled and the coupling then be placed radially on the shaft ends. Afterwards the loose





hub halves can be placed on the opposite side of the shaft and connected using stainless steel clamping screws. Disassembly is also possible with little effort and requires no further aids such as pullers or other tools. The hygienic designed metal bellows coupling is available for nominal torques from 10 Nm to 1,200 Nm.


If, however, widely spaced shafts have to be hygienically connected to each other in demanding environments, the rust-free distance coupling EWLC can be used.

This type of coupling, with a length

of up to 3 m, has a variable-length intermediate pipe made of A2 or A4 stainless steel, which is adapted to the customer's requirements. This pipe is connected with two metal bellows couplings made of A4 stainless steel. In many cases, the EWLC spacer coupling can be used as a backlash-free connecting, power train or synchronous shaft. Alignment errors, especially parallel misalignments, can be compensated with this type on a considerable scale. The half-shell hubs simplify assembly and ensure a secure, non-positive connection. The

type is particularly torsionally rigid and is suitable for high operating speeds of up to 6,000 min<sup>-1</sup> with a low moment of inertia.

The EWLC is available in 7 sizes with a nominal torque of up to 1,200 Nm. Shaft diameters between 7 mm and 85 mm can be accommodated.

Furthermore, ENEMAC offers safety couplings of the types ECI, ECE and ECG, also with a stainless steel housing and a coated, rustproof disc spring. Even encapsulated special versions can be manufactured on request. 





# Wine is losing ground on the tables of italians compared to beer:

as shown by a research project promoted by Grimbergen



by  
*Gabriele De Luca*

**D**uring the lockdown months, there was a boom in DIY pizzas and bakery products in Italy, but research carried out by Grimbergen, the historic Belgian abbey beer brand, also showed a sharp increase in Google clicks on beer and all the procedures for producing beer at home (+ 244%). In other words, during the lockdown lots of people tried their hand at this activity - Italians are great beer lovers, so much so that they decided to expand their knowledge to create a proper home brewery.

This trend, however, came to a halt after the end of the lockdown, when home-brewing research was replaced by "what beer shall I buy?" search. This data is also quite impressive when compared to wine data.

There is often a tendency to think that wine has historically been one of the specialties of which Italy is proud because of its extensive local and regional production, so much so that online research on the subject has always exceeded beer-related search in quantity.

But this year, for the first time, beers have been the subject of a real surge of interest, even surpassing the clicks on wine between March and April, which have been pretty constant in the last 12 months, with just a few small peaks during the holidays.

Among the most popular and appreciated beers in recent years, Belgian beers stand out and are at the centre of growing interest

from Italians, confirming Belgium's supremacy among the best producers of quality beer. The most popular beers come from this country, including the Grimbergen product, an abbey beer that has its origins in this land rich in history and tradition.







As for the territorial distribution, data seem to reflect, on an Italian scale, the preference of Northern European countries for beer. Beer, especially red ales, has received more attention in Northern Italy, with Friuli Venezia-Giulia in the first place, followed by Valle D'Aosta, Veneto and Lombardy. Sardinia also stands out in fourth place, while the regions of Southern Italy are at the bottom of the ranking, with Campania in the last place. As for craft beers, Veneto is the winner, followed by Lazio and Trentino Alto Adige.

The data collected by Grimbergen's research on the moments when Italians prefer to drink beer are also quite interesting: there is no evidence of a favourite time.

The same is true for the seasons, as research on beer sees a constant trend throughout the year. Yet beers, like wines, are not all the same: online searches of red, blonde or Blanche beers do not see any significant peak at specific times of the year, but there is a constant increase in searches from January 2019 up to now, with a preference for red ales, especially in recent months, which substantially distanced it from other types in terms of interest.

In short, whether it is an aperitif, or combined with different dishes, whether it is red, blonde or Blanche, beer has proved to be one of the most popular choices among Italians. 🏠





# PREDICTIVE MAINTENANCE: MINI MOTOR'S INNOVATIVE TECHNOLOGY LOOKING AHEAD TO THE FUTURE OF THE COMPANIES

**"L**IMITING machine downtime can be achieved by predictive maintenance", this strong and practical message was sent out by Andrea Franceschini, CEO of Mini Motor S.p.A., a company with over 50 years of experience in the design and production of innovative solutions for automation and motion control.

Mini Motor has operations worldwide with branches in Europe, USA and the Middle East, and a far-reaching network of dealers.

One of the aspects making Mini Motor a pioneer in Industry 4.0 is its design of a system of sensors fitted on its DBS gear motors for the control of temperature, current and speed, as well as of vibration by means of an accelerometer. This vibration sensor is able to detect the forces on the xyz axes and subsequently identify and communicate any internal anomalies or issues on the machine systems connected to it. By cross-referencing the variables sent by the product via fieldbus, it is possible to achieve true predictive maintenance, thus not jeopardising of production or of the operation of the machine itself, increasing its working life, and above all reducing the replacement of parts pre-emptively.

**How did Mini Motor come to the idea of fitting an acceleration sensor on servomotors to monitor its own behaviour and condition, as well as that of the machine?**

It is all part of our operations within the innovative context of Industry 4.0 giving us that extra push towards







innovation. In this case, we had an idea that could respond to actual market demands and give our customers what they need, providing a solution to a major problem in production, namely unscheduled machine downtime due to failure of a part.

In order to achieve this, we realised that the most effective solution was to think in terms of predictive maintenance. Our DBS motors are the only ones fitted with an accelerometer that gives a continuous reading of vibrations. The sensors use these readings to monitor and clarify how the machine is behaving, sending data enabling the identification of a problem. The customer is able to process and understand the data, guaranteeing that effective and scheduled action can be taken on the machine.

#### **What is the impact on a company of the predictive maintenance made possible by the sensors fitted on the DBS?**

There is no questioning the considerable savings in terms of time, space and costs. By using the data received, it is possible to decide when to replace a faulty or worn part – during a shift change for example – and it gives you time to select it with no need to keep spare parts in stock.

It will be possible to use DBS servomotors without adding other sensors to the machine, because they are already integrated inside it. This all boils down to savings in terms of costs and components.

#### **In which sectors in particular can this technology be a game changer?**

In general, any form of production benefits from regular machine maintenance and proper planning.

In particular, eliminating machine downtime is certainly a great opportunity in industries such as food&beverage, where unscheduled



machine downtime results in a significant increase in costs linked to the speed of production. For example, if a bottling machine develops a fault, the entire production chain has to stop running, but thanks to predictive maintenance, the accelerometer sends data warning of a particular problem, creating the conditions for its replacement to be planned in advance.

#### **What can we expect from Mini Motor in the future?**

Our technologies are looking to In-

dustry 4.0. This is not just as regards predictive maintenance, which is already an important base for the care of machines and consequently safeguarding production, but also in view of integrated logic, where it will be possible to handle everything in production remotely.

We are currently studying a new range of products that are totally wireless, also fitted with a battery with remote inductive recharging. 🏠

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



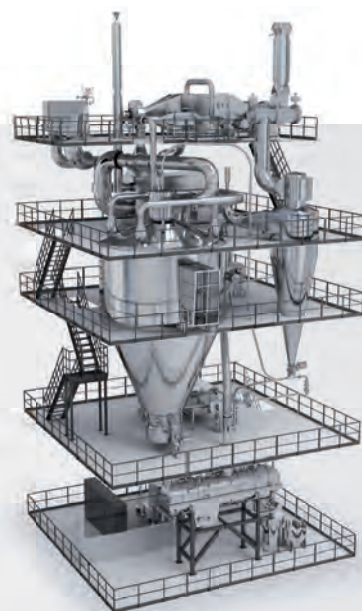




## Mixed Flavours

### GLOBAL PARTNER FOR **FOOD** INDUSTRY

The most delicious flavours come from an appropriate processing of raw materials. ICF & Welko is a worldwide supplier providing complete, turnkey and tailor-made plants for the food industry. Thanks to our specific know how on every process, we provide best performance automation solutions for the processing of food products such as milk, dairy products, coffee, tea, flavours and vegetable extracts.





# 120 YEARS OF GASTI

## From filling shoe polish to the leading packaging machine manufacturer for the dairy industry

**T**he Schwaebisch Hall-based company “GASTI” is celebrating its 120th anniversary in November 2020. Take a look back at more than a century of pure innovation in the packaging machinery sector.

It has all started at GASTI back in the year 1900, when the glue manufacturer Adolf Diemer was tired of manually filling leather grease (shoe polish) into cans. It was a mess, especially when the cans were overfilled and the sticky grease was spreading on tables and floors.

So he looked for a technical solution and remembered an old light-casting machine in the attic, which was used to make stearin candles. Adolf Diemer's vague idea was to use this machine to fill the leather grease into cans. He instructed his mechanic Karl Ganzhorn to convert them, who – after much trial and error proudly demonstrated the result in the small workshop: a pouring trolley – basically the first filling machine. A friend who was the owner of the Werner & Metz company in Mainz examined the “Ganzhorn” filling machines and immediately ordered ten pieces - for the production of “Erdal” shoe polish, which already enjoyed a worldwide reputation at that time. Ganzhorn had to complete this first order for 10 pouring trolleys on its own within a short period of time. He didn't like the massive order since, after all, he was employed by Diemer. However, the glue manufacturer encouraged him to set up his own company and even made available a small workshop in Klingenberg in Schwäbisch Hall.

Karl Ganzhorn started his own business same year. He was obsessed by



1965: Filling & sealing machine DG 25/6 for cups





his work. His variety of ideas was incredible. He designed and built dozens of gadgets and small machines. In order to be able to cope with the work, he soon needed employees.

They had to be paid, of course, and he needed capital. That is why he teamed up with Friedrich Kling in 1905. Kling joined the company as a so-called "silent partner".

Ganzhorn & Kling was the new company name.

In addition to the pouring and filling trolleys, they also manufactured filling hoppers for bottles and other useful equipment soon and the orders piled up. In World War I the company was given special order: manufacturing of filling machines for army catering. Only the fillers for milk remained for the homeland. Ganzhorn and Kling separated in the middle of World War I.

With the entry of a new partner, watchmaker Wilhelm Stirn, the company Ganzhorn & Stirn continued to develop. From June 16, 1916, Stirn was the sole owner (when the company was taken over, it consisted of 18 workers and 5 employees) and Karl Ganzhorn left the company. Due to the high respect for the company founder Ganzhorn & Stirn became the new company name. In addition Kling and Stirn sounds quite similar and there was also the hope to benefit from the already established and well reputed original name.

Stirn was a man of visions and the volume of orders grew steadily. Soon, the backyard workshop in Klingenweg became too small. Stirn searched and found a new domicile. In 1919 he and his people moved to the former cement factory in Steinbach. In 1921 the company already had more than 100 employees.

More and more effective machines and devices were built. In addition to shoe polish, products such as eau de Cologne, honey and mayonnaise, margarine and processed cheese, jam and cough syrup, tomato paste



Milk filling line delivered in 1940



First machine for filling shoe polish (photo from Erdal)





Continuous motion filling & sealing machine CONTITHERM 123

and liqueurs should be packed.

Bottles, cans, jugs, canisters and tubes should be used as containers. Each customer got his own special equipment and Wilhelm Stirn was very successful with his new ideas. A real tinkerer and inventor. "Doesn't work" didn't exist at Ganzhorn & Stirn. Soon after the shorter company name 'GASTI' was formed from GA for Ganzhorn and STI for Stirn.

In 1947 Wilhelm Stirn passed away and Mrs. Margarete Sehl-Stirn put the management in the hands of her husband, Hans Sehl, who successfully managed the company which had grown to 300 employees in the mean-



Tube filling machine

time. The 1950s GASTI introduced its first filling machines for tubes (Gnom) which was manufactured in series. Dieter Sehl (son of Hans Sehl) began planning the business in Hessental at an early stage, as a progressive business organization was no longer possible at the old facility in Steinbach.

#### **Aseptic processing as competitive edge**

In the 1970s, GASTI became one of the first suppliers to develop special machinery for sterile cup packaging. This was a pioneering and successful development, as it had previously been impossible to offer long shelf lives for dairy products that were not refrigerated. In 1977 the first aseptic filling and sealing machine (DOGASEPTIC 42) with a sealless dosing system was delivered. As a result, GASTI added aseptic machines to its product portfolio.

In 1978 the 500th GASTI packaging machine was produced and delivered to the customer.

#### **International growth**

The success story continued in the following years. In 1981 the owner Dieter Sehl sold the company with 450 employees to Rheinmetall AG. At that time GASTI a large variety of machines were sold into many countries globally wide. A success story began with the participation in the 'Middle East Electricity & Electronics' trade fair in Jeddah in 1983 and the sale of

the DOGATHERM 12DR to an Arabian company. This customer in Kingdom Saudi Arabia has nowadays installed 17 machines from the CONTITHERM series on which mainly yoghurt is filled.

In 2000, the IWKA Group took over the company from Rheinmetall AG and in 2007 the packaging machine division of IWKA AG was sold and joined the Odewald & Cie. portfolio and was introduced as OYSTAR Group to the market. At the end of 2014, the OYSTAR Group was sold to the Italian packaging machine manufacturer IMA S.p.A. and the IMA DAIRY & FOOD division - to which GASTI belongs - was created. At the end of 2018, Mr. Thomas Becker took over 60% of the shares in the IMA DAIRY & FOOD group; 40% are still owned by IMA S.p.A.

Today GASTI machines are in successful operation world wide. The company, based in Schwaebisch Hall-Hessental, specializes in continuous filling and sealing machines for liquid and pasty products in prefabricated cups made of plastic or cardboard-plastic composites.

E.g. this year a CONTITHERM 123 with an output of 28,000 cups / h for filling soy yoghurt and a an aseptic machine DOGASEPTIC 82 with an output of 19,200 cups / h for filling yoghurt have been installed with two different Chinese customers. Another DOGASEPTIC for filling caffè latte will be shipped to South East Asia in December.

The packaging machinery sector has been subject to constant changes over the past 120 years. GASTI, however, has always managed to pick up on changing market demands early on, continually setting new trends. As a result, the company's customers have always been supplied with reliable and innovative machines that always have one thing in common: the very highest quality standards. 🏠

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



# PRINTING FOR YOUR BRAND



**S**print 24 is an online typography specialized in products supporting your brand's growth, promotion and distribution. Differently from other services which merely print the files customers send, our goal is to create effective products, suggest the best materials and printing methods as well as correct any technical problems on files. For you, this translates to faster delivery times and products specifically designed for your Brand.

What is the link between branding and typography? How can these two things be related? Displaying a high-quality coordinated corporate identity is essential in order to make a first good impression on your clients. A good starting point for you could be printing business cards with refinements and using special printing methods, such as UV glossy details. Why starting with business cards? Because it is the very first way to show in person the style and design

characterizing your company, your firm or yourself.

Generally speaking, when in typography refinements are mentioned, companies or professionals tend to worry because they think of large quantities of products. And this is due to the fact that starting these kinds of works might imply medium-high costs. However, today, this can no longer be considered as a problem because a new machine was added



to Sprint24's machine inventory: the Jetvarnish 3ds. As a matter of fact, its peculiarity is that, on the same printed product, areas containing glossy details with different thickness can be created, thus highlighting specific texts or graphics. Thanks to this new printer, you will have 3D glossy details which will give you an extremely intense experience when touching – as well as looking at – them thanks to their increased thickness. No matter if you wish to have a print proof or print a single product, from now on, you will be able to get a single copy of your printed product with 3D glossy details at a very much lower cost.

Our brand-new laminated business cards with 3D glossy details are even cooler! The 3D areas will shine more and definitely stand out thanks to the marked relief effect which will stick out from the business cards' matt surface, thus catching the eye of everyone around.

In this way, you can be sure that the people you interact with will notice your attention to detail, hold you in

higher regard and respect you even more for your good taste.

These new 3D glossy details are available for all the printed products listed on our website, ranging from business cards and folders - for a great coordinated corporate identity - to book covers, brochures and much more. Basically, every time you feel like shining!

This elegant innovation is also part of our packaging development project. By further specializing on refinements, we can offer tailored cases in small quantities and in a very short time. Moreover, not only is our customer service always ready to respond to specific requests and settle any doubt, but we will also make sure to have a pleasant and constructive dialogue with our customers wishing to print boxes.

Sprint24 is a printing service ready to support you and guide you through any graphic and typographic project. With our EASY PRINTING METHOD® -

which has been developed online in the last 15 years – Your Brand will benefit from an excellent service at a lower cost. Thanks to our responsive, attentive and helpful customer service, we are able to quickly handle e-mails and phone calls as well as provide you with tailored quotes. Moreover, our graphic department always makes sure files are created in the right way so that they can be printed flawlessly. And, where files are not suitable for such a purpose, we will be happy to deal with their correction.

All this, together with a 15-year traditional typographic experience, makes us a reference point for over 20.000 companies, which have chosen us as their printing partners. 🏠

**[www.sprint24.net](http://www.sprint24.net)**



**SPRINT24**  
— PRINTING FOR YOUR BRAND —



# TECNOIMPIANTI: RESIN TECHNOLOGIES AND ENVIRONMENTAL SOLUTIONS FOR THE FOOD INDUSTRY



**T**ecnoimpianti is a solution provider for the Food sector, thanks to 35 years of experience, in-depth knowledge and process competence.

Tecnoimpianti supplies solutions for air and water treatment, recovery of by-products and selective extraction of substances with high added value.

In particular, TWT provides technological solutions aimed at the reuse of the products previously considered waste.

Its solutions include:

- Membrane systems;
- Adsorption with regenerable adsorbent resins;
- Chromatographic separation;
- Low temperature vacuum evaporation

Two are the main addresses of Tecnoimpianti technologies in the Food Processing industry:

- Recovery, concentration and separation of polyphenols, antioxidants/anti-aging, essential substances, natural flavors or dyes and process fluids for reuse;

- Efficient processes for
  - Rectification and demineralization of the must (MCR);
  - Discoloration of must and fruit juice;
  - Extraction of polyphenols, tannins and anthocyanins;
  - Separation and extraction of natural dyes;
  - Demineralization and bleaching of grape juice;
  - Debitting of orange juice.

And Tecnoimpianti is as well a technology provider for environmental requirements, in particular for water



and air treatment. Since 1985 Tecnoimpianti has been involved in the design and implementation of technological solutions to meet specific environmental needs for industrial production.

Respect for the environment and the relationship with the territory and the citizens are therefore essential for our company. For this reason, it

is essential to implement sustainable management in terms of liquid discharges, gaseous emissions and odor impact. Tecnoimpianti supplies turn-key systems for water and wastewater treatment, air treatment, odor control.

Our plants are designed and realized with care to satisfy every specific customer need. Our commitment

is to offer a strong support from the feasibility study and laboratory tests to the construction and installation of production plants, with effective and reliable after-sales and maintenance services.

Tecnoimpianti offers to the food industry a full range of solutions for the production, the by-products recovery and for the environmental regulation compliance:

- Biological WWTP and Membrane Bio reactors (MBR);
- Wet scrubbers for the removal of ammonia and hydrogen sulphide;
- Venturi scrubber for the reduction of starch and rice dust;
- Ammonia stripping plants;
- Membrane technologies;
- Resin plants for the enhancement of by-products;
- Polyphenol recovery and concentration plants;
- Plants for the extraction of natural dyes;
- Plants for fruit juice purification and must rectification;
- MINISTAB line plants ecological products, emissions from mills, odor reduction and agro-food emissions.

The commitment in the R&D and the growth of the project management and production teams allow us to support with high-level consultancies and services our customers in the food processing industry. 🏭

Tecnoimpianti, #ProvidingSolutions.

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





# FLUORINATED COATING FOR THE HIGHEST PROTECTION



**T**omace Srl is a skilled company working in fluorinated coating fields. Thanks to the experience acquired in more than twenty years, Tomace is able to grant complete satisfaction to its customers who are looking for solutions against corrosion, stickiness and friction problems of a given surface.

The applications are of the most varied: from packaging machine components, to food, pharmaceutical, ceramics and rubber moulding plastic industries, to the machines for wood processing and mechanical engineering in general. The benefits are easier cleaning of coated sur-

faces, higher productivity, less waste production and higher quality of the finished product.

The categories of fluoropolymers are multiple: PTFE, FEP and PFA combined with other resins allow obtaining an infinite variety of products able to enhance their own particular feature for any specific use.

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

**PFA-FEP-SOLGEL** Line includes a wide range of coatings specifically



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

developed to prevent products from sticking to surfaces such as pasta, bakery products and others, on account of their own nature.

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

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

and alloys subject to thermal deformation or components with tight dimensional tolerances, no stick-slip, corrosion protection, heat and friction noise reduction, excellent resistance to temperatures between  $-195^{\circ}\text{C}$  a  $+290^{\circ}\text{C}$ .

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

characteristics, as well as sanitized surfaces.

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

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

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





# PROPAK CHINA

## The 27th International Processing and Packaging Exhibition

23-25 June 2021 | NECC (Shanghai), China

Concurrent Events:

**FOODPACK  
CHINA**



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

**Fi** Food ingredients  
Asia-China



**POTATO  
EXPO**



The Premier Processing & Packaging Event for China

### Exhibitor Profile



Food Processing Machinery



General Food Machinery



Packaging machinery



Industrial robots and automation



Packaging materials and products



Labelling technology/ Flexible packaging



Logistics packaging

#### Space booking:

Ms. Vicky Leung (Asia & China)  
Sinoexpo Informa Markets  
T: +86 131 4389 6198  
E: vicky.leung@imsinoexpo.com

Mr. Andrea Boccellini (Worldwide)  
Informa Markets  
T: +44 (0)78 669 18897  
E: andrea.boccellini@informa.com

#### Follow us:



@OES\_ProPak



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

# PROPAK CHINA 2021: TAPPING THE PROCESSING AND PACKAGING MARKET IN ASIA

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

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

With the participation of leading exhibitors of processing and packaging industry, ProPak China is the best place to find out which machines, systems, technologies and applications are made possible by the latest developments. It provides solutions on food processing, packaging, labelling, weighing, printing, logistics, automation, containers and materials to food, beverage, dairy, confectionery, bakery, condiment, FMCG, pharmaceutical, personal care, cosmetic, home appliance and 3C, e-commerce, courier and other industries. Alongside with specialized trade fairs including FoodPack China, Health Ingredients China, Food Ingredients Asia-China, Healthplex and Natural & Nutraceutical Products China, Starch Expo, and iCorrugated, ProPak China 2021 will build an ideal platform for industry professionals to connect with their target markets, showcase their brands to decision makers and network with the industry buyers that matter most. The joint exhibition is estimated to attract more than 2,000 leading exhibitors and 100,000 trade buyers from across the globe and cover a record-breaking floor space of 170,000 sqm.



## A world of pioneers from across the globe

In the last edition of ProPak China, it gathered a number of leading international companies from around the world, including Belgium, Canada, China, Finland, Germany, Italy, Japan, Netherlands, Singapore, Switzerland and USA who provided abundant choices and total solutions for improving productivity, reducing cost and solving production challenges including: Aetna, AFA, Apollo, BIHAI, BOSTAR, Fortress, DAJIANG, DANENG, Elin, Fuji Machinery, GURKI, Hengli, Huituo, HUALIAN, Ishida, JCN, Koch, Kunshan Dahe, METTLER TOLEDO, Strapack, PRECISE, Speed, Sutian, Soontrue, Thermo Fisher, WEIKEDA, Wenzhou Dajiang, Wolf, Wuhan Rentian, Xiaoteng, Yamato, Yilong, Yuedong, Yusheng, Zhejiang Brother, Zhongheng, Zhongya and more.

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

daily chemical and other terminal fields.

ProPak China is organised by Sinoexpo Informa Markets (Former UBM Sinoexpo), a joint venture between Shanghai Sinoexpo International Exhibition Ltd and Informa PLC. As the world's leading exhibitions organizer, Informa Markets creates platforms for industries and specialist markets to trade, innovate and grow. Its portfolio is comprised of more than 550 international B2B events and brands. With our expertise in operating events and exhibitions and global network in a diverse range of industries, we will help you unlock new opportunities.

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

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

**PROPAK**  
**CHINA**



# (ITALY) IEG, A “ROAD MAP TO SIGEP 2022” AT THE SERVICE OF SWEET FOODSERVICE: A FULL-DIGITAL EDITION IN 2021

**Networking, new products, a global insight on product chains and work by master artisans in live workshops: these are the key business aspects of the market that Italian Exhibition Group has planned with Sigep Exp The Digital Experience, from 15th to 17th March on an innovative high-performance platform**

**S**igep: the sweet out-of-home experience goes digital from 15th to 17th March 2021 and goes live again from 22nd to 26th January 2022. The leading European expo for artisan gelato, pastry, bakery and the coffee world officially announces the dates and format of its 2021 edition: Sigep Exp The Digital Experience launches a road map that Italian Exhibition Group dedicates to sweet foodservice

running through 2021 and leading to the live edition in January 2022.

The action to fight the pandemic and government measures do not allow either live or hybrid expos to be held in the first quarter of 2021. The evolution of the supply chains and the market therefore have their preferential communication channel in a digital format, which IEG has constructed along with all the expo's stakeholders – exhibitors, visitors, association, the ITA Italian Trade Agency and the sectors Media partners - who acknowledge Sigep as a fundamental reference point. The March dates were therefore confirmed to enable the community to meet and network on the market's innovations, looking to the 2021 season.

Sigep Exp will be a digital experience of foodservice trends and international sweet artisan foodservice techniques. Along with companies' new products, Sigep Exp The Digital Experience will present a global insight on scenario trends for each of the prod-

uct chains that have made this expo an icon through the years. These will include the potential offered by the digital world for sales channels, as well as for the issue of sustainability. But that's not all. From 15th to 17th March, Sigep Exp The Digital Experience will take trade members into the workshops: spotlighting mixtures, dough and processing techniques, to discover the numerous opportunities for updating and the continuous evolution of the creation of gelato, pastry products and bread.

IEG thus brings together vision, master chefs and established media partnerships, to support the rebirth of a fundamental sector of Italian-made products, which is going through an extremely critical phase but, nevertheless, has not stopped imagining, creating and focusing on a new start.

This situation is completed by a calendar of thematic days that, between March and December, will study the period leading to the live edition in January. 🏛️



# NEXT EDITION IN SEPTEMBER 2021 IN MUMBAI

Exhibition venue occupied for COVID-19 facility leads to cancellation of Annapoorna ANUFOOD India - India's international exhibition on food & beverage trade and retail market.

**T**he unexpected second wave of coronavirus has hit Mumbai, and having such a dense population requires extraordinary efforts to tackle the pandemic; hence, local authorities have built jumbo COVID ICUs across the city. They have also converted Bombay Exhibition Centre into an ICU, and due to the second wave, it is unlikely that the venue will be available for the trade fair which was initially scheduled from 3-5 February 2021. The decision is a big disappointment for organisers, exhibitors and visitors. However, these steps are taken to help keep everyone safe and control the spread. Choosing to cancel is a difficult decision, mostly when all stakeholders have spent time and efforts into preparing and promotions. However, these steps are essential

for keeping attendees safe, helping to flatten the curve, and affecting positive change. Koelnmesse management understands that cancelling the event will cause inconvenience to the exhibitors, visitors and partners in the short term; however, this is the best option in the current scenario.

"This inevitable decision comes as a consequence of insurgent COVID-19 situation around us. However, with industry's support we are confident to rise, reassemble and present the best B2B trade fair to the Indian food industry in September 2021" says Milind Dixit, Managing Director of Koelnmesse YA Tradefair Pvt Ltd.

"Over the years, Annapoorna ANUFOOD India contributed to the growth of the economy; this year, the pandemic impaired this growth engine.

This joint decision of event cancellation is our endeavour to support the Government for curbing COVID-19" added Balvinder Singh Sawhney, Assistant Secretary General Head of Trade Fair Department of Federation of Indian Chamber of Commerce and Industries (FICCI) "Being a long-term supporter of this exhibition, we have been observing the market in this unprecedented situation and its probable impact on the trade fair. Considering the circumstances, we feel this is an appropriate decision made by the organisers" contributes Kumar Rajgopal, CEO of Retailers Association of India (RAI).

The next edition of Annapoorna - ANUFOOD India will be held from 6-8 September 2021 at Bombay Exhibition Centre, Mumbai. 🏛️

## ANUTEC

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

**G**overnment has created a jumbo COVID ICU facility at Bombay Exhibition Centre, Mumbai which is the venue planned for the trade fair, and it is unclear whether the venue will be permitted for the scheduled date in February 2021. India is witnessing a rapid second wave of the infection cases, and local Government has already issued a warning to re-impose the lockdown in Mumbai. Mumbai requires massive efforts to fight the coronavirus due to the dense population. Multiple jumbo

COVID Facilities are created to treat a maximum number of patients possible. Bombay Exhibition Centre is one of them where the event was planned from February 3-5, 2021. Therefore, the organisers have made the difficult decision to cancel the exhibition. By doing so, Koelnmesse is keeping attendees safe, helping to flatten the curve, and affecting positive change. This is disappointing, yet needs to be appreciated that the steps are taken to help keep exhibitors, partners and attendees safe. "This inevitable deci-

sion comes as a consequence of insurgent COVID-19 situation around us. However, with industry's support we are confident to rise, reassemble and present the best B2B trade fair to the Indian food industry in September 2021" says Milind Dixit, Managing Director of Koelnmesse YA Tradefair Pvt Ltd. The next ANUTEC - International FoodTec India, co-located with PackEx India, Food Logistics India, and ANUTEC Ingredients India will be held from 15-17 September 2021 at Pragati Maidan, New Delhi. 🏛️



# REVIEW OF SPS CONNECT AND THE CURRENT SITUATION REGARDING **SPS 2021**



**2** 020 is over and with it the first entirely virtual SPS. By 31 December 2020, the SPS Connect platform had played host to a total of 9,121 visitors, seen interactions with 239 exhibitors, facilitated 4,296 business meetings, and delivered a wealth of information about the latest products in the automation industry. In 2021, however, the event is once again set to take place in person from 23 to 25 November in Nuremberg.

Following the cancellation of the physical SPS at the end of August last year, event organizer Mesago Messe Frankfurt GmbH decided on a digital alternative; a concept that focused primarily on the interaction between the automation suppliers





and users, and which would be supported by an AI-based matchmaking function. Courtesy of this tool, a total of 22,216 connections were made as well as 837,486 recommendations.

Accompanying this was a lecture program looking at the latest industry topics in combination with related discussions.

As Dr. Josef Waltl, Principal Group Program Manager – Industrial IoT/Manufacturing, Microsoft Deutschland GmbH states: “The expert presentations and SPS Connect portal were the highlights of the SPS Connect. Software and the application of innovative technologies such as artificial intelligence within the industry have struck a chord with many participants and exhibitors. It could also make an interesting digital companion for the ‘regular’ exhibition, which is always a highlight of our calendar.”

#### **Positive outlook for the SPS 2021**

The figures for the SPS Connect demonstrate the considerable importance of an exchange of ideas with other professionals from the industry, even if it has to be online.

For 2021, however, organizer MESA is once again making plans for an in-person event: “Interest for the SPS 2021 in November has been great.

Currently, figures for stand space and exhibitor numbers are above last year’s level, despite the ongoing pandemic.

This highlights just how important the exhibition is for the automation industry and shows that even a year like 2020 has not changed this significantly,” reports Sylke Schulz-Metzner, Vice President SPS at MESA-Messe Frankfurt. As the organizer explains, a comprehensive range of

health protection measures will be taken on site to protect all participants, as had already been planned for the in-person event in 2020. “We’re proceeding with caution,” explains Schulz-Metzner.

“We plan to assess the situation periodically throughout the year, and also see how the vaccination program goes, so we can respond accordingly.” A supplementary digital program is also planned for SPS 2021.

#### **Stay up to date**

The event organizer will be posting regular updates at [sps-exhibition.com](https://sps-exhibition.com). Those interested can check this website for all the information they need to attend. 🏠

**sps**  
smart production solutions



# EXHIBITIONS

## 2020-2021

### SIGEP

15-17/03/2021

RIMINI

Fair for bakery, pastry, ice cream, coffee.



### INTERSICOP

01-28/03/2021

MADRID

Fair for bakery, pastry, ice cream, coffee.



### SPS/IPC/DRIVES

data da definirsi

NUREMBERG

Fair for electric automation.



### mcTER

date to be scheduled

ROME

Exhibition on energy efficiency.



### PROSWEETS

31/01-03/02/2021

COLOGNE

Fair for the sweets and snacks industry.



### ProWein 2020

21-23/03/2021

DUSSELDORF

International wine & spirits exhibition.



### BEER&FOOD ATTRACTION

11-13/04/2021

RIMINI

Fair for beers, drinks, food and trends.



### MACFRUT

04-06/05/2021

RIMINI

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



### CIBUS

04-07/05/2021

PARMA

Fair of food product.



### MEAT-TECH

17-20/05/2021

MILANO

Fair for the meat and ready meals industry.



### FRUIT LOGISTICA

18-20/05/2021

BERLIN

Fair for fruit and vegetables.



### MECSPE

10-12/06/2021

PARMA

Fair for innovations for the manufacturing industry.



### VINITALY

20-23/06/2021

VERONA

International wine & spirits exhibition.



### FISPAL

22-25/06/2021

SÃO PAULO

Fair for product from packaging.



### mcT COGENERAZIONE

30/06/2021

MILAN

Exhibition for applications of cogeneration.



### SPS/IPC DRIVES/ITALIA

06-08/07/2021

PARMA

Fair for manufacturers and suppliers in the industrial automation sector.



## MIDDLE EAST 2020/21

### DUBAI DRINK TECHNOLOGY EXPO

25-27/03/2020

DUBAI

Fair for the beverage industry.



### GULFOOD

21-25/02/2021

DUBAI

Fair for food and hospitality.



### GASTROPAN

03/2021

ARAD

Fair for the bakery and confectionery industry.



### PROPAK ASIA

17-20/06/2021

BANGKOK

Fair for packaging, bakery, pastry



### PROPAK VIETNAM

28-30/07/2021

SAIGON

Fair for packaging, bakery, pastry.



### IRAN FOOD BEV TEC

01-05/09/2021

TEHRAN

Fair for food, beverage&packaging technology.



### ANUTECH

15-17/09/2021

NEW DELHI

Fair for the food&beverage industry.



### HOSPITALITY QATAR

10-12/11/2021

DOHA

Fair of Hospitality and HORECA



### DJAZAGRO

22-25/11/2021

ALGERS

Fair for companies of the agro-food sector.



### WOP DUBAI

11/2021

DUBAI

Fair for fruits and vegetables.



### GULFOOD MANUFACTURING

07-09/11/2021

DUBAI

Fair for packaging and plants.



### GULFHOST

07-09/11/2021

DUBAI

Fair of hospitality.



### PACPROCESS FOOD PEX

09-11/12/2021

MUMBAI

Fair for product from packaging.



# EXHIBITIONS - EXHIBITIONS

## EXHIBITIONS

# 2020-2021-2022

### LATINPACK

28-30/07/2021

SANTIAGO CHILE

International packaging trade fair.



### COSMOPROF

09-13/09/2021

BOLOGNA

Fair for the cosmetic production chain.



### FACHPACK

28-30/09/2021

NUREMBERG

International packaging trade fair.



### DRINKTEC

04-08/10/2021

MONACO

Fair for the beverage and liquid food industry.



### HISPACK

19-22/10/2021

BARCELONA

Technology fair for packaging.



### HOST

22-26/10/2021

MILANO

Fair for bakery production and for the hospitality.



### IBA

23-28/10/2021

MONACO

Fair for the bakery and confectionery industry.



### SAVE

27-28/10/2021

VERONA

Fair for automation, instrumentation, sensors.



### mcT ALIMENTARE

28/10/2021

BERGAMO

Fair on technology for the food&bev industry



### SIGEP

22-26/01/2022

RIMINI

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



### PROSWEETS

31/01-03/02/2022

COLOGNE

Fair for the sweets and snacks industry.



### ProWein 2020

27-29/03/2022

DUSSELDORF

International wine & spirits exhibition.



### ANUGA FOODTEC

26-29/04/2022

COLOGNE

Fair on food and beverage technology.



### IPACK-IMA

03-06/05/2022

MILANO

Exhibition for the packaging industry.



### POWTECH

30-08/01-09/2022

NUREMBERG

The trade fair for powder processing.



### SIAL

15-19/10/2022

PARIS

Fair on food products.



### SUDBACK

22-25/10/2022

STUTTART

Fair for bakery and confectionery industry.



### BRAU BEVIALE

08-10/11/2021

NUREMBERG

Fair of production of beer and soft drinks.



### SIMEI

15-18/11/2022

MILANO

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



### ALL4PACK

11/2022

PARIS

Exhibition about packaging technology.



### INTERPACK

04-10/05/2023

DÜSSELDORF

Fair for packaging, bakery, pastry.



## RUSSIA CHINA

### UPAKOVKA

26-29/01/2021

MOSCA

International packaging machinery exhibition.



### BEVIALE MOSCOW

23-25/03/2021

MOSCOW

International trade fair for the beverage industry.



### MODERN BAKERY

23-26/03/2021

MOSCOW

Fair for bakery equipment and food ingredients.



### BAKERY CHINA

27-30/04/2021

SHANGHAI

Fair for the bakery and confectionery industry.



### INPRODMASH

14-26/09/2021

KIEV

International packaging machinery exhibition.



### AGROPRODMASH

04-08/10/2021

MOSCOW

Fair of machinery and equipment for agroindustrial industry.



### UPAKOVKA

25-28/01/2022/

MOSCA

International packaging machinery exhibition.





**ALIPLAST SPA****50-51**

Via delle Fornaci, 14  
31036 Ospedaletto d'Istrana - TV  
Italy

**BG SRL BOSELLI CISTERNE****96**

Via E.Fermi, 12  
43015 Noceto - PR  
Italy

**CC TECHNOLOGY SRL****73**

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

**CMZ SISTEMI ELETTRONICI SRL****70/72**

Via dell'Artigianato, 21  
31050 Vascon - TV - Italy

**COLUSSI HERMES SRL****35/37**

Via Valcunsat, 9  
33072 Casarsa della Delizia - PN  
Italy

**ERREPAN SRL****1/5**

Via Terracini, 4  
24047 Treviglio - BG  
Italy

**ETIPACK SPA****41/43**

Via Aquileia, 55-61  
20092 Cinisello Balsamo - MI  
Italy

**EUROPA SRL****24/27**

Via Del Lavoro, 53  
36034 Malo - VI  
Italy

**GIUSTO FARAVELLI SPA****32/34**

Via Medardo Rosso, 8  
20159 Milano  
Italy

**GORRERI SRL****28/31**

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

**GRACO****84/88**

Slakweidestraat 31- Oude Bunders  
3630 Maasmechelen  
Belgium

**ICF & WELKO SPA****105**

Via Sicilia, 10  
41053 Maranello - MO  
Italy

**ILPRA SPA****68-69**

Corso Pavia, 30  
27029 Vigevano - PV  
Italy

**IMA SPA****IMA ACTIVE DIVISION****INSERT**

Via 1 Maggio, 14  
40064 Ozzano dell'Emilia - BO - Italy

**KOELNMESSE GMBH****80-81**

Messeplatz, 1 - 50679 Koeln  
Germany

**LABELPACK TRADE SRL****46-47**

Via Monte Cervino, 51/F  
20861 Brugherio - MB  
Italy

**METTLER TOLEDO SPA****94-95**

Via Anna Maria Mozzoni 2/1  
20152 Milano - Italy

**MINI MOTOR SPA****102/104**

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

**NVC NEDERLAND****PACAKGING CENTRE****63/66**

Stationsplein 9k  
PO BOX 164  
2801 AK Gouda - The Netherland

**SEAL OF QUALITY****54-55**

Via Cantonale, 11  
6900 Lugano  
Switzerland

**SHANGHAI SINOEXPO INFORMA MARKETS****INTERNATIONAL****EXHIBITION CO., LTD.****115-116**

8/F, Urban Development  
International Tower, No.355,  
Hong Qiao Road,  
200030 Shanghai  
China

**SOTTORIVA SPA****17-18**

Via Vittorio Veneto, 63  
36035 Marano Vicentino - VI - Italy

**SPRINT24 SRL****109-110**

Via della Mercedes, 11  
00187 Roma - Italy

**TECNOIMPIANTI****WATER TREATMENT SRL****111-112**

Via Salvo d'Acquisto, 16/B  
20060 Pozzuolo Martesana - MI  
Italy

**TECNOPOOL SPA****7/8**

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

**TOMACE SRL****113-114**

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

**TOMRA SORTING SRL****14/16**

Avda. Ramón y Cajal nº 27  
28016 Madrid  
España

**TROPICAL****FOOD MACHINERY SRL****89/91**

Via Stradivari, 17  
43011 Busseto - PR  
Italy

**TSW INDUSTRIES SRL****19**

Via Industria, 8  
14015 San Damiano d'Asti - AT  
Italy

**TUBITEX SPA****56/59**

Viale del Lavoro, 31  
36021 Barbarano Vicentino - VI  
Italy





**MENICHETTI  
CIOCCOLATO**

*Piacere Quotidiano  
Daily Pleasure*

Da oggi puoi concederti il lusso  
della qualità artigianale ogni giorno  
grazie a Cioccolosa, crema spalmabile  
fondente dal gusto unico, vellutato ed  
intenso.

*As of today you can enjoy the luxury  
of the artisan quality every day  
thanks to Cioccolosa, the spreadable  
dark chocolate cream  
with a unique, soft and intense flavour"*



it. MAGAZINE

# **FOOD** **processing**

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

 **EDITRICE**  
**zeus**