beverage & packaging

PROCESS AND PACKAGING





THE NEW FILLING SYSTEMS GENERATION



Applications

Oil

Wine

Spirits

Juices

Water

Beer

Carbonated Soft-drinks
Detergents and chemical
products
Milk and Yoghurt

Company

FILLBER designs, manufactures and sells rinsing and blowing machines, filling machines, capping machines, monoblocks and triblock bottling machines and complete bottling lines for wine, liquors, oil, spirits, juices, water, sparkling products, foamy products and all the other liquids in general.

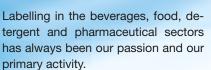
Fillber
Piazzale G. Mazzini, 2 - 25036 Palazzolo Sull'Oglio (BS)
info@fillber.it - sales@fillber.it



Technology for great numbers

MODULARITY, FLEXIBILITY, PRACTICALITY





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

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

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



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SAFEGATE ACCESS GUARDING. WE MAKE IT EASIER **pg. 39/41**



A FANCY AND ADVANCED PACKAGING TO PROTECT THE QUALITY OF YOUR PRODUCTS. **pg. 61/65**



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



FROM CONVEYOR BELTS TO WEDGE WIRE SCREENS. pg. 83/85



UPAKOVKA PARTNERS UP WITH SEVERAL DRINKS ASSOCIATIONS. pg. 110-111





We'll exhibit at...



Dubai (UAE) Pad A5 - Stand 49



Milano (Italy) Pad 15 - Stand N16



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THE JOSEPH COMPANY INTERNATIONAL INC.

he Joseph Company International, based in Irvine, California, USA is the developer, manufacturer, and patent holder of the world's first and only commercially viable self-chilling beverage can known as the Chill-Can®. The Joseph Company intends to rapidly commercialize the self-chilling beverage can and associated self-chilling beverage packaging containers through private labels and the licensing of the technology to the global beverage world. The Joseph Company is currently constructing a \$20 Million Beverage Production and Technology Complex in Youngstown, Ohio, USA which will allow for the production of billions of self-chilling cans and associated containers annually.

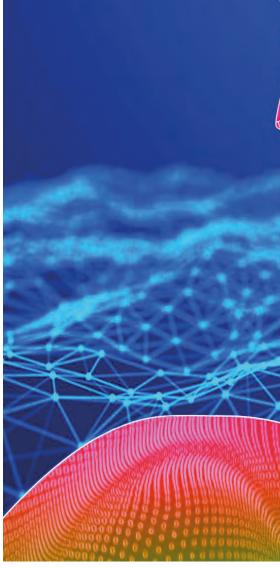
The Chill-Can containers are purchased at ambient temperature and chilled when ready to consume. When activated, the patented technology utilizes reclaimed CO2 and the process automatically chills the can and the sparkling coffee beverage

inside. The self-chilling can has been recognized by the Environmental Protection Agency (EPA), NASA and the U.S. Army.

"Because the self-chilling can technology is so groundbreaking, we wanted to introduce it with a super innovative beverage," said Tim Cogil, 7-Eleven Director of Private Brands, whom launched a private label beverage known as FIZZICS with the technology in 2018.

Chilling the can is simple:

- 1. Place the can on a flat surface, turn the can upside down and twist the base to activate until a constant hissing noise can be heard.
- 2. Do not handle or touch the can after activation until the hissing stops. The warmth of being handheld can inhibit the cooling process.
- 3. Do not turn can right side up until hissing stops—about 75 - 90 seconds.



4. Once the hissing stops, return the can to an upright position, open, and enjoy!

For more than 60 years, companies have been trying to crack the code on creating a viable, easy-to-use self-chilling can that could be made available to the general public. After more than 25 years in development, the Joseph Company patented the technology behind the world's first and only chill on-demand can.

CLUB COCKTAILS







Chara San Cana



The patented Chill-Can® and the MicroCool® technology created by The Joseph Company International utilizes a built-in heat exchange unit in concert with reclaimed CO2 to create its chilling technology. The EPA award winning process uses CO2 that is recaptured from the atmosphere and is reused. The Chill-Can® is 100 percent recyclable and does not introduce any new CO2 to the atmosphere. The Joseph Company is led by its

founder, CEO, and Chairman, Mitchell J. Joseph. Mr. Joseph is the 4th generation of his family, dating back to 1921, with the bottling and distribution of Dad's Old Fashioned Root Beer and Squirt, to dedicate himself to the beverage business. Educated at Ohio State and Youngstown State University, Mr. Joseph has spent the last 25 years pioneering the Chill-Can® project. Mr. Joseph's expertise in marketing, public relations, licensing,

and finance have led to the Joseph Company International being recognized globally for the technological advancement that is the self-chilling can and all associated self-contained cooling technology advancements.

For more information about Chill-Can® and The Joseph Company International, please visit

www.chillcan.com





Ideas, solutions and plants for the food and beverage industry

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

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

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

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

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

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



Mixing and Carbonating Units



Pasteurization Plants



Cip Cleaning Plants



Continuous Sugar Dissolvers



Syrup Rooms



Aseptic Tanks



Food Processing Plants



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www.sapitalia.it

IDEAS, SOLUTIONS AND PLANTS FOR THE FOOD AND BEVERAGE **INDUSTRY**

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

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

Our portfolio includes:

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

Thanks to constant efforts in the search for new solutions and numerous collaborations that have taken place over the years with leading customers in the industry, SAP Italia has gained extensive know-how in the various fi lds of operation and it's proud to present the new series of plants specifically studied for aseptic treatment born from a fruitful cooperation with Refresco Italia.

Refresco, European leader in the business of subcontracted soft drink bottling, engaged in the expansion of its product range and focused on ensuring the final customer a consistently higher guarantee on its products, has commissioned SAP Italia the study and development of one of the most ambitious projects ever conceived in the aseptic drinks production that covers a wide range of products, such as fruit juices, traditional drinks, tea and milk.

The strategy developed by the partnership, involving two of the major market leaders, is to achieve high goals if added value such as:







- full automation to ensure extreme fl xibility and the detailed control of every process parameter
- reduction of waste during production
- excellent energy recovery thanks also to the integration of Asepto-R Top with a Co-generation Plant of brand new conception.

The technical staff of SAP Italia and Refresco Italia have been working together for several months, sharing decades of experience in research and production, in order to achieve perfection of the whole process and providing great attention to aspects related to the design and perfect sanitation. The result is a combination of tested technologies and new production concepts.

Asepto-R Top can treat any type of drink and thanks to the special construction of the tubular heat exchanger, even soft drinks containing solids or isotonic drinks with particularly aggressive salts. Each component installed on the plant has been selected with care among the best global manufacturers to ensure the reliability that SAP Italia installations are accustomed to offering in Italy.

The supervision system, developed and produced specifically for this system, is intuitive, easy-to-use and reliable.

Each variable is stored in the database and can be consulted at any time, ensuring full traceability of all production.

ATK-R Top, the top range of aseptic tanks of SAP Italia completes the supply. The tank is meant to store the product after heat treatment and maintain its sterility. Thanks to its particular design, all possible contact with the atmosphere is protected by steam barriers. Perfect integration with the sterilisation plant of Asepto-R makes this the ideal solution to preserve product quality and sterility after the heat treatment, in stand-by for the fillin process.

www.sapitalia.it



INNOVATION IS BREWING IN THE **BEER INDUSTRY**

igitalization is having a dramatic impact on many industry segments - but brewing faces a number of additional challenges. Large brewing groups are facing issues such as quality, strict cost management, and changing customer tastes, while micro-breweries and craft brands need to manage their rapid growth efficientl.

The global trend of the rising popularity of craft beers has shaken up the industry over the last few years. Consumers who used to be happy with lower-priced, mass-produced beer are turning to what they see as a more authentic product, possibly made in their area by local people. With significant growth in the number of craft breweries, the trend has lost its association with hipsters and has become a growth industry in its own right.

Growth challenges for micro-breweries

However, as in most growth sectors, rapid expansion can generate its own set of challenges. Many craft brewers are self-taught and may face production or quality diffic Ities once their product starts selling well. The addition of new equipment may pose a problem if the brewer lacks the necessary technical and engineering resources. If a brewer decides to implement new equipment, the learning curve can be steep - not just for maintenance, but for controlling day-to-day processes and production. This is particularly the case for small breweries producing a variety of brands or seasonal products.

Adaptation challenges for large groups

Larger brewing companies have been around for much longer and are usually adept at managing growth. However, the disruption to the industry caused by new consumer trends - along with changing environmental regulations - is challenging them to revise their processes. They are often equipped with older, "black box" legacy systems that are diffic It to adapt to new recipes and expensive to maintain, hampering their fl xibility and capacity for innovation. Some larger groups have also outsourced parts of their production processes, such as mash filt ation, to external



Changes in consumer tastes can be a challenge for craft breweries as well as large brewing groups - but solutions exist

Rockwell Automation





Special / Beverage and bottling technology

skid providers that may not use the same control systems. This makes it diffic It to harmonize and modernize the production process, while generating unnecessary costs. A major equipment overhaul is not usually viable either, as it is too disruptive and costly.

Intelligent automation

Implementing an intelligent distributed control system (DCS) can give both craft and large-scale brewers the foundation for a common automation platform that interconnects different processes and brewhouse systems. If the system is equipped with an easy-to-use interface, users can view information about processes, power consumption and machine activity. In addition, it enables brewers to manage their recipes with more fexibility. In this way, craft brewers can repeat popular products while maintaining quality and consistency. And large brewing groups can use the DCS to optimize production and connect their

systems to the rest of their plants or enterprise information systems.

Rockwell Automation: industryspecific solutions for brewers

To help large and small breweries run their businesses more effici ntly, Rockwell Automation recently announced two new modular solutions that will be launched officially at the BrauBeviale trade show in Nuremberg (13-15 November). Both are based on the company's PlantPAx DCS system, which is in widespread use in the food and consumer goods industries.

FactoryTalk CraftBrew

For micro-breweries, the FactoryTalk Craft Brew is a cost-effective way to introduce entry-level automation with minimal technical expertise and instrumentation required. It is designed for craft brewers producing between fi e and 100 barrels (BBL) and enables them to manage the growth of their business by increasing capacity.

Each part of the production process is documented and visible, so that brewers can repeat or adapt each step, from grain handling to bottling. Craft brewers need to maintain product quality when they expand production, and this application provides them with the temperature and other data they need to monitor quality and consistency.

They can also scale their production up or down, giving them the fl xibility to respond quickly to consumer demand. The application can be integrated with brewhouse and cellar equipment, including mash tuns, lauter tuns, brew kettles, and whirlpools. Perhaps most importantly, the fact that all the process information is logged lets brewers be more creative - testing new recipes, tweaking them as necessary, then storing them for repeat production. The solution will be demonstrated at BrauBeviale and available globally from selected Rockwell Automation partner OEMs and systems integrators.





FactoryTalk Brew

Large brewing groups have a different set of challenges to solve and FactoryTalk Brew has a broader set of functions than FactoryTalk Craft Brew, allowing large groups to use it as part of an enterprise-wide automation and information approach - the concept Rockwell Automation refers to as The Connected Enterprise. It comprises a standardized solution for interlinking and fin -tuning every part of the brewing process. As a connected application, operators can config re automation sequences and reports, reducing startup time. For large groups with several global or regional breweries, the solution can be deployed across multiple sites and adapted to any equipment setup, even if different locations are using a variety of tank, tun and grain-handling systems. It has been designed with an emphasis on ease of use, enabling users to access production information at any time from any device - they can now start and monitor fermentations via their mobile phones. It also minimizes project risk by allowing operators to design within the software and test before executing.

This solution is also available from specialized Rockwell Automation OEMs and systems integrators.

Sleeman: 50 per cent production increase in 2 weeks

The Canadian firm Sleeman Breweries is a large beverage group that also produces craft beers. With an antiquated control system, changes to recipes or production runs had to be programmed manually. Its craft beers were so popular that its dedicated plant was running at full capacity, so Sleeman outsourced some extra production to partners, generating extra cost and risk. It thought about building a new plant, but this would require significant capital investment. Working with a Rockwell Automation partner, McRae Integration, the company selected and implemented FactoryTalk Brew. Within two weeks, the brewery was able to increase production from eight to 12 brews a day. The system includes reporting and historian software that records key process data to pinpoint brew cycle trends, allowing operators to proactively make changes as needed. "Craft brewing involves a lot of small changes in recipes – based on water, incoming malt and other variables – plus adding new recipes," said Stefan Tobler, brewmaster at Sleeman's craft beer facility. "The PlantPAx system with FactoryTalk Brew software allows us to maintain brew quality, while also providing the fl xibility we need to quickly respond to changing consumer tastes and market trends."

Conclusion

When the craft beer trend really took off, many micro-breweries ended up closing down due to issues managing growth, such as maintaining consistent quality while increasing production. The technology available today reduces this risk because it gives small firms much more control over their brew processes and more time to invent delicious new recipes. And for large brewing companies, advanced automation and control technology opens up new opportunities for cutting cost and waste while improving yield and efficienc .

www.rockwellautomation.com



PTFE SOLUTIONS FOR THE FOOD INDUSTRY

A COMPLETE LINE OF PRODUCTS

pecialist in the field of sealing systems and components since 50 years, PANTECNICA is constantly committed to develop and improve its offer with innovative and customized solutions. The following is mainly derived from the documentation of the manufacturer "Elring-Klinger-Enginered Plastics", of which PANTECNICA has been the exclusive engineering partner for the domestic market for over 30 years. These are innovative solutions in high performance plastics such as PTFE and PTFE, PEEK, PE-UHMW composites. PANTECNICA is able to meet the most specific market requests with solutions that meet the strictest standards of food and pharmaceutic industry.

PANTECNICA's long lasting experience in the application of almost any sector allows the company to supply both miniature components and seals up to 3.000 mm in diameter, with rapid delivery for both single-piece and largescale production.

Moldflon® - Thanks to this fl orothermoplast that combines the properties of PTFE with greater freedom and costeffectiveness of thermoplastic transformation processes such as injection molding, the range of application of the materials so far used is greatly expanded thus expanding the range of solutions and products.

RADIAFLON - PTFE/Compound Radial Shaft Seals

Mainly employed on rotating shafts. Characterized by high chemical resistance, they can be used in case of insuffici nt lubrication and dry runs. Sterilizable CIP (Clean In Place) and SIP (Sterilisation in Place)



RADIAFLON

"copyright by ElringKlinger Engineered Plastics"

Pressure up to 15bar with standard type. Peripheral speed > 35m / s.

Temperature -60°C +200°C

- Standard Executions: HN2390 and HN2580 and special customized solutions: multi-lip, friction-optimized, counter-sealed, single lip, hydrodynamic lip and various thickness and preload lips
- · Compounds in Compliance to: FDA, EU, AAA, USP VI

Applications: in Food and Pharmaceutical Processes

- Mixers and agitators (of fl ids and powders)
- Grinders
- **Fillers**
- **Pumps**
- Centrifuges
- Special executions for rotating fillin machine distributors

SPRINGFLON-PTFE/Compound Spring Energized Seals

Used for single linear acting on pistons or rods, in rotating, rotating-slyding, angular and static applications.

Characterized by high chemical resistance they can be used in poor lubricated or dry conditions.

Sterilizable CIP (Clean In Place) and SIP (Sterilisation in Place)

Pressure up to 700bar.





Panlecnica:

Linear speed up to 15m/s - rotating speed up to 2,5m/s

Temperature -200°C+300°C

- · Standard executions and special or customized solutions, monoblock pistons, Hi-Clean versions
- · Compounds in Compliance to: FDA, EU, AAA, USP VI

Applications: in Food and Pharmaceutical Processes

- Dispenser
- Packaging machines
- Piston pumps
- Special executions for rotating fillin machine distributors

MEMORY - PTFE/Compound Preload Seals

Characterized by high chemical resistance they can be used in poor lubricated or dry conditions.

Available in PTFE Compound and PE-**UHMW**

Sterilizable CIP (Clean In Place) and SIP (Sterilisation in Place)

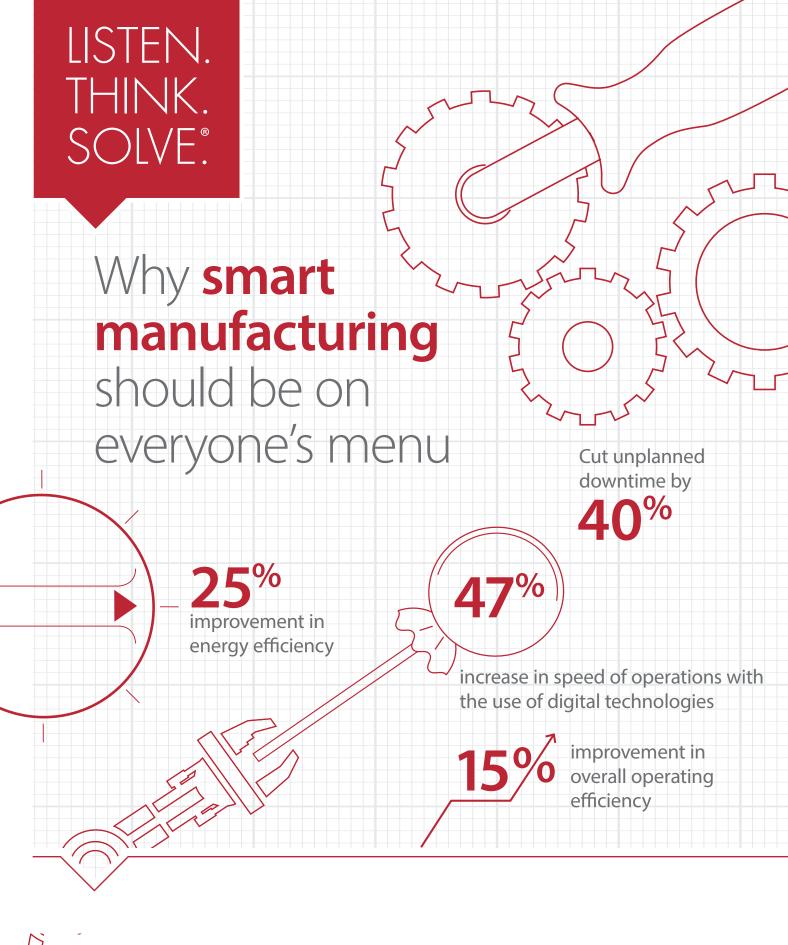
Used for single linear acting on pistons or rods, in rotating, rotating-slyding and angular motions.

No sticking phenomenon even after long periods of inactivity

Pressure up to 20bar

Linear speed up to 15m/s - rotating up to 1m/s







Rockwell Automation

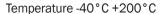


Allen-Bradley • Rockwell Software

Special / Beverage and bottling technology



"copyright by ElringKlinger Engineered Plastics"



- · Standard executions and special or customized solutions, guided piston
- Compounds in Compliance: FDA, EU, AAA, USP VI

Applications: in Food and Pharmaceutical Processes

- Filling Valves
- Pneumatic cylinders and actuators
- Dispenser
- Packaging / Bottling Machines
- Suction pumps

BELLOWS Applications: in Food and Pharmaceutical Processes:

- Protecting sterile areas
- Filling systems with over 20million strokes achieved
- · Aseptic valves
- · Solenoid valves
- Dispensers
- · Pumps and valves
- Pressurization Valve (filling machines - P up to 6bar - 10mil cycles)
- Blow molding valve (food design P



"copyright by ElringKlinger Engineered Plastics"



up to 32bar - 4mm stroke - 10million stroke)

DIAPHRAGMS/ MEMBRANES (executions: film, printed and turned)

Applications: in Food and Pharmaceutical Processes:

- Measuring Devices
- Pumps
- · Pressure regulators
- Valves

Optimized with high fl xural resistance properties, even under pressure.

BELLOWS and MEMBRANES

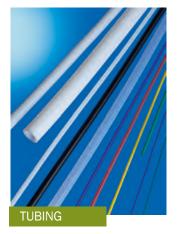
In virgin PTFE, PTFE modifi d or PTFE compound

Resistant to chemical agents Sterilizable CIP (Clean In Place) and SIP (Sterilisation in Place)

Can be used at temperature range between -60°C and +200°C.

Vacuum pressure up to 6bar

- Special and custom executions
- Compounds in Compliance: FDA, EU, USP VI



TUBING

In virgin PTFE, modifi d PTFE or PTFE compound, Moldfl n® Resistant to chemical agents Sterilizable CIP (Clean In Place) and SIP (Sterilisation in Place) Pressure up to 8bar Compounds in Compliance to: FDA, EU

Applications: in Food and Pharmaceutical Processes:

- Filling machines
- Tank connection / filling machines valve

ANTIFRICTION BEARINGS

In virgin PTFE, PTFE compound, Moldflo ®, PEEK

Excellent resistance to chemical agents Sterilizable CIP (Clean In Place) and SIP (Sterilisation in Place)

Operating temperature -100°C +250°C Suitable for dry applications with high PxV (up to $2.5N/mm^2 X m/s$)

No moisture absorption

Corrosion free

High static compressive strength (up to 80 N/mm²)

Compounds in compliance to: FDA, EU, USP VI.

Applications: in Food and Pharmaceutical Processes:

- Shakers
- · Mixers,
- Bottling lines
- · Conveyors
- Packaging lines me

www.pantecnica.it





46

If there is magic on this planet, it is contained in water.

(Loren Eiseley)



The lightest water in Europe, thanks to its unique properties is perfect to accompany every course. In haute cuisine, the excellence of Lauretana is enhanced by the innovative label with plays of light and transparencies, with the essential lines of Pininfarina design and the purity of glass. This is why it is chosen by the best restaurants in the world.



The lightest water in Europe

TDS/fixed residue

sodium

um hardness - °

14

FRFF 0.55







LAURETANA THE LIGHTEST WATER IN EUROPE

remium brand on the Food&Beverage international panorama, Lauretana is the lightest water in Europe, thanks to its 14 mg/liter of fi ed residue.

A real gift from the alpine nature, Lauretana water originates from the hydrogeological area of Monte Rosa glacier and it springs from a source in an unpolluted place at more than 1000 meters high.

Its purity is maintained thanks to the bottling near the source.

The Firm from Biella, based in Graglia, has been producing mineral water for more than half a century, it has always been oriented towards the quality of the product and its customers' satisfaction. Lauretana has established a relation of confidence and loyalty with its customers, thanks to the punctual and transparent communication of the characteristics of the product and the business values. The excellence and uniqueness of Lauretana make it

the ideal water for children, athletes, food lovers and all those who daily choose well-being in their life.

The pleasure of drinking Lauretana is a worldwide privilege, in the elegant bottle signed Pininfarina it is available in the best restaurants throughout the world.

In the 75cl and 33cl packaging it has revolutionized the premium segment of food&beverage inspiring other brands in the sector.

Preferred by the best chefs and restaurateurs, Lauretana is the perfect water for gourmet choices or traditional dishes, since it respects the original fullness of the fl vors, without infl encing their taste. Thanks to its 6.3 pH it favors the digestive process.

Lauretana, the lightest water in Europe, with its very low content of sodium, only 1.0 mg/l and 0,55° f of hardness, stimulates diuresis, increases hydration and prevents the development of kidney stones.

Excellence of Made in Italy, Lauretana places itself as a premium brand





in the most important exhibitions, national and international, dedicated to Food&Beverage,Fitness&Wellness, art, medicine, lifestyle. A 360° commitment because Lauretana is

much more than a water: it is an experience to live. $\widehat{\mathbf{m}}$

To stay informed about Lauretana activities: **lauretana.com** and the social profil s Facebook and Instagram.



The lightest water in Europe





EUROSTAR THE FUTURE ARISES FROM TRADITION

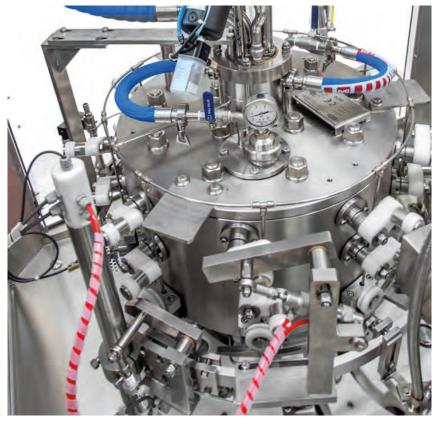
onferrato, the Made in **Italy added value**

Thanks to the deep knowledge of our traditions and the great passion for our territory that has always distinguished us Italians and in particular we of the Monferrato, for more than 20 years now, at EUROSTAR we design, manufacture and install bottling equipments lines based on state-of-the-art filling technologies and turn-key lines according to the most advanced packaging know-how.

We serve primary companies worldwide in all major markets: water and beverage, beer, wine and spirits, food products, oils, personal care, home care, pharmaceutical and chemical.

We have more than 1200 EUROSTAR equipments installed worldwide which are assisted by our After-Sales Service network. The "core" of our machines is made up of components that are designed and manufactured internally; this allows us to propose and implement high quality tailor-made solutions that satisfy all needs such as, for example, those of the fin liquor market. Our technologies cover all the major needs of liquid filling, up to medium viscosity: from light depression to high vacuum, from counter-pressure (mechanic and electro-pneumatic) to volumetric (mechanic and electronic with fl w-meters). Our counter-pressure technology is now available on our new range of canning machines equipped with the seaming devices designed and manufactured by EU-ROSTAR because our goal has always been to evolve, improve and differentiate ourselves. The production capacity of our equipments ranges from 1000 up to 24000 BPH for glass, PET and all other polymers containers, covering all the capping options available on the market.

www.eurostar.it











BOTTLING AND PACKAGING SOLUTIONS









1.200 **Installations worldwide**



Production capacity 1.000 ÷ 24.000 bph



After-Sales Service



LOGIN TO DISCOVER OUR RANGE OF PRODUCTS

eurostar.it





BOTTLING AND PACKAGING SOLUTIONS

DOUBLED PRODUCTIVITY AND RETURN OF THE INVESTMENT

he vocation of BBM Service is to give quality services for bottling and packaging, pursuing the recovering philosophy which has been part of our company since its foundation. From simple maintenance of machines to the engineering of a line, the answer to the production and budget demands of the customer moves towards the lowest possible impact on the environment and the sharing of the best practices with the personnel of the production site.

This ability to combine recovering and effici ncy makes BBM Service an appreciated partner for many customers.

That has led to our steady collaboration with large companies for the supply of maintenance and upgrade services on machines and lines. Over the last few months, we have worked for one of the major water bottling companies of Italy indeed, for a project which has shown even better our capacity to add value to the available resources, always aiming at regeneration and sustainable production. The project, for the upgrading and the increasing of productivity of the site, has involved BBM from the designing of the new layout of the line, with the implementation of refurbished supplied machines, refurbished machines from other sites and new machines. Having a closer look at the specifi activities we have done, it comes natural for us to start from the supply of refurbished machines which is among our strengths. For this customer, the machines we have supplied are a blow moulder and a shrink-wrapper completely overhauled, upgraded and ready for the production site, with the goal also of using less plastic.



Thanks to our support, the client has been able to allocate some machines from other production sites of the group, some closed and some needing a machine upgrade, to the plant of this project and for which they represent an improvement in terms of capacity.

The machines we have relocated for this line are the filling machine, the palletizer and the labeller, next to several sections of conveyors. Obviously, relocation means also disassembling and assembling, but also being in charge of transportation. Furthermore, refurbishing, changes of format and conversion have been necessary to get the machines ready to work in the new line with also lighter performs. All these activities have been carried out by BBM Service directly in the working site.

The relocation done in accordance with the customer represents an interesting opportunity for every producer with more than one bottling and packaging factory, who can exploit the upgrade with new machines and the end of activity in some lines to give new value to another one, thanks to our work.

As already said, the project involved also the use of brand new machines

BBM SERVICE formula for the bottling line engineering through recovering, saving and sustainability







which we set into the new layout of the line and for which we have taken care of the orders and the supply. The new machines are the stretch-wrapper, the handle applicator and the bottle inspection device. To conclude the installation activity of the line, we run the testing to deliver to the customer a turnkey system.

The numbers of the project are what stands out though, the line has doubled its hourly production (from 8.000 to 16.000 bph), reducing the weight of the plastic performs (4 g less per each perform) for a total saving of around 250.000,00 Eur per year, which by itself means the return of the 1.000.000,00 Eur investment in few years.

An increased productivity can be translated also in potentiality to better meet the demand of the market, and consequently an improvement in the organization of shifts. Only to mention the immediate benefits Here it is the perfect example of how BBM Service may be the unique reference point of the customer for the many activities needed on a line, from servicing, to purchase, going through installation, with a well established structure, with two facilities, more than 30 permanent technicians and well defin d departments to serve the customer in the best way. This is the plus offered by BBM Service, which is now recognised and sought-after in the sector of bottling and packaging. 🛅

www.bbmpackaging.com



CADALPE: THE WARRANTY OF A WELL KNOWN TRADE MARK

adalpe Srl is one of the longest-running and most important companies in the world, with more than 40 years of long experience and competence in the manufacture of beverage systems and equipment, with customers all over the world.

The constant vocation to the improvement and the continuous research of technological innovation that has progressively shifted to its production have brought Cadalpe to be a leader in the national and international landscape in the systems and equipment for vinification, distillation, beer and beverage sectors.

The company, which has its headquarters and establishments in Vazzola, in the province of Treviso, Italy has contributed to the evolution and development of the sectors where it operates, with the continuous improvement of its performance adding exclusive internationally patented features and achieving new original solutions that offer significant advantages of effici ncy with low consumption: results also obtained through constant dialogue and active interaction with customer requests.

Cadalpe's production is characterized by state-of-the-art technologies, offering systems with innovative and high-tech solutions. A high degree of specialization in stainless steel machining guarantees an excellent finish and an impeccable aesthetic presentation. Cadalpe meets its costumers' requirements, providing an integral work cycle: from raw materials, to assembly and finally esting machines. This results in good performance, durability, longevity and minimal maintenance.

The technical and practical knowledge of the process allows Cadalpe



to understand or perhaps better interpret clients' requests even when they are not always easily achievable. We are also among the fi st companies to offer integration with Industry 4.0, a very interesting opportunity for those who want to buy a new plant.

Cadalpe is at work all over the world with the 70% export of its production and after-sales service allows to solve any problem promptly. Cadalpe machines reach every country that grow grapes and produces wine, as well as beer, distillate and beverages

Since the Company is fully aware of environmental problems, it prefers to address its production to more evolved, non polluting, efficacio s and user-friendly solutions such as:

Crossflow Filtration

CrossfolwFilters C41. one of the most reliable and qualifi d products on the market today. It is available in automatic and semi-automatic models, equipped with hollow fib r polymeric membranes with asymmetric hydrofil structure highly resistant to chemical agents and heat, which makes it perfect for wine and beverages in general filtr tion. In addition to offering many possibilities of applications it also assures high respect of the structural and organoleptic characteristics of products, which can be ever higher than traditional techniques. Not only does the system help to avoid any leakage of product but it also enables eliminating all polluting wates without any filtr tion agents.

Desulphurization

The Vacuum Desulphurizing Equipment C37 gathers technical solutions all addressed to reach the best results in order to eliminate the sulphur dioxide in musts, to avoid pollut-



Vacuum Desulphurizing Equipment C37





TURNKEY SOLUTIONS FOR BOTTLING AND PACKAGING



BBM Service Srl via Pregalleno, 24 - 24016 San Pellegrino - IT +39 0345 23642 - info@bbmpackaging.com PACKAGING SOLUTIONS www.bbmpackaging.com









Special / Beverage and bottling technology

CONTINUE FROM PAGE 24 -



Continuous Tartaric Stabilization plants C 30 and C36

ing discharge waters, to reduce power consumptions and the preservation of physical-chemical and organoleptic characteristics of the product.

This system, that is the result of Cadalpe experience in the desulphuration sector, makes use of a stripping column composed by plates equipped with special valves, an evaporator with descending film for the production of stripping steam, a patented device that, during steam phase, directly fi es the sulphur dioxide that has already been submitted to the vacuum stripping process, turning it in calcium bisulphite.

Continuous Tartaric Stabilization

The Continuous Tartaric Stabilization plants C 30 and C36 represent the latest generation line for the stabilization of wines & vermouth.

Cadalpe production for continuous tartaric stabilization consists of the most advanced plants, fruit of highlevel technique and already wellknown in the market.

Those plants are based on the "with contact" method: a stop at low temperature, with crystal charge of 4 g/l at least, in a high-power enucleation crystallizer.

Computerized control unit processes and stores parameters and process measures, displays graphics of product fl ws, freezing circuit situation of alarms and TCC. The system can also be networked as to share info and can be transmit to remote PC (Industry 4.0). If we have to analyse only the running costs of the various systems and products for wine tartaric stabilization, we could certainly say that the Cadalpe system has broadly proved to run a defini ely more cost-effective management with energy saving, in addition to guaranteeing correct effectiveness of all the process stages, thanks to a micro-processor control system, and certificati n of the stability level reached during the stabilization process. Compared to the traditional method and other technologies, it offers a number of interesting advantages, including total guarantee on the result, high thermal recovery (up to 95%), 24 - hour continuity without the presence of the operator, Investment and management costs are particularly beneficial

Distillation Plants

Particularly with regard to distillation, Cadalpe with its distillation plants C7 and C27 put itself alongside producers in the distillation sector to design and manufacture plants for the production of high quality distillates,

> such as fermented grapes and fermented fruits, brandy, grappa, typical of Origin areas and grape varieties from which the grapes derive, guaranteeing the consistency of the product, with the same quality and type of raw material used. More and more, customers require distillates not only lacking in visual defects but, above all, with characteristics of olfactory fin sse and softness in taste, so as to create the overall taste-olfactory harmony that can only qualify the product.





Distillation plants C27 and C7



CONTINUED ON PAGE 30



HERTI **ALUMINUM SCREW CAPS**

erti provides aluminum screw caps, and composite closures for different industries such as spirits, wine, non alcoholic beverages, mineral waters and olive oil. Herti can offer a suitable cap for almost any size of bottle. The production plant is located in Pliska, Bulgaria. It is situated on 22 acres own land and 15 000 sq.m. production halls and facilities. Herti constantly invests in new technologies that boost energy effici ncy and participates in the collective scheme of Ecopack for recycling. It collects separately the waste from the production cycle and give it to companies specialized in recycling and reports to Ecopack for all quantities. Each year Ecopack issues the certifica e that shows the whole quantity of the recycled waste, the energy and water saved through the collective scheme and the reduced CO2 emissions. This year Herti invested in a new cooling system in the production sites with a minimum energy usage and started a project for optimization of the compressed air system.

Investment drives company's progress and growth. The last 3 years Herti followed a major investment program and different projects for increasing capacity and improving the health and working conditions in the factory. A new warehouse was put into operation at the production site. The building, covering 2 500 sq.m., has four loading platforms. It is equipped with two wrapping machines, a reach truck and forklift trucks. The bar code readers and the software allow easy navigation and quick service. Herti installed new equipment for increasing capacity of 30x60 aluminum screw caps, which







gives the company more fl xibility to meet customers' needs for wine closures in terms of quantity and delivery time. Last year Herti introduced two more lines to boost capacity and give more decorating options.

Our R&D team works closely with the customers in the development of their products and their brands, creating unique and innovative products. The R&D and quality assurance department puts efforts to organize and to improve all processes connected with developing new products, explore new materials and technologies and implement them in production. Recently we developed a new olive oil pourer for smooth pouring of the liquid and improved the equipment to increase the capacity for producing olive oil closures. This year we launched two new sizes for the spirit sector- 20x12 mm standard closure and 36x52 mm extra long closure. These are aluminum screw caps that enlarge our portfolio. Our R&D department has good traditions and develops very well. The budget has been gradually increased and it will still go up in the next years.

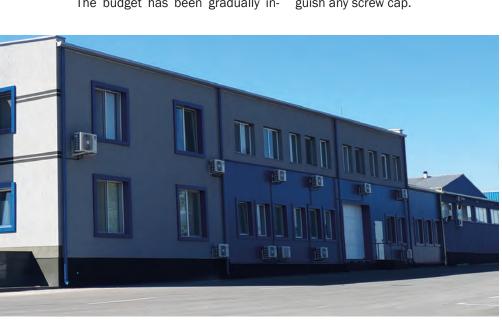
Herti follows the new trends in the industry by continuous investing in new machines and technologies, upgrading the production facilities and improving the production process. Herti has benefied the technological innovations and has achieved lower energy costs and increased capacity.

The vision controls secure highest quality of the end product.

The design became a very important part of the package vision. Clients turn to design options such as hot foil top and side printing and top embossing. Our fin ings show that clients look for unique and extraordinary individual design of their closures to attract consumers at the shelves. May be this is the biggest trend in the screw cap sector. The innovations in the printing and decorating machines follow the market requirements for unique and extraordinary design, which can distinguish any screw cap.

Herti plans to invest in new machines for lacquering and printing and to use the latest technologies in this fi ld. This will not only improve the speed and increase capacity but also reduce energy, which is our strategic goal. We also think of increasing our capacity for screw caps that go for mineral waters as this is going to be one of the big challenges for the mineral water industry.

Discover more about Herti products at: www.herti.bg/en







Special / Beverage and bottling technology

CONTINUE FROM PAGE 26

Micro Brewery

In the fi Id of the Brew sector, in addition to the basic philosophy, Cadalpe with its C49 and C49M is committed to the search for plant innovations that help the brew Master's daily work and allow him to develop his creativity. An in-depth knowledge of the process and the continuous dialogue with the breweries has allowed us to make concrete and useful changes for everyday use.

Cadalpe's production includes:

Cross-fl w fil ers

Kieselguhr fil ers with horizontal plates Sheet fil ers with 40x40 cm plates Single-chamber rotary vacuum fil ers Heat exchangers of tubular nest type, or with scraped body Helicoid one-tube Cooling units for water or glycol solution Cooling units with scraped bodies evapo-

Plate heat exchangers

Portable sulphur-dioxide dosers

Discontinuous and Continuous Flotation



Micro Brewery C49M and C49



units for musts cleaning with or without adding chemical products

Continuous tartaric stabilization plants Resin Stabilization System

Dissolving mixing units for sugar, clarifiers, additives

Grape pomace continuous dealcoholizers Columns for continuous distillation with production of brandy, grappa or fruit distillates

Discontinuous distillation plants

Vacuum concentrators with one, two or more stages

Heat pump concentrators

Desulphurizers

Pressure tanks for sparkling wines Stainless steel tanks and fermenters

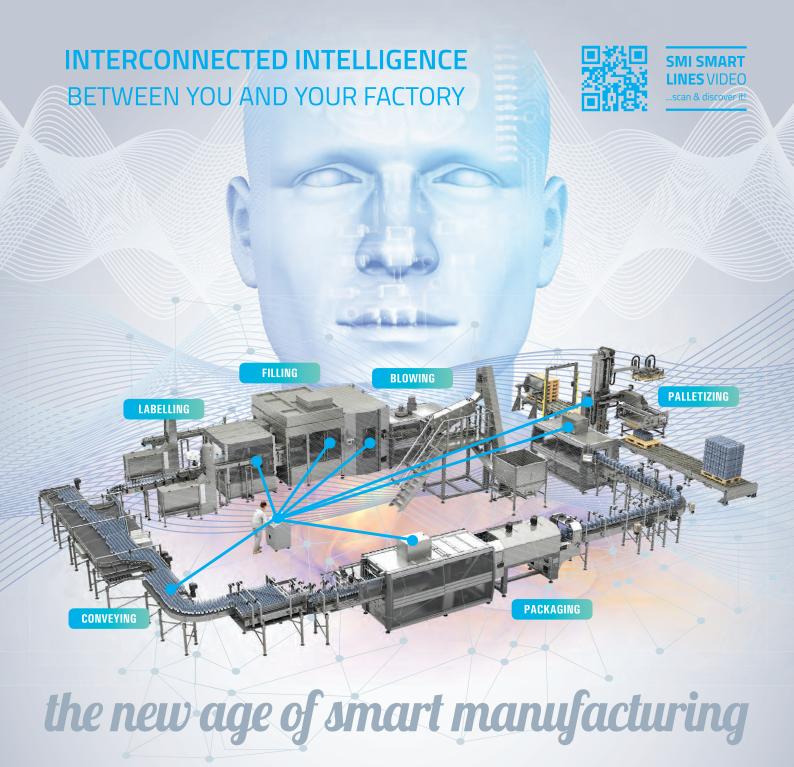
Brewery equipments.

For more info about Cadalpe, you are welcome to visit the website

www.cadalpe.com







SMI is specialized in designing, producing and installing complete lines for food & beverage bottling & packaging.

SMI turn-key systems feature Industry 4.0 and IoT technologies and an output rate up to 36,800 bottles/hour.

THE FACTORY OF THE FUTURE IS ALREADY A REALITY















SMI SPA

ubject to a constant technological evolution, packaging plays a key role for those who produce and buy consumer goods. Nowadays, when supermarkets are overcrowded of references. sometimes similar to each other, packaging is the only effici nt communication and sales tool that directly involves the consumer.

Packaging contributes to clearly conveying the qualities a product has and to informing consumers on what is interesting and specific (that's why we talk about **strategic packaging**). Format, colours, design, size and materials are elements used to distinguish oneself from competitors.

More and more companies invest in innovative machines to increase their production capacity, in order to be able to satisfy the market needs and at the same time to differentiate products through attractive packs.

The MP 150 ERGON overlapping cardboard sleeve packer, that will be showcased at Brau Beviale international trade fair, taking place in **Nuremberg - Germany from 12th** to 14th November, meets these needs

Thanks to the design and production of machines with an innovative design, equipped with IoT technology, SMI provides cutting-edge solutions for the primary, secondary and tertiary packaging that ensure production effici ncy, operational fl xibility, energy saving, ease of use and bottling and packaging line monitoring.

Beer and packaging: a winning combination

The continuous increase in craft beer consumption all over the world is accompanied by the emergence of new microbreweries and by the increase in production, that have led the operators of the sector to invest in automatic bottling and packaging plants; in-





deed, well-thought-out and well-made packaging is a winning tool.

SMI packers from the MP ERGON range allow companies to compete, by leveraging on innovative packaging, without forgetting important elements, such as the practicality and the protection of packed products.

The machine that will be showcased in Nuremberg packs in 1X3 in NT style 0,33 L glass beers by Via Priula brewery in San Pellegrino Terme, that are grouped in a pack equipped with a handle that serves as gift box.

An original packaging that ensures a great visibility and is able to catch the attention of a large number of consumers in stores; furthermore, particular packs such as the ones manufactured by the MP give higher quality and an additional value to a product that is unique, related to the local territory and characterized by features appreciated by experts and recognized by awards achieved on a national level.

Overlapping cardboard sleeve packers are the ideal solution for realizing a strategic packaging and offering great advantages

· packers from the MP range are suitable to pack a wide range of containers in many config rations, in order to effici ntly meet the chang-

BRAU BEVIALE PREVIEW: **STAND 7A-503, HALL 7A** STRATEGIC PACKAGING FOR COMMUNICATING AND COMPETING



ing current and future needs of fina

customers;

- the continuous motion packaging cycle ensures a smooth production fl w, without jerky movements, which protects containers from knocks, ensuring product integrity, high quality of the pack and reduced mechanical wear of the machine components:
- the hot melt glue sealing of the pack bottom is precise and long-lasting, with the possibility to use different types of cardboard;
- the packers from the SMI's MP ER-GON range are the ideal solution for manufacturing a pack with a captivating design and strong visual im-

pact able to capture the consumers' attention; moreover, packs in cardboard sleeves are very resistant to knocks and easy to manage, open and store;

- the touch-screen control panel is equipped with a graphic "user-friendly" interface, this allows to manage the machine in an easy, intuitive way and have advanced real-time diagnostic and technical support functions;
- · ergonomic design characterized by slightly rounded safety doors, allowing all the motors to be mounted externally to the mechanical groups they activate, making maintenance operations easier.

Primary packaging as promotional vehicle

Recognition and visibility of the product on the store shelves are key elements for the business success. For this reason, companies of the food & beverage industry invest strongly not only in the secondary packaging, but also in the design of the primary packaging, by looking for shapes and sizes with a strong appeal and by using all the opportunities of customization offered by a ductile and fl xible material like PET.

SMI, thanks to a modern CAD department equipped with design tools of the latest generation, is able to design and graphically process a wide range of PET bottles and containers with a simple or complex shape, with functional and customized design. SMI design department has realized until now more than 1,700 containers, different for design, shape weight and size.

www.smigroup.it





H.T.P. SRL IS A YOUNG AND DYNAMIC COMPANY

ESTABLISHED IN 2003, OPERATING IN PNEUMATICS, HYDRAULICS AND INDUSTRIAL AUTOMATION

T.P. s.r.l. is a young and dynamic company, established in 2003, operating in pneumatics, hydraulics and industrial automation.

H.T.P. s.r.l. produces a wide range of EN175301-803 connectors (former DIN 43650 connectors) for solenoid valve, as well as M8, M12, M23, 7/8" circular connectors, passive distribution boxes and lately also LED industrial lights.

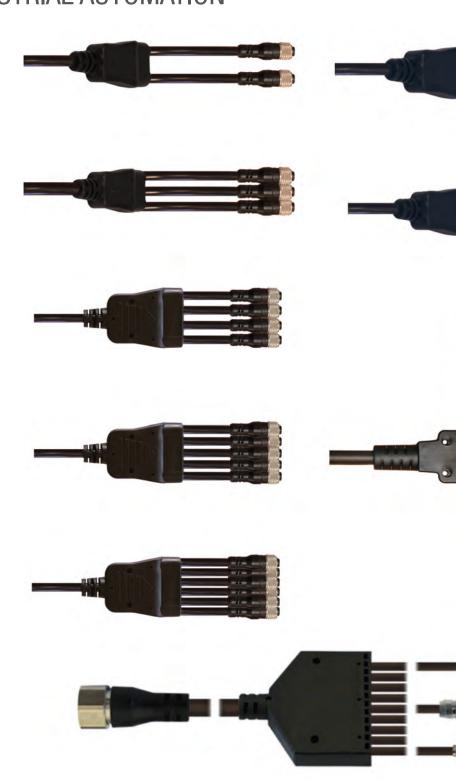
Thanks to its unique fl xibility H.T.P. s.r.l. is able to follow constantly the evolution of the market by developing new key products such as energy-saving connectors, structured cabling solutions and splitters allowing the end customer to save time in terms of wiring and to produce the machines more quickly thus being more competitive than its competitors.

H.T.P. s.r.l. builds custom connectors (even personalized with customer's logo) through innovative, unique, effective and cost-saving technical solutions.

Quality, reliability and fl xibility make H.T.P. s.r.l. a partner you can trust and rely on.

H.T.P. s.r.l. has been for many years the leader in the following markets:

- Pneumatics, being H.T.P. s.r.l. among the leading suppliers of companies such as Metal Work, SMC, Camozzi, Parker, BOSCH and Pneumax.
- Hydraulics, having H.T.P. s.r.l., among others, customers such as Duplomatic and Hydac.
- Producers of pressure switches,







being H.T.P. s.r.l. supplier of companies such as Euroswitch, Trafag, Huba Control, Elettrotec, Ae.Cas, Suco and Fox.

Over the years H.T.P. s.r.l. has sold its products in more than 60 countries worldwide in all continents and to fi st class customers.

The main commercial advantages that H.T.P. s.r.l. can offer are the following:

- excellent service and high quality of all products.
- competitive prices in the international market in relation to the entire range of products.

Those who turn to H.T.P. s.r.l. instead of buying cable and products to be assembled receive connectors already assembled with cables, lengths and sizes meet-

ing the required specificati ns. Today H.T.P. s.r.l. is the protagonist in the market with head offic in Brembate di Sopra (BG), Italy, where it has more than eight million pieces in stock.

H.T.P. s.r.l. also has branch offic s both in Rockaway, New Jersey, USA, and in Taipei, Taiwan, and Moscow Russia all with related sales offic s and warehouses. H.T.P.'s own production is located in China.

The organization of the production, certifi d in accordance with ISO 9001, is done according to criteria that enable the achievement of a standard of quality of the highest level.

To have a better idea of our range of products, please visit our website at **www.webhtp.eu**



PROTECTING PILSNER **URQUELL** AGAINST CYBER ATTACKS

n times of Industry 4.0, the subject of cyber security is of elementary importance for producers in the food industry. The example of the Pilsner Urquell brewery shows how the fi st step towards further cyber safeguarding of industrial plants can be taken via a security audit by Kaspersky Lab without disturbing ongoing production operations.

The prestigious Czech brewery Pilsner Urquell, established in 1842, is the leading brewery enterprise in Central Europe. It employs a workforce of around 2,000 in three breweries, eight bottling/packaging lines and 13 sales and distribution centers.

Pilsen, where the brewery company is based, is world-famous as the "birthplace" of Pilsener beer. More than two thirds of the beer produced throughout the world has been inspired by this beer type and is sold under the name 'Pils', 'Pilsner' or 'Pilsener'. Pilsner Urquell is, so to speak, the original source of Pils beer.

From 1999 onwards the brewery belonged to the SABMiller Group, (at the time South African Breweries). In agreement with the regulatory authorities (before Anheuser-Busch InBev was allowed to take over SABMiller in October 2016), Pilsner Urquell - without specific geographical regions - was sold to the Japanese brewery group Asahi on 31 March 2017.



Technology development means a continuous process at Pilsner Urquell. A number of inde- pendent audits have been conducted in the company in the past years. When the IT Depart- ment wanted to change over from PC single-user solutions to a virtualized, serverbased mas- ter system connecting all systems and items of equipment, the company saw a specific need for action - to examine relevant IT security aspects.

System conversion presents new challenges with regard to security

The main motivation for carrying out a cyber-security examination - also known as Cyberse- curity Assessment (CSA) - consisted in examining the infrastructure in the end phase of the conversion project for IT security aspects. In addition, the project also includes virtualizing the production systems and upgrading the main network components of Operational Technology (OT). A further challenge is to determine the core themes and requirements of the future pro- ject as regards an endpoint security solution. The goal was quite clear - all production facilities of Pilsner Urquell were to be protected against possible targeted cyber-attacks and attacks against enterprises closely connected with the business. "What was important to us was to be prepared for all unexpected incidents, to review our OT infrastructure and to set up a plan for securing the industrial net-

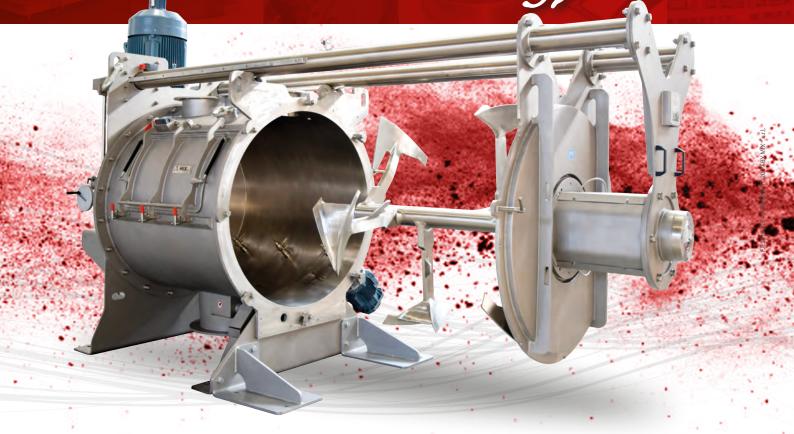




Mixing systems and components for plants CERTIFICATE SYSTEMS ISO 9001 - ISO 14001 - ISO 45001







SPS smart production solution

work together with the experts from Kaspersky Lab", explains Jan Šik, Chief Engineer at Pilsner Urquell.

The objective of the industrial CSA project was to render the production lines and all OT-related software and hardware immune to cyber-attacks and to set up the company in such a way that a holistic, industrial cyber security strategy can be implemented.

Prior to conducting the security assessment (CSA), the greatest challenges with regard to in- dustrial cyber security were the complexity of the OT infrastructure (two areas – brewery and bottling, each with quite different infrastructures), the connection to external business systems and the launch of the new production line which had recently taken place.

If you know your weaknesses, you can protect yourself

Pilsner Urquell decided on the industrial CSA by Kaspersky Lab, which consists of a minimal- invasive remote and on-site Cybersecurity-Assessment.

The advantage of this is that Kaspersky Industrial CyberSecurity Assessment does not affect ongoing operations. Industrial processes can continue to run.

The experts from Kaspersky Lab began the industrial CSA process with an infrastructure audit and the development of a threat model.

The industrial processes at Pilsner Urquell are divided above all into the fi lds of brewery and bottling. This involves two breweries and beverage tank sectors (cylindricallyconical fermentation tanks, CCT) and eight packaging lines within the production plant in Pilsen.

Kaspersky Lab examined the most critical areas of the infrastructure. For this specific attack- vectors were re-enacted in order to reveal gaps in security and subsequently examine the systems for malignant activities and anomalies.

In their examination of the company network and the associated industrial sectors, the experts discovered externally developed corporate software that revealed dangerous security gaps – security gaps through which the OT installations could be attacked very easily. In the industrial sector of the brewery the IT security experts even discovered a Zero-Day vulnerability for SCADA software. Furthermore, measures were taken to identify any uncontrolled external connections in and from the shop-flo r level.

At the end of the infrastructure audit, Kaspersky Lab provided Pilsner Urquell with an overview of all the weaknesses and security gaps discovered, such as weak authentications, SQL in-jections and the like.

This also included a detailed analysis of how these could be exploited. Furthermore, Pilsner Urquell received a description of the attack vectors discovered and confirm d that could be disastrous for the continuity of operations and integrity of the company's industrial processes.

Protect properly – analysis provides recommendations for action

Based on the results of the audit, in a next step the experts from Kaspersky Lab developed a threat model in order to develop recommendations for action which the company could imple- ment. Such a final report plays a crucial role – it contains recommendations for future measures in the fi ld of cyber security for specific industrial components and techniques in order to eliminate vulnerabilities. Recommendations for Pilsner Urquell were for example se-curing update and password guidelines, as well as strengthening the network and web application security.

"The analysis has provided us with important recommendations for the security life cycle and given us essential findings regarding the weaknesses in the security process. The final report from Kaspersky Lab has provided us with several possible improvements", summarizes Miro-slav Zajíc, IT Analyst at Pilsner Urquell.

This strategic approach to industrial cyber security shows the company further paths to be taken in future regarding its own IT security. "On the basis of the CSA results, we now plan to implement the Kaspersky industrial cybersecurity solution for network connections and servers together with Kaspersky Lab", concludes Miroslav Zajíc.

Kasten Kaspersky Industrial CyberSecurity

Kaspersky Industrial CyberSecurity is a portfolio of technologies and services that offers com- prehensive protection for each individual level of industrial systems, including SCADA-servers, HMI, Engineering-Workstations, PLC, network connections and staff.

The solution increases the industrial security step by step in all areas, from human resources, via processes, right through to technologies. The continuity and consistency of industrial processes are not af-fected at all: https://www.kaspersky.de/enterprise-security/industrial-solution





SAFEGATE ACCESS GUARDING. WE MAKE IT EASIER

he SAFEGATE type 4 range of safety light curtains is the ideal solution for the protection of a vast number of high-risk industrial applications, in particular those requiring a high level of integration of the muting functions.

SAFEGATE guarantees the integration of the muting sensors that can be connected directly to the safety light curtain.

Figure 1 - SAFEGATE

Each barrier can be config red as:

- Exit-only (L-Muting) with crossed
 (X) or parallel (P) beams
- Entry-Exit (T-Muting) with 2 crossed (X) beams
- Entry-Exit (T-Muting) with 4 parallel (P) beams



Config ration can be changed at any time.

Hardware config rable models (SM/SMO/SMPO) allow config ration of

Muting logics and functional parameters via the Master connector wiring.

Software config rable models (SMPO) allow config ration of Muting logics and additional function-











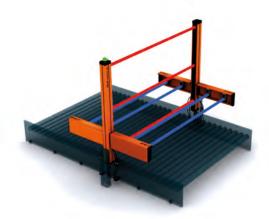


Figure 2 - Muting type



Figure 3 - Muting arms and Muting brackets MA and MZ

al parameters (i.e. Partial Muting) via Safegate Config ration Software (SCS). Programmable models (SMPO) allow further config ration parameters, ideal to address particular issues in more complicated application scenarios.

Safegate can be used with MA Muting arms (with pre-aligned and pre-config red integrated Muting sensors), with MZ Muting brackets (with M5 multi-beam photocells or MTRX retro-refl ctive single beam

photocells) or with any other Muting sensor.

Figure 3 – Muting arms and Muting brackets MA and MZ

Sensors can be upgraded, added or removed at any time.

Models with integrated status lamp allow to easily recognise the status of the barrier.

Special Models "G" to optimise correct and consistent detection of

transparent materials (i.e. glass) Special Models "V" with longer Muting arms for high-speed conveyors are also available.

Reer completes its range of access control safety light curtains with the new TRX models with retro-reflective passive elements.

These new models allow to have all wirings on one side only. $\widehat{\ensuremath{\overline{\mathrm{m}}}}$

www.reersafety.com



SOTTORIVA, BETWEEN TRADITION AND ZERO-STRESS INNOVATION



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

The company's distinctive feature is to be able to understand the market needs, especially in the food sector, where needs change quickly.

Nowadays, in fact, consumers are more and more careful about the quality of products and therefore to the ingredients used to make them. As far as bread making is concerned, this involves the need to make quality bread, without chemical preparations or shortcuts, while maintaining the natural leavening of the product. For this reason,

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

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

The company has developed various dividers with this technology.

The **MR8 2.0** model, designed for the industry, a laminating machine that cuts and shapes in a practical and precise way, without ever stressing

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

Even **Athena Plus**, a high production divider rounder, has a zero stress system. This machine, that does not stress the dough, has a very high weight accuracy, maximum fl xibility and a range of weight range from 25 to 600 g. It is a machine suitable to divide and round dough to make



Special

SPS smart production solution





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 glutenfree 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 fl xibility 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



Lyra, divider rounder suitable for medium-small production



EFFICIENCY AND EFFECTIVENESS ARE GVF IMPIANTI SRL KEY-WORDS

GVF Impianti SrI is a reliable partner specialized in the design, production and supply of machines, equipment and plant for Bulk Material handling since 1964.

ith more than 50 years of experience, GVF Impianti SrI is the ideal partner able to supply quality solutions for bulk material handling and for industrial auto- mation in sectors like food, pharma, chemical, pet-food and construction materials.

The wide range of production full of transversal pro- ducts characterizes the company organization, which is divided in 6 main divisions: dense phase pneuma- tic conveying systems, bulk material handling systems and equipment, mixing and dosing technology, filtra- tion systems, recycling systems and foundry machineries and plants.

Each company division represents the know-how and the experience gained in each sector of application, making the company become able to design and pro- duce components, complex machines as well as complete turn-key plants.

The main feature which distinguishes the company production is the search for the quality, following both the plant's effici ncy and the effectiveness of the adop-ted solution.

GVF Impianti Srl's objective is to supply advanced solutions combining



quality and innovation, which makes the customer's job easier and which gua- rantees a fast return on investment.

INNOVATIVE AND EFFICIENT SYSTEMS

Together since 1964 to solve bulk material handling problems
To be successful in today's global in-

dustrial ma- chineries' market, companies need to provide Mis- sion-Driven Machines which are smarter, more functio- nal and easier to maintain.

The market expects maximum durability, not only on a day-to-day basis, but also in the long term, in order to remain productive for years. That is why GVF Impianti's main objective













Sps smart production solution

has always been satisfying customer's needs, even if it requires high levels of product's customization and quality.

The company has a long story of positive results. It was founded in 1964 by three partners, and thanks to the experience they gained in building and designing machineries and plants in the USA, they fi stly began to serve the foundry sector.

Year after year the company has slowly improved the production range, by supplying products in more and more sectors of application, such as food, pharma, chemical and pet-food sectors, and to different types of customers.

In 2000 the company becomes a family-owned company, and with the ownership also the company view changed, in order to become more and more customer oriented.

Recently the company has enlarged its target markets abroad, by suppling goods and establishing business relationships in many European countries.

For the coming years its main goal is to continue to supply high quality solutions to its customers, with the support of its selected partners.

Efficiency and Effectiveness are the key-words.

"Ideas, Projects and Solutions in order to provide our customer with the best possible product."



IN-HOUSE ENGINEERING

One of the most powerful strength of the com- pany is its ability to design and produce in-house stan- dardized and customized products, in order to satisfy each possible customer's need.

The company studies each production process of its customers, in order to provide them with the best solu-tion, not only in terms of productivity, but also in terms of efficiency and effectiveness. This allows GVF Im- pianti to be able to project the entire systems' functio- ning and management logic.

The engineering department uses the most up-to-date design and 3D

simulation systems. Engineers interact with the mechanical production department, and fol-low all the production phases up to the assembling, the start-up and the commissioning of the machine in customer's premises.

PED COMPLIANT PRODUCTS

In order to improve the production quality and to control all the production processes internally, GVF Im-pianti Srl has decided to request and obtain the WPS (Welding Procedure Standard) certification

The company is now able to produce PED com- pliant vessels for its pneumatic conveyors, certifi d by TÜV (CE0948).



SPS smart production solution

Indeed, the management strongly believes that the in-house production of products is part of the company's strength, because it allows products customi- zation and quality controls for the entire production system.

SOFTWARE DEVELOPMENT

GVF Impianti is also able to provide a complete service of in-house industrial automation, for its machineries and its complete turnkey plants, thanks to an internal software development department. which follows and studies all projects in order to provide the best solutions. The software development department takes care of the software project and the mechani- cal automation project. It also follows the creation and assembly of control, power and monitoring panels. Moreover, in order to offer the best possible solution in terms of industrial automation, our company has established some important partnerships with major global powerhouses such as Siemens. This resulted in a fundamental quality guarantee and improvement.

DENSE PHASE PNEUMATIC CON-VEYING SYSTEMS

The dense phase pneumatic conveying system transports the product at low speed, using a small amount of air and reducing the energy consumption.

GVF Impianti's technology prevents contamination between the transported materials thanks to a process control that executes cleaning cycles every product's change.

DISTINCTIVE MARKS OF GVF PNEUMATIC CONVEYORS

GVF Impianti Srl has developed during the years mainly four types of pneumatic conveyors, which sati- sfy different needs: GA, GC, GA COMBO and GA-A. GA type is

suitable for the transport of normal wearing materials, is designed with an inlet butterfly valve and is supplied complete of electro-pneumatical panel in box. GC type has been developed to convey particularly abrasive material, thanks to the special inlet cone valve designed by GVF Impianti, which guarantees a high resistance to wear.

The conveyor is supplied complete of its electro-pneumatical panel in box too. GA COMBO type has the same features of GA type but it is studied to be compact, economical and modular, really useful if the available space is reduced. Its distin- ctive mark is the electro-pneumatical panel installed on board the vessel. Finally, the GA-A type is suitable if it is necessary to weigh the product before the transport. Indeed, it is equipped with load cells and with a load control unit, which allows to create batches of product just before the transport.

But, what distinguishes all these pneumatic conveyors from the competitors is the special design of some components and the unique air distribution system. Indeed, all GVF Impianti's pneumatic conveyors are equipped with outlets made in cast iron, and further strengthen by a thermal treatment. In addition, the out- let unit is equipped with spilt flanges made in cast iron too, which allow to have an easy directing of the outlet pipe.

Very important in terms of performance is also the exclusive uniform air distribution system, which distributes the compressed air in three main parts of the vessel: in the outlet, laterally and in the central part.

GVF Impianti Srl can supply on request also pneumatic conveyors for

high temperatures and high performan- ce pneumatic conveyors HP type, for long distances and big hourly capacities.

Finally, all GVF Impianti's pneumatic conveyors offer the following advantages: automatic execution, low wear, reduced product breakages and un-mixing, low air consumption, effici nt product/air ratio, low operational and maintenance costs.

PNEUMATIC CONVEYING COM-PONENTS AND EQUIPMENT

In the pneumatic conveying systems' production range GVF Impianti produces also all the pneumatic conveying components (such as pipeline's boosters, pinch valves and wear-resistant bends) and diverter valves (two-ways diverter valves and multi-ways diver- ter valves).

Indeed, very interesting are the two-ways diverter val- ves which are mainly divided in 3 types: DAS, DP and Y. The two-ways diverter valves DAS type are studied to be installed on the top of the silos, in order to divert the product between more silos or to become a ter- minal box made in a wear-resistant material. DP type allows to divert the material from one to two ways, and is particularly suitable for abrasive products. Y type is equipped with two pinch valves, and allows to select between two ways.

But, if the number of ways in which the product should be sent is higher than two, GVF Impianti has developed a very interesting multi-ways diverter valve DS type, which allows to divert the material fl w up to 12 destinations.

Visit: www.gvfimpianti.it



PEMCO









Perfect food packaging begins with the best packaging machinery

Have you ever noticed the difference between a tightly wrapped ream of paper and one that is loose or improperly sealed? Maybe you have seen cartons with twisted flaps or rounded folds and wondered about the condition of the interior contents, especially when it comes to food or beverages?

Pemco can eliminate such worry. Packaging your products with our packaging machinery will assure you of a perfect finished product. Pemco has been satisfying sharp-eyed packaging customers for over 50 years. That is a long time and a lot of perfect reams and cartons for a demanding market. We work hard to deliver the best machinery available or develop new innovative solutions for diversified markets. Our customers want the best product for their customers. When quality matters to you, when quality matters to your customers, then Pemco is the quality provider that will deliver the type of packaging perfection that matters to everyone.

PART OF YOUR SUCCESS



LEVEL REGULATION WITHOUT BLEMISH

SMART LEVEL SENSORS IN CHOCOLATE PARADISE

apacitive sensors are a fin 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 builtin sensor from the machine manufacturer, however, did not look promising be-

> > cause the ap-



plication could not be left unattended. Then a Balluff sensor with smart level technology was chosen fin ing 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 retrofit ed 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 refill d until the optimum fill level is reached.

Unlike conventional capacitive sensors, these fill-I vel 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









INDUSTRIAL **AUTOMATION SOLUTIONS**

amozzi Spa realizes solutions for industrial automation for more than 50 years and has grown throughout the years up to becoming one of the main international companies operating in the sector of pneumatic components for industrial automation. Total quality of products, efficien production processes, fl xibility and continuous research in technology are the pillars on which the company is based and which are declined in terms of miniaturization, energy effici ncy, plug&play solutions and mechatronic devices that are able to operate in the context of Industry 4.0.

The strategy of Camozzi is based on the development of sector-specifi expertise along with a multi-technological approach integrating pneumatics, electrical actuation and proportional technology. Camozzi is a leading multi-technological supplier of industrial automation, starting with the conviction that in automated systems there is no driving technology that is absolutely better than another, but each application has different requirements that can be satisfi d thanks to the use of a specific technology which can be pneumatic, proportional or electric.

In order to complete its offerring, Camozzi created C_Electrics; a new division dedicated to the development of electric actuation, proposing solutions that include electromechanical cylinders and axes with auxiliary motors, drivers and accessory components, combined in config rable systems in order to guarantee maximum fl xibility to the user.

As a result of the work of this Division we can name the Series 6E electromechanical cylinders, the Series 5E



electromechanical axes, the Series MTS brushless motors, the Series MTB stepper motors and respective drivers with the newest DRCS driver, especially studied for stepper motors. Using the microstepping technology (up to 1/128 step) it is possible to considerably reduce the natural resonance of the motor. Moreover, eight input modalities are available that allow to realize a table of 256 commands, for each of which it is possible to set position, speed, acceleration and deceleration. The Series DRCS drivers are equipped with a CANopen serial protocol through which you can run commands for motion control and monitoring of the driver's state. The operation can be config red wireless or through a USB cable, according to the Bluetooth standard (BL-BLE).

Part of the C_Electrics range is also the Series 6E which is a mechanical actuator with rod in compliance with standard ISO15552, among which the new versions with protection class IP65 can be found, suitable to be used also in dusty environments or in presence of strong water jets. The wide range available, their high precision and easy assembly make the Series 6E the ideal solution for the most diverse applications, in which control of position and/or of



dynamic movement is required, like for example Pick & Place, sorting, palletizing, tensioning, pressing and lifting.

To make the transition from pneumatic to electromechanic actuation easier, Camozzi has developed OSET, a software that allows to easily config re the motor system and the electomechanic actuator. QSET interfaces with the Camozzi drivers and enables to program these very easily, without necessarily knowing complex parameters and options that would increase set-up times, at the expense of other activities with a high added value. The development phase of the man-machine interface has been the subject of a dedicated research: the aim is to have an intuitive program that is easy to use, in order to considerably reduce the config ration times through simple and quick guided choices.

www.camozzi.com





TUBITEX SOLUTIONS FOR FOOD FILM PRODUCERS

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 rectifie 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

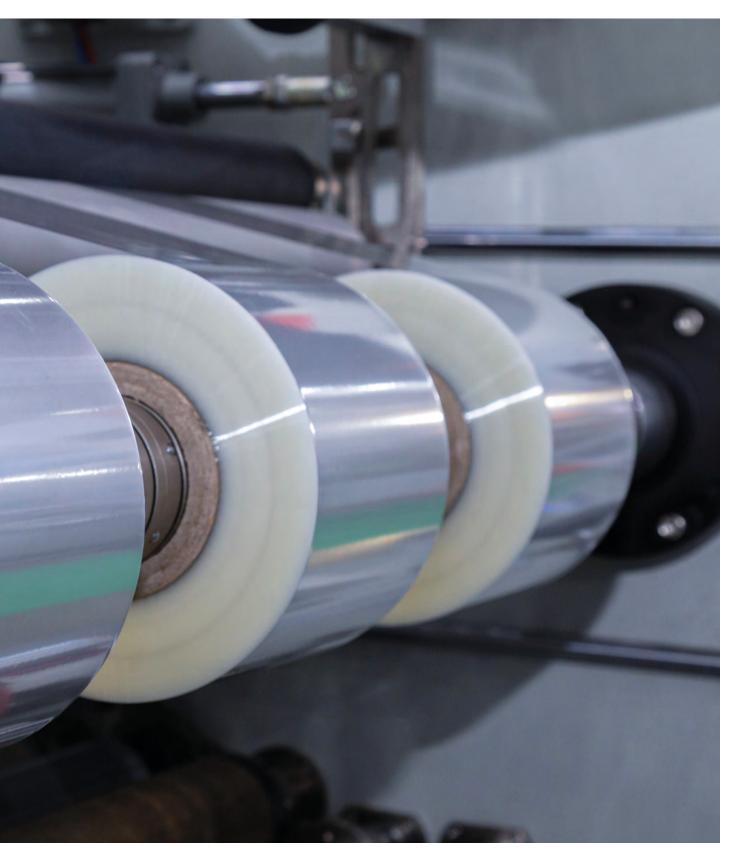
Tubitex addresses the food packaging sector with a wide range of plastic film tubes for fresh food packaging. The products are made of 100% recyclable cardboard and can be reused one or more times, depending on the type of use. The cardboard core material consists of 90-95% recycled fi ers and 5-10% 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



TUBITEX





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

Furthermore, Tubitex is now in the final stages of a journey that has taken it, over the last decade, to evolve its own production and management processes towards more ethical and environmentally friendly standards, which will be checked and certifi d 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 defin d 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 fl xibility 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 fib rs 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 finis ing 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



PACKPACT: THE FIRST NETWORK OF ITALIAN COMPANIES FOR COMPLETE AND INNOVATIVE TECHNOLOGICAL SOLUTIONS

he project was launched in 2013 under the name "Processing & Packaging - The High-Tech Italian Way" and was recently renamed "PACKPACT - Your partner in advanced Processing & Packaging".

It is a network of leading companies in the processing and packaging industry, which provides the customer with complete, fl xible and advanced solutions, guaranteed by the unmatched made-in-Italy technology.

The network was created to develop business and to increase competitiveness on the markets through the integration of each participating company's specific skills. The main aim of the companies is to access emerging markets by promoting an integrated product offer, to boost joint marketing activities and to undertake shared initiatives in order to

be recognized as a unique partner for every customer need.

Grown over time, today PACKPACT includes seven national producers, leaders in their respective sectors thanks to the entry of new companies that have trusted this new way of doing business abroad. The fi st Italian network of companies in the processing and packaging industry includes: Cama Group (secondary packaging), Clevertech (palletizing),

















Ilpra (traysealing, thermoforming fill and seal), Makro Labelling (labelling), Ronchi Mario (filling capping), Universal Pack (stick pack & sachetfill and seal) e Tosa Group (wrapping).

In 2018, the companies belonging to the network recorded a total turnover of 300 million euros, of which approximately 85% came from exports. The network employs over 1,050 people, with a 20% increase in employment in the last two years.

The goal of sharing strategic assets in order to better promote the companies in the new markets has strengthened the core value that the network wants to embody: "the excellence of the Italian processing and packaging chain, which is highly competitive on the international market for its complete and innovative technological solutions".

The network was born on the initiative of Gianmario Ronchi, CEO of Gianmario Ronchi, who conceived this project. He affirm d that "it is essential to have shared an active relationships between different companies to consolidate our pres-

ence in foreign markets and promote the "Italian system". In our industry, each of the companies in the network already has an excellent international reputation for its high technological capabilities and manufacturing fl xibility. Our portfolio of integrated technological solutions, a sales force strengthened by the network and the trade fairs as our main promotional tool - all this has allowed us, in just two years, to consolidate our presence and, above all, to explore new sales channels and enter new markets as leaders, such as, for example, the most growing economic areas".

Annalisa Bellante, president of PACKPACT and CEO of Cama Group, stated that "Cama joined the network with the purpose of creating an innovative form of aggregation, independent from trade associations, to create real promotional synergies and stimulate both sector innovation and internationalization, and therefore improving the companies' competitiveness. The network wants to go beyond a simple co-promotion, but aims at sharing business experiences in a constant debate on both

strategic and operational issues, which are more than just important commercial and project synergies. It's an ongoing discussion between modern entrepreneurs, who are managing hi-tech companies and are willing to find the key to the success of "made in Italy" solutions thanks to a shared exchange of know-how and experience".

The Italian companies in the Network want to represent and export the unmatched made-in-Italy technology all over the world, to compete with the major international big players and offer customers the benefit of a one-stop-shop service, through the supply of a complete range of integrated solutions, meeting all production needs.

The synergy between the companies of the network has laid the foundations for collaborative relationships that translate into the mutual transmission of leads and joint implementation of projects.

Two practical examples of the collaboration between companies belonging to PACKPACT are the pro-





jects carried out by Cama Group and Universal Pack for Unilever South America and by Clevertech and Tosa Group for Aurora Dairy.

In the fi st case, Universal Pack supplied the bagging machine for the primary packaging as well as the stacking, weighing and counting unit for the subsequent transfer to the Cama Group cartoning machine, fully integrated into the line.

From Universal Pack line arrive groups of 60 or 36 sachets that the Cama Group machine combines into 16 cases max of big dimensions.

What's particular about this line are the special and out-of-format dimensions of the package. The major benefit of this project is the perfect integration of the Universal Pack loaders with the Cama Group conveyors.

In the second case, the joint activity of Clevertech and Tosa Group has resulted in a line that combines the mechanical and electrical design of both the companies. From the spiral lifter to the pallet stacker, the end-of-line system minimizes the transfer cycle to the forklift and was designed and assembled by Clevertech integrating the stretch film wrapping solution from Tosa Group.

In both examples, the know-how of the individual companies offers the client the extraordinary opportunity to take advantage of a complex and complete solution in a single unit. The three-year internationalization program started in October 2018 in collaboration with Honegger, Project Manager of the network, has so far seen the presence of the network in the following countries around the world: Iran, India, United Arab Emirates, Russia, Algeria, China, Australia and Thailand.

An unmissable appointment for the companies of the Packpact network is the Interpack event, no. 1 trade and packaging fair, that the companies will attend individually according to the sectorisation of the exhibition.

For additional information visit **www.packpact.it**













High speed **SACHET** packaging machine





stick-pack and sachet packaging machine:

OMAG Srl

Via G.Santi 42/A - 61012 - Gradara (PU) Italy ph +39.0541.950854 - fax +39.0541.953913 commerciale@omag-pack.com

www.omag-pack.com



OMAGOPEN DOORS TO THE FUTURE

ince 1973 Omag has been designing and developing vertical and horizontal packaging machines and complete lines for 4-side sealed sachets, stick-pack and doy-pack for food, cosmetic, chemical and pharmaceutical industries; with more than 45 years of experience in the packaging industry has acquired a unique know-how.

Every machine is customizable, can easily pack a wide range of products (powdery, granular, liquid, pasty, tablets and capsules) in different pouches dimensions and sizes and can be designed on one or more packaging lanes according to customer's indications about speed and production.

Omag machines can be completed with robot counting and feeding systems, cartoning machines, customized with a large variety of optionals and finishing on the base of customer specifications

Innovation and Industry 4.0

Continuous innovation and technical research allows Omag to guarantee strength, reliability and durability of its machines, all built with a pleasant design and according to GMP and FDA standards: "cantilever" design makes cleaning procedures and replacement of any component easier, every part in contact with the product is in stainless steel, the limited number of components present ensures that the machine is compact for the installation in restricted places.

In the last years Omag has nationally and internationally excelled with a strong economic and employment growth in the packaging world.









The key factors for this sustained rate of growth is the constant investment in research and development to be always up to date with Industry 4.0 new technologies: sensors, smart cameras, robotic systems and augmented reality implemented on the machines.

Omag is now actively implementing predictive maintenance on its machines: thanks to IoT technologies, remote control and machines interconnection, in a very near future will be possible to constantly monitor the machine status, components lifecycle and system performances in order to minimize the risk of machine downtime.

Events around the world

With a great sales force around the world Omag will exhibit its packaging machines in the most important packaging events in these last months of 2019:

- Propak India, October 21-23, Mumbai, India;
- Gulfood Manufacturing, October 29-31, Dubai, EAU;
- AllPack, October 30- November 2, Jakarta, Indonesia
- Interfood & Drink, November 6-9, Sofia, B Igaria;
- Pharmtech & Ingredients, November 19-22, Moscow, Russia;
- Andina Pack, November 19-22, Bogotà, Colombia;
- Pmec India, November 26-28, Delhi, India.

Visit **www.omag-pack.com** to see our packaging machines and to be always update with the latest news and events. $\widehat{\mathbf{m}}$





QUALITY AND **FUNCTIONALITY** FROM ICE-CREAM PACK

he high quality, user-friendliness and eye-catching decoration of the sleek EasySnacking™ pot from RPC Superfos are key factors in its selection for a new range of ice-creams from Russian manufacturer Taice.

Thanks to In-Mould Labelling, it is possible to show the texture of the ice cream in razor-sharp photo quality on the packaging. This is complemented by the striking purple colour of the lid that catches the consumer's attention. Overall this smart look of the EasySnackingTM pot makes the product stand out on shelf.

In addition to these powerful colours and smooth design lines, the inte-

gral spoon of the handy EasySnackingTM pot is a key feature for Taice. The spoon is neatly separated from the ice cream, and easy to grasp under a tear-off label in the lid. Taice made the vital packaging decision in collaboration with Denis Komarov, the company representative at UnipakCentr.

"The Taice ice cream is of excellent quality so it was important to find a packaging solution on a matching quality level," he explains.

"In the EasySnackingTM pot, we found what we were looking for. We value the entire packaging solution, but the spoon deserves a special mention. It is sturdy, convenient and

perfectly in tune with consumer demand for an easy sweet treat."

Taice is a new player in the Russian ice-cream market. The delicious varieties – including blackcurrant, raspberry, cherry, chocolate, strawberry and sweet condensed milk – are sold to end-users through food markets, cinemas, pizzerias and gas stations.

"People who have enjoyed the Taice ice-cream from the EasySnackingTM pot tell us that they like it very much," concludes Denis Komarov. "We do get a lot of positive feedback, both in respect of the quality and taste of the ice cream, and in respect of the packaging solution."



OUR STAINLESS STEEL JEWELLERY



A FANCY AND ADVANCED PACKAGING TO PROTECT THE QUALITY OF YOUR PRODUCTS

e're sure that our pizza will always be true to us", said Tiziano Zanuto in an interview to the business magazine "Mondo" in the 1990s. He is one of the founders and current CEO of Prodal Srl, a company that produces frozen pizza and snacks based in San Donà di Piave, in the province of Venice.

The activity was founded in 1994 when the Zanuto family, already working in the fi ld of pizza making, started up a new business thanks to the courage of a twenty-year-old Tiziano who made good use of the governmental support given to young entrepreneurs.

Time seems to have proved him right considering that today, after twenty-fi e years of activity, the adventure that began in a small laboratory has turned into a real business, going from about ten employees to a double shift work on two lines, with a production capacity of 100,000 pizzas per day against a few thousand in the fi st years. At the beginning of its activity, the Venetian company decided to focus on the Italian market only, mainly for two reasons: on the one hand, it was necessary to gain suffici nt experience to deal with the market; on the other hand, it was important to receive a positive feedback on the quality of the product.

In the wake of the excellent results achieved in Italy, Prodal decided to enter the foreign market, which was very demanding in terms of product standardisation. Soon after, Prodal's commercial success, its constant



The famous frozen pizza brand, Prodal Srl, celebrates its 25th anniversary and chooses the know-how of Tecno Pack S.p.A. to re-think and automatize its packaging department



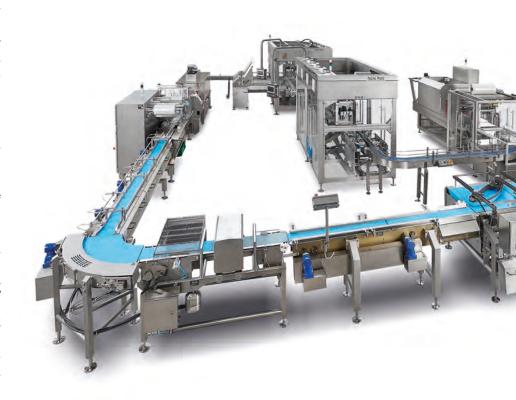




growth and the development of its range of food products led the company to focus more and more on the exports. Intending to constantly improve and invest in process innovations, in 2011 Prodal built a new plant of around 5,000 m².

The implementation of a cutting-edge automation system has meant a significant reduction in costs as well as an improvement in quality and a drastic reduction in the number of non-compliant products, too.

Here, it is worth mentioning an innovative solution introduced in 2018: a brand new blast chilling and storing system, with latest-generation cool stores, able to triplicate the product storing capacity. These structural and operational improvements project the company towards the world of Industry 4.0.





In 2014 Prodal started a collaboration with Tecno Pack S.p.A. to develop a high level of technological innovation in its packaging department. The fruitful union between the two companies has led to two great results: the innovative modifie atmosphere fl w pack packing and the heat shrink film packaging.

Since the very fi st meeting with Andrea Motta, area manager of Tecno Pack, Prodal made it clear that they weren't just looking for a simple supplier, but were looking forward to establishing a long-term and constructive partnership with a leading manufacturer able to provide guarantees and, above all, to be willing to grow together, with the common aim of creating an advanced technology to ensure the best dress for the queen of Italian food: pizza.

This is how Tecno Pack has been providing Prodal with high-performance, fl xible and effici nt systems for the past 5 years. The forthcoming delivery of a third line is part of further success.

"The great teamwork with Tecno Pack", says Zanuto, "has led to great results that certainly make us proud, but at the same time remind us of the great responsibility we have for our product. Respecting traditional

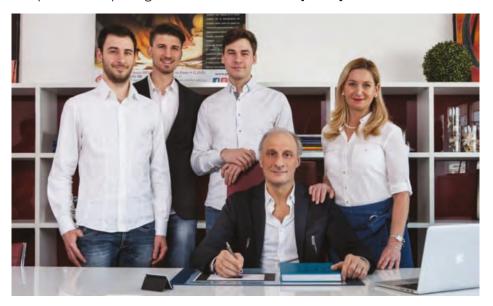
methods and approaches must be the guiding light for our production". Prodal's CEO continues: "One of the primary aspects of our mission is certainly the careful selection of the ingredients and the meticulous compliance with national and international standards regulating the food supply chains". In fact, Prodal complies with European and international standards for both management and food safety in the production, packaging and storage, and is certifi d to ISO 22000, IFS Food and BRC Food. This aspect, together with the active participation in the main national and international trade fairs, allows Prodal to make its way in the global market, exporting its products in a lot of territories, from Tyrol to Germany, from Dublin to Amsterdam, from New York to Sydney, up to Dubai, Hong Kong and Johannesburg..

And if Tiziano Zanuto admits that he is quite happy with the work he has done so far, he nevertheless insists on not lowering his guard. "Otherwise", he says with a smile, "I wouldn't be true to my pizza".

The collaboration between two large companies, both market leaders in their respective sector, could only lead to new, great success.







FRUTMAC - YOUR PERFECT PACKAGING SOLUTION

rutmac is a leading manufacturer and supplier of tailored packaging solutions and machinery for the fresh food sector. Its development and planning department, the possibility to implement **complete packaging lines**, and an unlimited range of **packaging materials** make Frutmac a well-known and reliable food packaging supplier. With over 50 years of experience in the design and construction of packaging lines throughout Europe, constant R&D investment and a Europe-wide customer service, Frutmac is a real expert in the fi ld.

The company works following three simple guiding principle, being solution-oriented, customer-oriented and offering a full-service. As the CEO of the company says: "Experience does not solve problems on its own, but it really helps", Frutmac can count on a highly-qualified technical staff, able to develop specific solutions for all customers' needs. Within the company, people have a central role, whether they be employees or customers. Therefore the company provides clients with everything necessary, from pre-sales advice to full technical support during the warranty and post-warranty period. Frutmac offers a full range of services from the design and production of new packaging solutions, installation and start-up works, and is also happy to advice its clients with the best matching packaging materials.

What makes Frutmac's offer really special is the ability to offer **individual packaging solution**, suitable for any **design and marketing requirements**. Each product requires a special packaging, whether for legal, hygienic or cost reasons.

Frutmac's development department is always on the lookout for **new trends and ideas** in order to offer **sustainable packaging** options, guaranteeing **product preservation**, **best machinerunning properties and longer shelf life**.

The company can pack fruit, vegetables, berries, meat fish, bakery products, dried fruit and much more.





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TWIN ROBOT

robot for high-speed wrapping of flow pack packages in shrinkable film



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ESPERA, WEIGHING, LABELLING AND INSPECTION TECHNOLOGIES

SPERA is a fully family owned company manufacturing weighing, labelling and inspection technologies including full software solutions for the fresh food industry. Since almost 90 years family tradition ESPERA is a highly technology driven company, setting latest standards and innovations for food production applications. With its global sales and service structure ESPERA is distributing its products within more than 50 countries worldwide via subsidiaries and distribution partners. The headquarter is based in Duisburg Germany.

ESPERA PRODUCT NEWS ESPERA NOVA ES-R WEIGH-PRICE LABELLING 4.0

Due to its perfect combination of machine hardware & software features the latest machine generation ES-R is a perfect, self-learning and intuitive machine generation. The weigh-price labelling systems is easy to operate compared to a smartphone and within one screen level all machine process can be easily controlled. Furthermore, unique features, e.g. the integrated smart head thermal bar improves the reliability of a labelling systems and optimizes the production process. With this unique thermal head technology, the machine itself gives feedback to the operator, as soon as the readability of the printing on a label is decreasing and recommends to the machine operator settings to improve the printing quality and to extend the lifetime of the thermal head. Due to this, the producers avoid product recalls of the supermarkets due to worse labelled products and improve in parallel the lifetime of a thermal head. This and many other unique, digital technolo-



gies are features within the new ES-R machine generation. For sure, classical performance parameters, e.g. machine speed up to 140 packs per minute and a high water protection level of IPX5 are in standard with the new product line ESPERA NOVA.

ESPERA NOVA ES-M – Digitalization in manual weighing & labelling

The manual system ES-M convinces with its unique and intuitive machine operation compared to the operation of a smartphone. The integrated color-

swipe touch screen enables and easy handling. Additional features, e.g. the individually adaptable printing force for a perfect label print and the unique light barrier for automatic recognition of different label sizes and geometries.

ESVS – Vision inspection technology

Since the latest regulations in food declaration, correct label content as well as the readability of a label is an absolutely mandatory requirement of the retail industry. Wrong labelled products, e.g. wrong declaration of al-





lergen facts or unreadable barcodes can lead to huge product recalls and high recall costs for producers. With ESPERA's ESVS Vision Control System on the one hand label content, barcode content and the readability of a label will be fully automatic checked. On the other hand, also, the package can be checked if there is a damage for example within the package sealing.

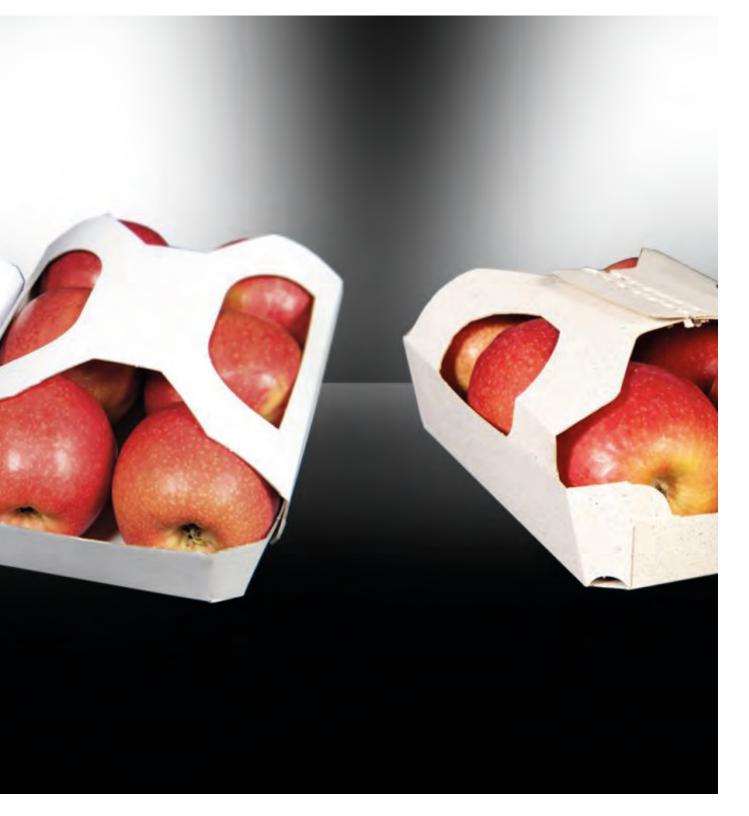
www.espera.com





Tailored packaging solutions for the fresh food sector













WWW.ESPERA-NEXT-GENERATION.COM

CONTINUE FROM PAGE 70 -

Among the packaging solutions offered by Frutmac there are trays, alveoles, films bags and p uches.

Trays are an optimal packaging solution for many types of products, such as fruit, vegetables, berries, dried fruit or bakery products. Whether in polystyrene, PP, R-PET or cardboard the company is able to deliver foodtainers in any shape and design. Cardboard trays are made of corrugated board or grass paper, to be wrapped with stretch or fl wpack films. They are also available with PET-coating, with or without lid, already mounted or flat, and can be personalized with offset, flexo or digital printing.

Alveoles make the shop-presentation of fruit and vegetables in a stable oblique position and allow safe transport. They can be realised in ground wood pulp, paper and plastic in various sizes, colours and shapes. Paper alveoles can be printed in 4 colours to maximise the advertising effectiveness.

Frutmac only offer high-quality stretch, plateau, top-seal and flowpack films in order to guarantee the best product protection while maximizing its shelf life. Films can be of different materials (PVC, PLA, recyclable films) and can be transparent, micro or macro perforated. With multicolour printing, they are ideal for advertising purposes.

All **bags and pouches** can be purchased as single items or on a roll. They are extremely resistant and transparent. They can be processed both by machine and manually, and can be **printed in multiple colours**.

A wide range of accessories for all kinds of packaging solutions completes Frutmac's offer: from labels to glue for packaging films, all accessories are of the best, high quality.





- CONTINUED ON PAGE 76



ZAMBELLI: DIFFERENT PRODUCTS, SAME HIGH QUALITY

ambelli, since 1969, designs and manufactures cutting-edge technical solutions for the packaging industry.

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

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

Zambelli core values

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

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

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

Zambelli business approach

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

Who we are and what we do?

We are #MarketOriented, because we are constantly reaching out to new horizons. Starting from our core



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

50 years of perseverance and success, an ongoing story for Zambelli and its friends.

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

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

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

We are #CustomerOriented, because for us most important is to





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

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

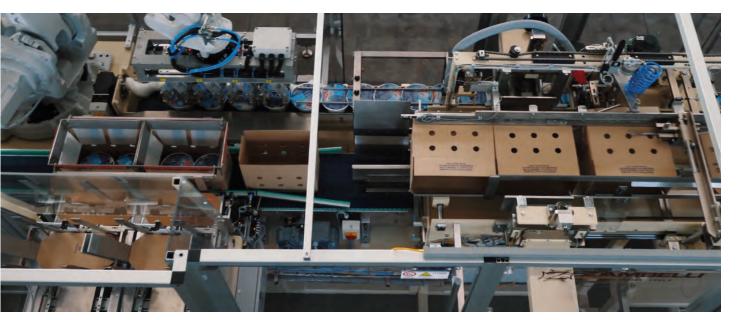
What we can do for you and your project?

Three easy steps: Meet up – contact us for a fi st meeting.

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

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

www.zambelli.it







CONTINUE FROM PAGE 72 ___

Frutmac produces and supplies highly-efficient **packaging machines** that work trouble-free for extended period of time. All machines are suitable for the installation of new packing lines as well as for the integration or extension of existing packing lines.

In combination with the packaging materials offered by the company, smooth packaging processes are ensured. Frutmac's machinery are able to satisfy the following options: automatic feeding; automated placement/positioning; sealing; product weighing labelling and preparation bulk packaging.

Frutmac's R&D department and highly-efficient service team allow the company to be at the forefront of design, technology and innovation. The company is able to respond to the most demanding needs, guaranteeing tailored solutions to its clients. Its presence throughout Europe makes Frutmac a reliable international partner.

www.frutmac.com









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The right tool for the toughest jobs





Valor™ 2000

Valor™ 4000

The new $Valor^{\mathbb{T}}$ scales combine many features that make them capable of handling the toughest food processing jobs. The keypad made of polycarbonate prevents damage from sharp objects, repealing stains, moisture, corrosive fluids and food contaminants. The Flow-Thru Design protects the scales from fluids and condensation that may form inside the scale from constant temperature changes in typical food processing environments. With their fast and accurate results, practical touchless sensors, waterproof and durable design, $Valor^{\mathbb{T}}$ 2000 and 4000 are performing at their best even in harsh environments.

THE EVOLUTION NEVER STOPS











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info@gsp.it - www.gsp.it fax +39 0445 576 286



YOUR EVERYDAY WORK IS TOUGH ENOUGH



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

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

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



their scale simply by spilling the liquid on it. I trust that after all the years we have finally succeeded - our Customers are highly satisfi d with our new Valor 2000 and 4000 scales, created especially for food processing jobs." OHAUS latest proposal for food industry jobs are Valor 2000 and 4000 Com-

try jobs are Valor 2000 and 4000 Compact Bench Scales, certifi d and highly resistant. Looking at their features it is clearly visible that they are the perfect tool for the food processing.

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

The scales' Flow Thru Design protects the scales from fl ids and condensation that may form inside the scale from constant temperature changes in typical food processing environments. The Valor 2000 and 4000 scales are NSF Certifi d and have OIML/EC Type Approval.

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

www.ohaus.com

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



P.E. LABELLERS AND PACKLAB AT CIBUS TECH 2019

rom 22 to 25 October 2019, P.E. Labellers and Packlab will exhibit at Cibus Tec, in

Parma, together as usual, with a single stand – E025-D026 in Hall 3 – where the new range of FUTURA labellers by P.E. Labellers will be showcased for the Italian market. These machines are designed for applying pre-cut wrap-around labels with hot melt glue, according to new machine control platforms with highly automated production management features. New circular frame to provide greater accessibility for operators and possibility of combining several labelling technologies on the same machine.

Another series of models, for all speeds, designed according to the concept of a 'centralised machine', with new, more versatile and performing electronics, fully in line with Industry 4.0 standards: the true technological

revolution in terms of methods of use. maintenance and productivity management with cutting-edge tools, connected to devices such as tablet PCs and smartphones, fit ed with specific apps. In particular, the augmented reality system installed on the new FUTURA machine uses an iPad with a dedicated app that allows the operator to frame the machine, monitor its operating status, and display any alarms, signals or maintenance to be carried out. With this device, the inside of the electrical cabinet - which in this case is built into the machine - can also be viewed to check its status without having to stop the machine and actually open the cabinet. This enabled us to reach extremely high levels in terms of ease of use and operator interaction: all within your fing rtips (this machine will also be on display at BRAU BEVIALE trade fair - Hall 7, stand 7-339).

The stand will also feature the WING model of the linear self-adhesive labeller by Packlab, which can label any kind of cylindrical, elliptical, rectangular and pyramidal containers.

This labelling machine can contain up to two labelling stations for front and rear partial labels, but it can also apply a wrap-around label on cylindrical containers. Fitted with MODULO 60 fl xible, simple and user-friendly self-adhesive units, it also offers the option of storing up to 500 different label formats thanks to touch panels with multimedia interfaces.

The frame features external labelling stations to provide greater accessibility for operators both during work processes and the format changeover stage, as well as sliding doors to reduce overall dimensions to a minimum and ensure maximum operator safety. Models for all speeds.

III PROMACH'

QUALITY AND CONVENIENCE THE SECRET LIES IN THE GROUP

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COLD GLUE

SELF-ADHESIVE

ROLL-FED

HOT MELT

PRINT & APPLY SYSTEMS

SLEEVER







INNOVATIVE HIGH FREQUENCY PASTEURIZATION AND STERILIZATION SYSTEM

orn in 1961, Officin di Cartigliano spa core business is based on machinery production for the tannery industry. Officin di Cartigliano Spa has studied the possibility of using alternative technology for modifying moisture content of leather before finishing

The result of a continuous innovation has led this reality to follow another winning track and invest in other areas such as the food industry. Indeed, the company patented the application for food pasteurization and sterilization at low temperatures using an electromagnetic fi ld. The processed material coming out shows higher organoleptic compounds such us nutritional characteristics, very similar to the fresh product, maintaining the characteristics of freshness in the long run.

Cartigliano Low temperatures Flash Sterilization is suitable for liquid, semi-liquid and highly viscous food in line pasteurization/sterilization processes such as vegetable drinks, fruit juices and diced, jam and marmalade, sauces and vegetables creams, milk and dairy products, fresh soft cheese, ice cream blends, High viscosity product, liquid eggs, etc.

HF TUNNEL for CONTINUOUS or BATCH processes could be used for Drying, Quick heating or Pre-Heating, Pasteurization, Sterilisation, Decontamination, Sanitizing of dried fruit and cereals, Defrosting ecc.

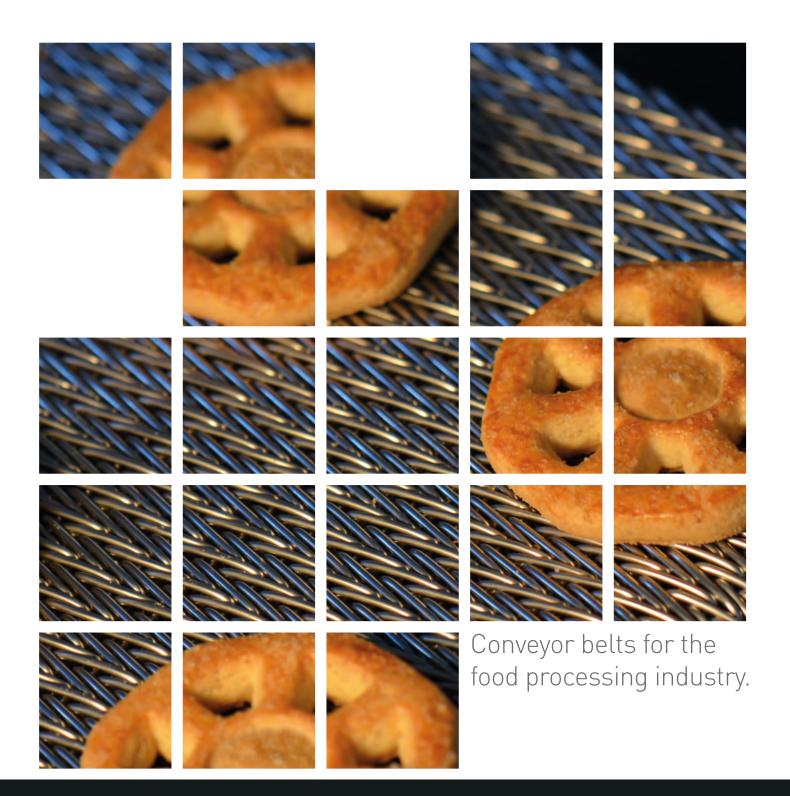
www.cartigliano.com











Costacurta conveyor belts are used in food processing as well as in many other industrial processes.

Thanks to the specific experience gained over more than 60 years, Costacurta can assist the client in the selection of the most suitable type of belt for the specific application.

Costacurta conveyor belts are suitable for applications with temperatures ranging from -150°C to +1150°C.



FROM CONVEYOR BELTS TO WEDGE WIRE SCREENS

ostacurta S.p.A. - VICO is an Italian company specialised in the designing and production of metal components for industrial manufacturers and architecture, serving markets worldwide. The company, with its 95 years of consolidated experience in the Made-in-Italy production, is based in Milan and has 2 production facilities in the province of Lecco.

Since 1921 Costacurta has been investing and researching to be more and more competitive on both the Italian and international market.

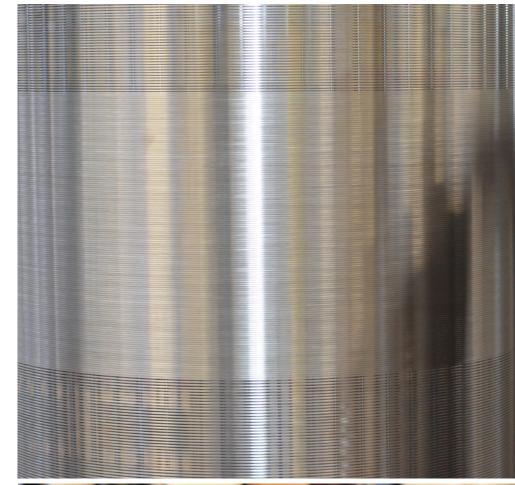
The company has a divisional structure allowing effective operations on different markets, where Costacurta works according to its mission and values.

Its entire product portfolio originates from wires and plates, and is made of:

- · Filtering elements
- · Conveyor belts
- Products for the Oil & Gas, chemical and petrochemical sectors

Metal conveyor belts

Metal conveyor belts are used in many industrial processes and sectors, from metallurgical engineering, to the pharmaceutical and food industry. These belts can be used for applications that require temperatures ranging from approx. -150°C to +1.150°C, even under mechanical or chemical stress. The company has gained a deep understanding in the designing and manufacturing of metal conveyor belts and is able to support its customers in choosing the most appropriate solution, helping them in terms of materials and type of belt to purchase on the basis





COSTACURTA'S WIDE RANGE OF SOLUTIONS FOR THE FOOD INDUSTRY





Costacurta

of operating conditions, shape, size and weight of the products to be conveyed.

In the beverage sector, Costacurta's products can be used in different applications. In particular, the belts are used for heat shrink tunnels or shrink wrappers where the final product needs to be wrapped with a heat-shrinkable film.

The belts are designed to guarantee an excellent stability of the product during the whole process. The constant speed operation of the belt, reduced vibration levels and a high functioning reliability really guarantee the perfect wrapping for any pack, six-pack and others.

Wedge wire screens

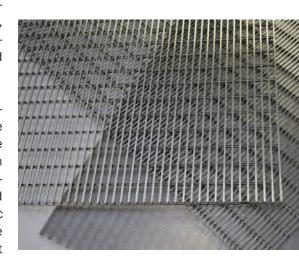
Among the usual fil ering systems, Costacurta also offers the wedge wire screens. This product allows an effective separation while guaranteeing a high mechanical resistance. The VICO-Screen® is designed for retaining materials, fil ering and sieving. It has countless applications, mainly in the chemical, mining, pharmaceutical, plastic, paper and food industries.

Thanks to their mechanical and construction features, which guarantee a high product resistance, the wedge wire screens can be considered in some cases a more effici nt alternative to metal meshes and perforated plates, depending on the specific needs of the customer. The wedge wire screen is a fil ering element

made of V-sectioned wires, arranged in a parallel manner and welded to support bars or rods. The V-section minimises the risk of clogging, allowing an effective separation of solid elements (smaller than 1 mm) from liquids, both in coarse screening and fin r screening procedures, thanks to the wide range of slots available. The VICO-Screen® can also be supplied as a flat panel, often used during germination in the production of beer.

The VICO-Screen® can be made with wires and supports of different shapes, sizes and materials in order to be able to resist to different temperatures, pressures and corrosive or abrasive actions. Malt houses, breweries and distilleries can use Costacurta's VICO-Screen® in their clarification and filt ation plants. The slots (from the smallest of 30 µm) are suitable for many production processes, from the smallest plants to industrial scale productions.

www.costacurta.it



CLEAN BUT NOT CLEAN

his purple look is a buildup of protein which occurs over days and weeks. It appears slowly, so you get used to this look. The purple protein builds up due to improper foaming & scrubbing, then you need to use an 'acid' to remove this film.

Cleaning crews will typically roster this in on a weekly or monthly basis depending on what the factory produces (blood, meat, vegetables etc). The acid will remove the purple protein & the stainless steel will be back to shiny again, often the cleaners will use a break sanitizer within this routine.

So, is this purple surface really clean?

Not from my cleaning experience. To be a properly clean surface both visually & microbiologically clean, a film should not be present. So how do you fix this?

Lack of agitation or 'scrubbing ' is the problem, build up will start on stainless surfaces when not agitated properly, and build night after night, getting worse and worse. Scrubbing every surface in a plant is literally impossible, sometimes there is a lack of time & other times the equipment is just too hard, for example an auger how would we scrub this or certain conveyors belts that are moving or areas the hand cannot physically get into. Blending machines are another example you either need to get in after lock-out (which most plants would not allow) or you need doodle bugs but you cannot guarantee to get every square inch.

So what is the solution? high pressure agitation! can give you a better result that hand scrubbing.

Now most people will have a heart

attack at this thought because they are scared equipment will be damaged.

Now this is true if used incorrectly, however if you use the correct pressure with the correct water fl w (fl w being critical) you will get a good cleaning result rather than scrubbing with a scourer. In fact pressure has the potential to be a higher quality clean than a scourer.

Scourers are a source of cross contamination if your fi st rinse out is not done thoroughly. Then don't for-



Have you ever noticed purple streaks on stainless steel in your factory?

get the purple protein that you cannot even see. If you have enough cleaners to do a lot of scrubbing, this system can work but there is a lot of room for error.

Also cleaning happens in the middle of the night so it depends on your







manager & how well they run their crew. This method has worked forever but is it the way forward? In my opinion it isn't. In our cleaning cycle we do not use Scourers except for a very small amount of jobs. We have good cleaning times & micro results without scorers. We have customers using our trolley and gun which has replace most of their scrubbing & they are getting excellent results. Staff get the training and support to use the equipment properly, the training is hands on so the cleaners can be confid nt and learn to not damage equipment. If you would like to discuss reducing your hand scrubbing or improving hygiene please contact us today.

We believe that a high pressure - high temperature machine will offer you a faster better clean, foam and sanitising machine, using less water and producing better cleaning KPI's.

We have been trialling it intensely tweaking sensors and PLC's, while doing our own cleaning contracts and consulting/cleaning trials in abattoirs and factories to ensure you get the best possible outcome. Now we are excited to present to you these units capable of running at Cold to Abattoir hot at up to 50lmin which has never been possible in a mobile unit before. Combine that with additional maintenance and safety features like oil pressure, input fl w sensor (with PLC option available) to create what we believe is the best wash and foam trolley anywhere in the word.

It washes, foams & sanitizes with the power to clean drains, chutes, floo s (with floor cleaner), roofs, chillers, refrigeration units and more! It can even be connected to power one of our Tub & Crate Washers. There is also the option of adding time-saving CIP spray bars and high-pressure rotors for spiral freezers and Conveyors.

To find out how to improve your cleaning and quality at

www.europumps.com.au or www.calgiene.com



in the picture:
Energy Resources
Headquarter - ITALY

- 4,000 sqm
- PV | 294 kWp
- GEO | 160 kWt
- EV Charging Station
- Building Automation
- Storage System
- Efficient lighting
 and air conditioning
- Rainwater recovery



Top Client

















GreenBuilding In the industrial building energy consumption is an important fixed cost that can get to absorb up to 2% of the general management costs. Any savings can result in a substantial improvement in the efficiency of the income statement.

Since 2006 Energy Resources designs cutting edge solutions for the energy integration of renewable sources, studying solutions to achieve maximum energy efficiency for industrial and commercial companies.

Thanks to important collaborations with Italian and international architects and engineers today Energy Resources has developed, as EPC General Contractor, energy projects for many of the most important brands of the Made in Italy.

With more than 110 MWp of photovoltaic systems, 15 Green Building made and several geothermal plants realized Energy Resources is the market leader in Italy for renewable, sustainable and integrated energy solutions design. Green Shopping Center and Green Food Processing is the most important concept-design for Energy Resources international development.

Our knowhow meets yuor business. Becomes protagonist in the green economy revolution.









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We don't just Sell our Trolleys We use them every day









20 years of real world cleaning experience

We believe there's no better clean, foam and sanitising machine on the market than this in the world. We have been trialling it intensely tweaking sensors and PLC's, while doing our own cleaning contracts and consulting/cleaning trials in abattoirs and factories to ensure you get the best possible outcome. Now we are excited to present to you these units capable of running at 850C-1850F which has never been possible in a mobile unit before. Combine that with additional maintenance and safety features like oil pressure, input flow sensor (with PLC option available) to create what we believe is the best wash and foam trolley



Blast Away Fat

Euro Pumps 7.5KW Trolley is unique as it capable of running Cold to Abattoir hot at up to 50I-min.



It washes, foams & sanitizes with the power to clean drains, chutes, floors (with floor cleaner), roofs, chillers, refrigeration units and more!

It can even be connected to power one of our Tub & Crate Washers. There is also the option of adding time-saving CIP spray bars and high-pressure rotors for spiral freezers and Conveyors. Talk to us about how the unit can be customised to suit your individual needs.



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ICI CALDAIE, SINCE 60 YEARS YOUR EXPERTS IN SOLUTIONS OF EXCELLENCE

CI CALDAIE is a company with 60 years of history and experience in energy management and heat production, a reference point among companies operating in the sector of steam generator for industrial processes and heating. Our company stands out for its spirit of innovation, which lead us to invest through research and development in projects aimed to create new energy systems with low environmental impact, exploring new technologies and typologies of renewable energy sources. Among these, we are investing huge resources in the production of electricity and heat from hydrogen for the housing construction market. Our headquarters and representation offic s in Russia, Belarus, Kazakhstan, Romania, Poland, UK, USA, China and Singapore and our longstanding official dealers in many other countries of the world enable us to be close to the customers who choose our solutions and to accompany them with competence through the study, dimensioning or renewal of their plant.

Our generators are appreciated in the world because they have demonstrated:

- Performances superior to 100% also for steam generators, thanks to the exploitation of technologies of condensation of gases, deriving from our know-how in the commercial sector, with a yearly reduction of fuel consumption up to 22%;
- Reduction of yearly electricity consumption up to 90% thanks to the internal design of integrated systems and to the competence in our proposals of revamping and optimisation of existing plans;
- Nox emissions < 18 mg/Nm due to several R&D projects and to the cooperation with international partners;
- The possibility to work automatically and safely with no need of supervision;
- User friendly use and control;

 The option of **remote monitoring** in order to optimize the service operation with no need of on-location technical interventions

We have developed specific products for dedicated applications in the food in-

- integrated burner with inverter regulation systems, oxygen control and effici ncy control;
- condensate collector tank with heat recovery;
- management of generator functions (load spreader) aimed to maximize



dustry, integrated systems able to satisfy even the largest demand for steam, with solutions complete and tailored to this sector.

CASE STUDY

A company in North Italy.

Use of direct saturated steam and for production of process hot water.

Delivered technology:

nr. 2 steam generators each 8000 kg/h, furnished with:

- economizer first stage for the preheating of feed water;
- condensing economizer second stage for the preheating of waters for bathings;
- modulation system of supply with double effect in order to reduce the electricity consumption of supply pumps and to optimize the quantity of water at the generator entry;

performance
Obtained results:

Performance plant: +8%

Electric power absorbed: -90%

Steam unit cost: -20%

Yearly revenues from white certifica es:

15000 €/year

What our customer say about us:

"ICI CALDAIE has proved to be the winning choice, as a young and dynamic company, characterized by a high level of technical know-how in the industrial fi ld, great productive capacity, customer assistance during the the design phase and total fl xibility regarding the production of out-of-standard generators, entirely customized along the specific r quests of the customer".

Follow us on **LinkedIn**_or on **www.icicaldaie.com**





ecovapor

Worlds apart.



THE REVOLUTION OF STEAM GENERATION SYSTEMS



-20% ELECTRICAL

CONSUMPTION



FUEL CONSUMPTION



30 mg/kWh

NOx EMISSIONS



-30%

icicaldaie.com DIMENSIONS



INGREDIENTS FOR MEAT & SAVOURY APPLICATIONS



Clearly natural solutions for perfect flavour and texture

eyond clean label Clean label has been a major trend in the food industry for the past decade, with food and beverage manufacturers keen to highlight that their products are free from synthetic ingredients and additives. But today's consumers are looking for more. They want to know what is in their food, not just what isn't. They want their food to be made of recognisable natural ingredients and they want to know where those ingredients came from. This desire for more transparency is leading to a massive upsurge in clearer labelling. So, while Innova Market Insights found in 2014 that a quarter of all food and beverage launches featured clean label claims, it also identified greater transparency - a shift from 'clean to clear' - as the top labelling trend for 2015.

In tune with this trend, Lycored offers Real Food Ingredients made from 100% tomato, enabling formulators to label products with reassuringly simple food declarations that all consumers will recognise. What's more, its verticallyintegrated business model guarantees farm-to-fork transparency and traceability. Lycored uses its own specially bred non-GMO tomatoes, carefully grown on farms in California and Israel. Once the tomatoes are harvested, a proprietary extraction process is used to remove the delicate pigments, fi bres and serum from their pulp as efficiently as possible.

Honest goodness

The unique non-GMO tomatoes bred by Lycored are naturally four times higher in lycopene than standard tomatoes. They are also rich in naturally occur-

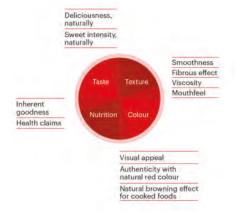


ring taste compounds, including glutamate, which is an amino acid. Lycored's Real Food Ingredients range builds on the goodness of these tomatoes to enhance the taste, colour and texture of food, while also providing an inherent nutritional advantage. There are four product types available from Lycored, as follows:

- SANTE this taste enhancer provides a high concentration of the naturalcompounds that produce umami (the fifth taste) and kokumi (the Japanese word for deliciousness). SANTE accentuates existing fl avour characteristics while remaining taste neutral.
- Clear Tomato Concentrate (CTC) a concentrated serum with a savoury
 character that offers balanced sweet ness from 60 brix combined with
 higher acidty than SANTE, which cre ates a smooth balancing taste effect.
 In tomato-based products, it also in creases tomato taste intensity.
- Lyco-Fibers these modify the pulpiness, viscosity and mouthfeel of sauces, soups and meat products. The unique, authentic texture they provide cannot be achieved reliably using other texturisers. They lend products a

- pleasant pulpy fi bre mouthfeel, without the slimy consistency of formulations that rely on alternative stabilisers such as gums and starches.
- **Dry Tomato Pulp** this combines a fresh, vibrant and consistent red colour with a stable texture for red sauces, ketchups and soups. Its fi bre content can add to the health credentials of a naturally-positioned product. It also works well as a natural colourant and texture improver in meat-based products such as sausages, in which many food colourants or starches are not permitted.

4 dimensions of goodness, from our tomato







Sharing nature's wonder from our garden to your kitchen.

We put our hearts into getting the very best from Mother Nature's wholesome treasure.

Real food ingredients, 100% tomato for taste, texture and colour.

Natural food & beverage colours, that look good and are good.

Interested in clean label, all-natural, food ingredients for better colour, flavour and texture?

Get in touch with us by emailing: infos@lycored.com

www.lycored.com

SANTE - natural deliciousness

Available as a liquid or powder, SANTE provides naturally occurring umami and kokumi tastes with a low sodium content. Umami, meaning 'delicious taste', is also known as the fi fth taste - after bitter, sweet, salty and sour - and its savoury, meaty character is detected via the taste receptors for glutamate. Kokumi, meaning 'rich taste', provides balance and a hearty mouthfeel. Kokumi is delivered by foods with the right combination of amino acids. Importantly, SANTE manages to combine both of these attributes with a clean and clear label. Manufacturers may declare SANTE as 'tomato concentrate' or 'natural fl avour', according to local regulations. SANTE is taste-neutral, with no overt tomato taste, so it can be used to boost the fl avour of both sweet and savoury products. It is ideal for use in soups, sauces and marinades and in its powdered form it can also be applied as part of a seasoning mix for products such as potato chips and extruded snacks, and in spice blends for meat products. Low dosages of between 0.15 and 0.7% are suffi cient to deliver a highly accentuated taste experience, and SANTE is stable across a wide range of temperatures and pH. As well as providing all these positive attributes, SANTE enables formulators to reduce or eliminate a range of ingredients with negative labelling connotations, such as MSG, ribonucleotides, yeast extracts and hydrolysed vegetable proteins. In addition, thanks to its ability to enhance the salty fl avour of products, SANTE allows a reduction in sodium from salt by 30 to 50% in some applications. The secret of SANTE lies in the high levels of naturally occurring glutamate in Lycored's specially bred tomatoes. Glutamate occurs naturally at high levels in many delicious foods, such as ham and Emmental cheese, Nori



seaweed and scallops. Lycored's special breed of tomato is also a rich source of natural glutamate. It has an amino acid concentration of almost 9%, of which 32% is natural glutamate.

Clear Tomato Concentrate - smooth fl avour

CTC is a clear liquid that acts as a natural taste improver for food, bringing a smoother character to savoury products such as soups, condiments and sauces. It can also intensify the tomato character of tomato-based foods and act as an extender for tomato paste, which can be expensive. CTC can be declared as consumer-friendly 'tomato concentrate' and, like SANTE, it gives formulators a way to reduce or eliminate their use of less attractive ingredients. It is stable across a range of pH and temperatures. It is colour-neutral and besides delivering a better taste and cleaner label, it can also produce a browning effect for a more appetising appearance in foods such as pies and pastries.

Lyco-Fibers - authentic texture

Formulators can modify the pulpiness, viscosity and mouthfeel of sauces, soups and meat products naturally using Lyco-Fibers. Not only do they deliver a cleaner label, but they also carry the positive benefit of fi bre content. Their high stability means that Lyco-Fibers do not undergo syneresis when used in sauces. In addition, while alternative stabilisers such as gums and starches can lead to a slimy consistency, Lyco-Fibers deliver an authentic vegetable fi br texture. Lyco-Fibers also improve the juiciness of meat products and prevent burning of the meat when barbecuing.

Dry Tomato Pulp - visual appeal with fibre

Lycored's Dry Tomato Pulp is perfect for formulators looking to produce tomato-based sauces, soups and dips with a fresh and vibrant 'made from scratch' look, taste and texture that remains stable throughout a product's shelf-life. It also suits meat products such as sausages. The pulp delivers a fresh, consistent, natural red colour thanks to its high lycopene content, combined with an authentic pulpy

texture. It also contains fi bre and can carry a consumerfriendly 'crushed tomatoes' or 'tomato concentrate' label within the EU. Conventional tomato pastes can be inconsistent, which may lead to formulation challenges. In contrast, Lycored's Dry Tomato Pulp provides reliable, consistent, repeatable results. It also permits the removal of starches from sauces, leading to a shorter ingredients list.

Benefits of Lycored's Real Food Ingredients at a glance:

- Foodstuff label declaration
- Cleaner label and a shorter ingredient list in many applications
- Stable across a range of pH and temperatures
- Allergen-free
- Kosher and Halal
- Fibre content
- No added glutamates
- Non-GMO
- Vegan

Inherent goodness - naturally

Lycored is an international company committed to 'Cultivating Wellness' by harnessing the nutritional potential of nature using cutting edge science. The result is a growing portfolio of natural ingredients and products that formulators and - just as importantly - consumers can recognise and trust. Lycored's fi rst 'hero ingredient' was lycopene, which has been clinically proven to help support general health and, more specifically, heart, skin, prostate and female reproductive health, among others. As global leaders in natural carotenoids for food, beverage and dietary supplement products, Lycored's experts are constantly developing new fortifi cation blends using lycopene to support relevant health claims. Beyond this, simply including Lycored's natural tomato ingredients allows customers to provide an 'inherent goodness' or betterfor-you positioning for their products. Established in 1995, Lycored is based in Israel, with sales and production operations in the UK, Switzerland, the US, Ukraine and China.

www.lycored.com



SIE SWISS – C.R.S.I., DRYING OF BREAD CRUMBS

he process is usually continuous. The treatment temperature cannot be too high, essentially for safety reasons, but also to avoid unwanted color variations. On the other hand it is necessary that the temperature is not even too low to have an acceptable yield.

The technique that provides the best results is that of the "fl id bed" that we have historically used in different variants where the discriminating factor is the particle size of the base product.

For this application both continuous plants such as the Turboflash and the TSA can be used, as well as discon-

tinuous systems, such as the TS. This recently finds good possibilities of application because it allows to treat products with variable fl w rates and particle sizes, guaranteeing at the same time lower consumption.

The plant, although operating in a discontinuous manner, is completely automated and easily combines with continuous lines thanks to the rapidity of the drying cycle.

It also allows the product to be cooled before being discharged and retains

a minimum quantity of residues inside it, with obvious advantages in quality and cleanliness.

Finally is possible to push the drying obtaining any final humidity value and this simply by changing the parameters of the panel cycle.

Our equipment is suitable for productions ranging from 50 to 3'500 kg/ hr. $\widehat{\underline{m}}$

www.sieswissservice.ch





Centro Ricerche Sviluppo Impianti SA



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SIE SWISS SA



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SIE: Società Italiana Essiccatoi dal 1896



DRYING AS A KNOWLEDGE-INTENSIVE PROCESS

an Tongeren Kennemer has been active for decades with the design and production of knowledge-intensive transport systems and process installations for the processing of cargo. Currently one of the focal activities is drying technology.

Jos Verleg

Van Tongeren Kennemer BV (VKT) ability to differentiate itself from the competition is the fact that the design and construction of its machines and installations is based on profound knowledge of the processes in which these systems are applied. The company's slogan – engineers who deliver – is thus translated into high-quality industrial solutions that stand for reliable processes, quality products, and high returns.

Product groups

Last year, Van Tongeren Kennemer (VTK) celebrated its 125th anniversary with approximately 70 employees. One of the more recent milestones in the history of the company was the acquisition in 2004 of the screw conveyor business of Spaans Bulk Handling Systems BV in Hoofddorp. The company's product groups now include screw conveyors and blenders, cyclones and fil ers, dryers and coolers, fans and blowers, as well as service, maintenance and repair. Modern engineering tools (such as 3D laser scanning and cloud-based modelling), and advanced machinery (e.g. laser cutting and robotic welding) allow us to produce specialised, custom-made systems.

Drying and cooling

For over 50 years, VTK has been a specialist in designing, producing and commissioning entire drying and







cooling processes. The programme includes but is not limited to 'flash dryers' (pneumatic drying systems) that can dry vast volumes of starch quickly and effici ntly. For these systems, VTK designs the complete process, from the dough supply in squeezing screws and the disintegrator to the ring dryer and the cyclone for the separation of the dried product.

The disintegrator (with a 2 MW drive for the rotor) pulls the dough apart, after which it is carried along in a powerful hot airfl w. One of the challenges in the design of such an installation is to achieve a process that is as energy efficient as possible.

Complete projects

VTK is used to taking on full responsibility for complete projects, including all construction activities at the customer's location. Not only do we take care of directing contractors, suppliers and hired staff, we also take care of security, and can do so on a 24/7 basis. Next to installing turnkey installations, VTK also concerns itself with improving the performance of existing systems. Characteristic of drying and cooling installations is that these are built do be used for decades, which means that the systems must not only be extremely reliable, but also future proof. The trend is that performance requirements with regard to for instance product quality, explosion protection, emissions, and maintenance become increasingly more strict. VTK's engineers, therefore, are fully focused on understanding our customers' processes, and the implementation of state-of-the-art technology.

Maintenance

Companies can also bring in VTK for the service, (periodical) maintenance and the repair of transport and process installations; even if these have been supplied by third parties. Thanks to VTK's expertise and process knowledge it is often even possible to om bring the performance of these systems to a higher level.

If necessary, we can stock process installation parts, so that a solution is close at hand in case of an unforeseen malfunction or failure.

VTK can also provide remote monitoring of installations within the framework of preventive maintenance, so that unplanned downtime can be prevented.

www.vtk.nl





VAC-U-MAX

CELEBRATES 65-YEAR ANNIVERSARY PROVIDING BULK MATERIAL HANDLING AND INDUSTRIAL VACUUM CLEANING SOLUTIONS - 1954-2019

AC-U-MAX has reached a proud milestone celebrating 65 years of business providing bulk material handling and industrial vacuum cleaning solutions to industries worldwide.

The company has grown from the dreams of its founder Frank Pendleton, who designed the world's fi st industrial vacuum cleaner that operated only on compressed-air to service the highly combustible textile mills industry of New Jersey.

In addition to servicing niches for combustible dust handling, in 1970 VAC-U-MAX designed and engineered compressed-air powered industrial vacuum cleaners for the evacuation of highly flammabl jet fuel for Pan American Airways, recovering jet fuel from the wing tanks of the fi st Boeing 747 aircraft.

Since 1954 VAC-U-MAX designed, manufactured and marketed a full range of compressed-air driven industrial vacuum cleaners for combustible dusts, flammabl liquids and reactive powders, with product range expanding to include explosion-proof electric-powered vacs used in agriculture, chemical and food industries, as well as portable, continuous-duty, and central vacuum cleaning systems.

In 2018 VAC-U-MAX designed the first renewable-energy lithium-ion vacuum cleaning system for high volume recovery of post-consumer waste for municipal transit track cleaning applications.



A pioneer with many fi sts, in 1965 VAC-U-MAX entered the pneumatic conveying business by designing the fi st venturi-powered vacuum-generator with patented noise suppression for applications conveying black powder for a US ordnance manufacturer.

In 1977 VAC-U-MAX introduced the vertical-wall "tube hopper" material receiver designed for "diffic It-to-convey" materials.

Today's manufacturing environment utilizes pneumatic conveying systems for moving a wide variety of powders and granular materials from sources like drums, totes and super sacks, to destinations like process equipment or packaging lines, with vacuum conveying technology the most commercially accepted. In 1989 VAC-U-MAX patented the Bulk Bag (Super Sac) Unloading Station which included massaging actuators that aid material fl w from the super sac to the process below.

VAC-U-MAX's tradition, vertical integration, application expertise, and manufacturing in Belleville, New Jersey spans three generations, with Steve Pendleton the President of VAC-U-MAX. "It gives me great pride to follow our family tradition and entrepreneurial spirit," said Pendleton.

"We are committed to building, expanding, and continuing our legacy by manufacturing high-quality solutions for industries worldwide. I am proud of what our company and employees have accomplished and will continue to accomplish, following the legacy of our founder, Frank Pendleton."

Since 1954, VAC-U-MAX has defin d leadership in bulk material handling and industrial vacuum cleaning for a wide range of industries including food, pharmaceutical, nutraceutical, chemical, frac

sand, precast concrete, packaging, additive manufacturing, plastics, nonwovens, and more. A UL-listed designer and manufacturer of control systems for general purpose and hazardous locations, VAC-U-MAX furnishes integrated controls maximizing coordination of material movement with tie-in capabilities to existing control systems. With a customer-centric focus at every step of the process, VAC-U-MAX is committed to continual improvement with quality policies, strategies and quality systems communicated within the organization.

"The secret to the success of any business is being able to focus not on fighting to keep the old, but also on building and expanding the new," said Doan Pendleton, Vice President. "At VAC-U-MAX we focus on our customers and their applications and in doing so incorporate 65 years of process expertise," said Pendleton.

With over 6,000 square feet of available fl or space in the Customer Test Facility, VAC-U-MAX offers the ability to create a multitude of equipment config rations. Over 10,000 diffic It-to-convey materials have been tested in their 65 years, adding to VAC-U-MAX application expertise in bulk material handling and industrial vacuum cleaning. Test facility is equipped to meet customer demands for full-scale vacuum conveying, fl xible screw and aero-mechanical conveying testing in addition to testing a wide range of industrial vacuum cleaners.

VAC-U-MAX product range includes vacuum conveying components and systems for general purpose and USDA Sanitary designs, multi-ingredient handling / batch weighing systems, bulk bag loading / unloading systems, bag dump stations with integrated dust collection and empty bag compaction, fl xible and aero-mechanical screw conveyors, convey line diverter valves,

direct charge blender loading, load lifters, mobile vacuum conveying systems, feeder refill systems, fiter assemblies and media including HEPA filtrati n, UL-listed control panels, as well as a full line of portable, continuous-duty and central vacuum cleaning systems for high volume recovery of many materials including combustible dusts, flamable liquids, steel shot, reactive powders and more. For more information or to REQUEST-A-QUOTE visit www.vac-u-max.com

Signature Series™ 5-Part "Plug-and-Play" Packaged Conveying Solutions

VAC-U-MAX Signature SeriesTM offers food processors a quick and easy solution for vacuum conveying powders, pellets, fla es, pastilles, dried fruit, nuts and many other granular food ingredients to processing and packaging lines. Sanitary systems are available in 1500 SeriesTM for conveying rates from handfuls to 1500 lbs/hr (680 kg/hr) or 3500 SeriesTM for conveying rates up to 3500 lbs/hr (1600 kg/hr) - with systems available for higher rate applications. Each 5-part "plug-and-play" system includes a pick-up wand, convey hose, VAC-U-MAX Signature Series Vacuum Receiver with automatic pulse fil er cleaning, a vacuum producer and UL-listed controls. Typical applications include source to destination conveying from totes, drums, bulk bags, bag dump stations and more - to feeders, mixers, blenders, screeners, food extruders, auger filling and/or packaging machines. For more information or to request-a-quote,

visit www.vac-u-max.com/SignatureSeries.



Make your spices even more valuable



www.ava-huep.com

Dynamic Spices Sterilizers



NEWS IN SHORT

SUCCESS STORY: SOUTH MILFORD (UK)

NEW GENERATION ANAEROBIC DIGESTION PLANT, WHERE BIOMETHANE FOR THE GAS GRID IS GENERATED BY 100% FOOD WASTE

he food industry has the potential to convert waste products into green energy: by-products from food industry, vegetable waste, waste from slaughterhouses, organic residue from the food processing industry, all these scraps can profitably be used in an anaerobic digestion plant to produce green energy as electricity or Biomethane. This is what happens at the AD plant that BTS Biogas has constructed in 2016 in North Yorkshire, a plant designed to take 60,000T of blended food and green waste per year and convert it into 3.769.000 Sm3/year Biomethane to be injected directly into the gas network (gas to grid plant) and 500 kW/h electricity. Moreover, the plant produces 50.000 t/ year of pasteurized liquid digestate to be used as fertilizer. This BTS Biogas plant is an important operational showcase with the application of our most advanced technologies. It is at the forefront of Anaerobic Digestion, dedicated to driving innovation and unlocking the potential of the food industry. The fi st relevant challenge in the development of a plant is the management of the AD process, starting from the food waste that the customer has available, in this case 100% waste. This plant is fed with a large variety of substrates like for example: tea industry by-products, potato chips, sandwiches, sugar water, leftovers from beer production, cola, gin, beans, cakes, fl ur, chaff, and so on. This variety makes the stabilization of the anaerobic digestion process very complex, where the experience of our biologists and our own microbiology laboratory has made the difference in the plant performance. South Milford is one of several examples of achievements where we have maximized profitabilit and biological effici ncy of the feeding



mix, where BTS has given to the client it's full biological, technical and automation support, and it's service of optimization of the biological effici ncy of fermenters. The other invaluable know how developed during the project in South Milford is the upgrading system, completely engineered by BTS. Our advanced membrane upgrading system (bioMETANm) is composed by several membranes and by an efficient temperature control technology, with a heat exchanger. Through the biogas upgrading, methane is separated from all other gases, chiefly CO2. This upgraded gas unveils two new possible applications, on the one hand the typical supply into the existing methane network, like in South Milford, on the other the usage of biomethane as fuel for vehicles. Moreover 100% pure CO2 can be produced, a gas which can be used especially in the food industry.

The advantages of BTS upgrading solutions are:

- higher lifespan of the membranes
- reduced costs, higher availability and biomethane production
- lower energy consumption
- higher biomethane production for higher returns.

BTS Biogas is the technological leader in the Italian biogas sector with more than 200 biogas plants worldwide (over 11 countries) providing a total installed generating capacity of 165 MW.

BTS Biogas is active in design, engineering, construction and service of customized biogas power plants (turnkey). Product range from plants of 100 kW up to 1.5 MW+. For over 25 years its highly qualifi d employees have been accumulating experience in designing and making biogas power plants: for all the industries that have organic materials, food-processing companies, municipal interests and farms.

In 2013, the company considerably strengthened its potential in foreign markets by setting up offic s and signing important partnerships in Europe and abroad.

The driving force behind the company is the awareness that we can make an important contribution to environmental protection by integrating agronomic, technical and biological expertise and energy recovery of biogas.

www.bts-biogas.com



SPX FLOW APPOINTS AVA DRAYTON AS ITS NEW VP, FOOD AND BEVERAGE IN AMERICAS

SPX FLOW has announced the appointment of Ava Drayton as the Vice President of its Food and Beverage business in the Americas. Drayton has a strong background in market development and is looking to further grow this core market sector for SPX FLOW

va Drayton is an experienced and well-respected global product and market development leader with experience across multiple process industries. SPX FLOW has appointed Ava as Vice President for its core Food and Beverage business in the Americas to further drive and grow market share. Drayton has previously worked for large multi-billion dollar companies; most recently in a global role in the Power and Water sector for GE.

Dwight Gibson, President, SPX FLOW Food and Beverage, commented, "Ava is a strong addition to our Americas team and her joining us is part of our ongoing commitment to provide leading processing solutions to the Food and Beverage industry. With her global experience and understanding of market development strategies she will lead our powerful and experienced America's team in this area to grow our business and further intensify our customer centric approach to sales and product development."

The SPX FLOW Food and Beverage team in the Americas is already highly customer-driven with clear focus on customer support, technical excellence and providing solutions that meet or exceed the modern demands of the food processing industry.



Drayton said, "SPX FLOW is truly a global leader in food processing solutions.

The organization has tremendous experience in applying technology and finding solutions that offer real benefit and sound return on investment. With the expertise we have in place and the on-going investments SPX FLOW makes in customer service and R&D, I am excited about how much we will achieve by continuing to build on the company's success in the Americas region."

Based in Charlotte, North Carolina, SPX FLOW, Inc. (NYSE: FLOW) is a global supplier of highly engineered fl w components, process equipment and turn-key systems, along with the related aftermarket parts and services, into the food and beverage, power and energy and industrial end markets. SPX FLOW has approximately \$2 billion in annual revenues, operations in over 35 countries and sales in over 150 countries. To learn more about SPX FLOW, please visit our website at

www.spxflow.com





FROM FRUITLOGISTICA 2019, FUTURPERA LAUNCHES THE THIRD EDITION

IN FERRARA, ON 28 - 29 - 30 NOVEMBER 2019

n event with an ever more interesting programme awaits the pear sector in 2019, with the third edition of FuturPera – International Pear Salon, the only exhibition in Europe that is dedicated to the whole production cycle of the pear.

This is what emerges from the press conference that was held on 6th February at the ITALY stand – which is managed by CSO Italy – with fig res that highlight the constant and significant growth of the event, which testifi s to a wide-scale interest in the sector.

The second edition already recorded a 30% growth in terms of attendance and companies that took part, compared to the fi st edition, with over 10.000 visitors and around 120 qualified and specialised exhibitors in all the departments of the pear production cycle, not only from Italy, but from other European countries as well, especially Holland and Germany.

The third edition of Futurpera, which will be held in Ferrara in the renovated halls of the Exhibition Centre from 28th to 30th November 2019, confir s the importance of the World Pear Forum, an international conference that is organized in conjunction with CSO Italy, which in the last edition recorded the presence of over 3.000 farmers and experts of the sector. The World Pear Forum 2019 will focus on major themes linked to pear growing, ranging from technical and production aspects to financial





and marketing ones, and touching on the themes of import, export and internationalization.

There will also be important technical meetings organized by the exhibiting companies which will enrich the programme with a more in-depth look at various matters of great interest.

Futurpera proves to be an important event due to its uniqueness and authority with the presence of the most important players of the sector at a global level. Thanks to its reputation, the 2019 edition will welcome buyers from the biggest national and international large-scale distribution channels from Germany, Spain, Saudi Arabia, Qatar, Kuwait, Dubai, Bahrain, South Africa and Chile.

The 2019 edition will also devote ample space to consumers, in order to understand their requirements and reach out to them with the right communication tools and promotional campaigns.

The consumption of pears in Italy is on a slight but constant increase (CSO Italy data) after the crash of the early 2000, however new consumers must be gained and the penetration index of the product into Italian and European families must also increase. These are the themes that will be dealt with during Futurpera 2019, trying to reach consumers during the three days of the exhibition with promotional activities that will involve the whole town of Ferrara, which is, to all intents and purposes, the "European capital of the pear".

"After the extraordinary edition of 2017 – Stefano Calderoni, CEO of FuturPera declares - we have set in motion a large-scale campaign aimed at listening to the needs of all the players in the production cycle.

Our intention has never been to organize an event that is measurable

in terms of fig res alone, because above all, we want it to be useful to the sector. Which is why we are aiming to strengthen the idea of FuturPera as a veritable forum on pear growing: innovation, markets and promotions of a top of the range national product will be our guidelines."

"The exhibition dedicated to pears in Ferrara – Paolo Bruni, CEO of CSO Italy emphasises – is also a great opportunity for the town, which takes on a central role that it is fully entitled to along with Modena, Bologna and Ravenna in the pear growing sector, which we are the leaders of on a world-wide scale".

Regarding the importance and role of Futurpera, Mauro Grossi, member of the OI Pear Committee, confirms the supporting role of the event on behalf of the whole production cycle, from production to consumption: "Pears – Mauro Grossi declares – are not simple to produce, preserve, package, market, distribute, and finally consume. A time of discussion and exchange of information about techniques and experiences is the basis of any serious revitalization project of the sector".

The President of the Chamber of Commerce of Ferrara Paolo Govoni – underlines that: "In addition to the extraordinary quality of the product to which the exhibition is dedicated, the success of Futurpera is also due to the strong integration of the exhibition with the system of businesses

that operate not only in the fruit and vegetable sectors, but also in many other filds including the hotelier sector, and the catering and services sectors.

The Province of Ferrara – the president of the Chamber of Commerce continues - is the cradle of pear growing at a national and European level. Ferrara, in fact, is the fi st province for the production of pears with over 200.000 tons, over 40% of the production of the Emilia-Romagna Region, i.e. around 30% of all Italian pears".

"The increasing importance of Futurpera enhances the Emilia-Romagna production system – Simona Caselli, regional councillor for Agriculture, hunting and fishing states – as it is an important production area with around 70% of Italian pears grown, and over 20% of European ones. Pear growing is a cultivation that communicates an important message to consumers, thanks to the use of production systems that have a low environmental impact, and the employment of innovative processing and packaging techniques.

These aspects must be taken up by marketing initiatives to support consumption and seek new markets. The effectiveness of marketing depends on the support of the activities of the Organizations of Producers (OP) and their Associations (AOP) and of the Inter-professional Organization (OI) which are the cornerstone of production and marketing management".



COLIMATIC: A STEP FORWA



he company, based in Chiari, near Milan in the northern of Italy, commenced manufacturing packaging machines in 1973! Nowadays the historical brand Colimatic has become COLIGROUP SPA. thanks to the successful collaboration with the leading companies Alfa Service & IO Trading, the sister company COLIMATIC USA Inc. based in California and the subsidiary COLI-MATIC ARGENTINA in Buenos Aires.

With thousands of packaging machines installed in more than 50 countries, COLIGROUP SPA is a leading company in the packaging industry. Its unrivalled reputation comes after a 40- year experience in designing and manufacturing innovative machinery systems. Thanks to the know-how achieved with its packaging turn-key project management, with the most renowned companies in the foodstuff and medical fild, Coligroup is sure to meet all the most challenging packaging expectations for the retail and food industries as well.

THE COLIGROUP packaging machinery range includes: thermoforming machines, which are the Coligroup's core business, tray sealing machines, vacuum chamber machines and fl wpack&vacuum combined systems. Any brand and technology for labeling, printing & product loading systems together with the most modern robotic feeding applications are the accessories, which make the packaging systems offer complete, effici nt and unique! The lasagna&ready meals processing and packaging lines, together with several other medical & food turnkey projects managed by COLIGROUP SPA is a step forward to higher reputation, reliability & a new standard of quality!

> Designed in every details, ers to select the machine

size that best suits them. Additionally within each version there are a number of options available to provide pack size fl xibility and different output levels.

The main machine's features are: High production speed; Brushless motorization allows energy saving and controls the engine for the handling of the entire production; Extreme rationalization in film using, with a considerable scraps reduction: due to a different vacuum and MAP technology, THERA thermoforming machines have 10mm lateral scrap only on the bottom film!; Top security of vacuum level and oxygen residual inside the packaging. Upon request these levels can be controlled in every packaging trough a linear electronic analyzer; Automatic control of possible anomalies in machine automatization through a micro-controller, permitting the complete machinery blocking in case of an incorrect packaging process or a rational discharge of non-conforming packs.

Total sterilization of loading area is possible ,according to last European directives concerning foodstuff; A set of specific safety covers and warning alarms are installed on THERA 650, in order to assure the total control of dangerous process.

Colimatic packaging machines can work with any kind of packaging material (laminated, plastic, paper or





shrinking film) and can be equipped with any sort of automatic loader, dosing system or printing device.

The high quality features of COLIMATIC packaging machine allow the company to propose machines which are more reliable, versatile and functional than any other packaging machine. The accurate hygiene level (thanks to rounded shapes and sloping surfaces for water draining during machine washing), their easy functioning and cheap managing allowed COLIMATIC to become market-leader in the packaging industry.

The competence in extending the product shelf life, presented with a nice and modern pack, is one of the winning features of COLIMATIC thermoforming and traysealer machines. In this area, considering the close contact of the pack with the foodstuff, it is essential to ensure the highest quality and prevent any external contamination.

Recently Coligroup R&D dept has developed a brand new and revolutionary range of **traysealing machines**, **the TDF series.** Machines' frames are completely realized in stainless steel with metal sheets obtained by laser



cutting and electrically welded holding components. The high packaging fl x-ibility is guaranteed by the Brushless servomotor management which optimize the functioning cycle according to the product exigencies. It creates an interconnection between the various elements in motion by means of electronic cam and the energy recovery system generated by the machine motor during braking is used to drive other motors installed in the system (KERS - Kinetic Energy Recovery System).

The high level of hygiene is guaranteed by the realization of sloping surfaces and easy dismantling system of the inlet conveyor.

Worthy to be mentioned, among the numerous packaging solutions proposed by COLIGROUP is the innovative packaging system mod. **OMEGA 800 1C 1200** composed by **flowpack machine&vacuum chamber**, suitable for long products such as salami, ham or processed meat:

OMEGA series machines are conceived for the packaging of products

with long dimensions (up to 1.200 mm) and heavy weight. The machine folds the products in a tubular film and realizes the vacuum into the sealing chamber, only by using a unique film reel which is sealed on 3 different sides (2 transversal sealing and 1 longitudinal sealing in the middle).

The product loading can be done by an operator (which manually charges the products on the loading belt) or the machine can automatically receive the products coming from the production facilities. The photocell, positioned on the belt, automatically reads the length of the products and adjusts the belt movement for product introduction into the vacuum chamber. This solution does **Not produce any film waste** because the "packs" always fit perfectly to any product lengths!

Moreover Coligroup's commitment to preserve our environment by reducing Co2 emissions, is highlighted by the machines features & peculiarities (standard spare parts). The R&D Department is always striving to develop more environmentally friendly packaging solutions, by using components that require less energy consumption and working on new packaging materials. Result of this continuous effort are the **paper forming machines** & our **carton MAP packaging** systems.

All Colimatic machines are designed and exclusively personalized according to customers exact requirements. The extensive lists of our satisfi d customers represent a great number of large and small organizations, which completely rely on COLIMATIC to fulfill their packaging needs!

www.colimatic.it



CONCENTRATION MONITORING WITH LIQUISONIC®

Real-time inline concentration measurement in chemical processes

nalytical methods for monitoring chemical processes are often handled manually and hence discontinuously and delayed. Process analytical technology measuring inline and online, is a perfect solution, not only to optimize the quality and effort, but also for eliminating non-sensitive aspects.

For reasons of quality and safety the control of industrial processes is essential. In many areas of the chemical industry different parameters have to be considered depending on the process.

Therefore, the concentration of the raw material, intermediates or the final product can be monitored during the production of chemical substances or separation of phase transitions. To achieve maximum efficiency of the absorption, it is also advantageous to monitor the concentration in neutralization processes or gas scrubbers.

Reducing the reject rate with inline real-time analysis

In chemical processes, the monitoring should be done directly in the process, continuously and on a real-time basis. In this way, process analytical technology provides reliable methods that measure inline and without a delay at any time. Sampling becomes unnecessary, time and costs are saved. Using a real-time inline measurement, it is possible to react very fast on deviations from the desired value and to control the process in an optimal way. This results in both quality and process safety as well as cost savings and increasing yields. By fast reactions to process changes underand overdosing can be avoided. This

measuring method	max. process temperature	max. process pressure	lifetime	investment	remark
refractive index	150 °C	25 bar	limited	average	sensitive to contamination
conductivity	180 °C	40 bar	unlimited	low	only applicable in inorganic substances
pH-value	140 °C	15 bar	limited	low	continuous maintenance due to calibration
density	150 °C	100 bar	limited	average	bypass required, sensitive to contamination
sonic velocity	200 °C	250 bar	unlimited	average	corrosion resistant due to special material

Typical installation specifications of different measuring methods

reduces the consumption of energy as well as the consumption of important raw materials. Even defective batches can be reduced what eliminates costs for failure, correction and lost manpower.

In order to perform a concentration monitoring, there exist different measuring methods, which vary in their suitability and user-friendliness. Table 1 gives an overview about typical specifications for application.

The sonic velocity measurement convinces beside the conductivity, also regarding lifetime that can be achieved. As most measuring methods are restricted to operation temperature or pressure, the sonic velocity is able to withstand tough conditions.

Conductivity measurement is usually limited to inorganic substances. In addition, many measuring methods require high efforts regarding maintenance or complex installations. However, the sonic velocity emerges as adequate measuring method for a high variety of chemical processes.

Systems using this method determine the sonic velocity as a measured quantity to calculate the concentration of process liquids.

The LiquiSonic® system manufactured by SensoTech consists of a one forked sensor with electronic housing and a controller, the evaluation unit. Depending on the process conditions, there are different sensor and controller types available.

The sensor has a completely enclosed design. At one side of the sensor, a transmitter is integrated that generates an ultrasonic signal to the receiver located at the other side of the fork.

The measuring principle is based on a runtime measurement, with which



the signal velocity is detected. Depending on the substance characteristics, there will be a change in the signal or sonic velocity. Due to a functional relation the concentration can be calculated from the sonic velocity.

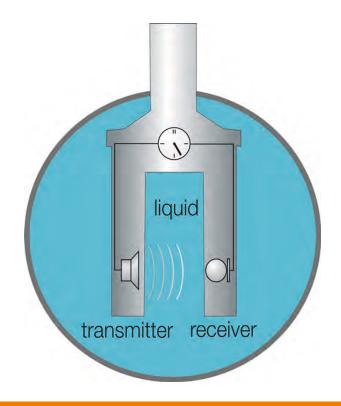
Detecting process problems immediately

During the last 28 years SensoTech's sonic velocity measurement systems convinced many customers - regional companies as well as global players.

The systems are running reliably and maintenance-free over years. For many applications the systems work maintenance-free for more than 10 years. Usually customers use them to automize process control and optimize the process efficienc.

For example, the device measures the product concentration in a plant compared to the reference value. Directly installed in the pipelines the sensor collects precisely updated measuring values within seconds and transmits this data via digital connections to the controller.

A warning signal will be displayed, if the measured value leaves the previously defin d measuring range. The controller can be connected to the process control system, where the



The measuring principle of the sensor based on the measurement of sonic velocity

warning and other controller values can be displayed too.

Individual solutions

If a process handles with hazardous substances an inline process control is recommended, because of safety reasons instead of manual sampling and analysis.

Usually the sensor is made of stainless steel 1.4571, but other materi-

als or coatings are available, what increases the variety of feasible applications. Even for hazardous or very clean areas (food) special controller housings and sensor designs ensure a safe working.

In case of expanding the plant with more measuring points, it is possible to connect up to four to one controller.



SensoTech's measuring system based on the sonic velocity consists of a forked sensor with electronic housing and a controller as evaluation unit



UPAKOVKA PARTNERS UP WITH SEVERAL DRINKS ASSOCIATIONS

Exhibitor registration for this leading Russian trade fair now open

everages take precedence at the next upakovka, which will take place at the AO Expocentre Krasnaja Presnja in Moscow from 28 to 31 January 2020. upakovka showed that it was a standard bearer at the Water-Show2019 - 18th international Forum of Bottled Water and Soft Drinks Manufacturers in Moscow in March and is now the official partner of the Russian Bottled Water Producers' Union (BWPU), who has organized the event.

The core themes of the industry within the Russian market environment, including its neighbouring states, will be discussed at the conference. Along with the industry associations Russian Union of Juice Producers (RSPS) and the Union of Soft Drinks and Mineral Water Producers, Messe Düsseldorf Moscow has agreed upon a partnership as the organizer of the event.

At the last upakovka held in January this year, it was evident that Russian consumers are placing high value on bottled water and functional beverages alongside the usual breakfast cereals, ready meals and sweet pastries. New fl vours, low-sugar drinks, smoothies and ready-to-drink teas were all trending for the urban population segment, who are becoming increasingly health-conscious.

This is why upakovka 2020 covers this range of themes extensively. It



has become a longstanding tradition that our regular exhibitors include the big stakeholders in the industry, such as KHS, Krones, Sidel, SMI, Sacmi Beverages, IMACO and SIPA and talk slots are planned in the special theme forum, innovationparc.

These will be moderated by Maxim Novikov, the Director of the Union of Soft Drinks and Mineral Water Producers. innovationparc has already doubled in capacity this year, thanks to the astounding resonance that the previous events have had.

In 2020, talks on the trending topics in the packaging industry and the

related processing industry will once again take place in parallel on two stages.

You can register as an exhibitor for upakovka 2020 online right now at **www.upakovka-tradefair.com**.

The trade fair is oriented towards eight core target groups, which consist of vendors of packaging material, packaging technology and the relevant process technology for various filds of application.

These include food, confectionary and bakery, pharmaceuticals, cosmetics, non-food consumer goods and industrial goods, in addition to beverages.





upakovka

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Singapore 31 March-3 April 2020

Singapore Expo, Hall 4 singapore.prowineasia.com

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BevialeMoscow2020

Trade fair for beverage production.

Beer | Juices | Water | Wine | Spirits | Dairy

Sokolniki, Moscow, Russia | 24-26 March



Beverages – from production to marketing

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





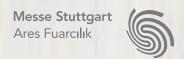


FRUIT EXPO2020 & WORLD FRUIT INDUSTRY CONFERENCE



16-18 July2020

China Import & Export Fair Complex





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13TH INTERNATIONAL TRADE FAIR FOR BAKERY, PATISSERIE MACHINERY, ICE CREAM, CHOCOLATE AND TECHNOLOGIES



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2019

SIGEP

19-23/01/2019

RIMINI

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



27-30/01/2019

COLOGNE

Fair for the sweets and snacks industry.

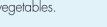


FRUIT LOGISTICA

06-08/02/2019

BERLIN

International fair for fruit and vegetables.



ENOLIEXPO

21-23/02/2019

International wine & spirits ezeustion.



INTERSICOP

23-26/02/2019

MADRID

Bread baking, confectionery and related industries show



ENOMAQ

26/02-01/03/2019

ZARAGOZA

Fair of wine and oil, for innovation and internationalization.



GASTROPAN

28-30/03/2019

ARAD

Fair for the artisan production of pastry, confectionery and baker



07-09/04/2019

CAIRO

International packaging trade fair.

VINITALY

07-10/04/2019

VERONA

International wine & spirits exhibition zeus



POWTECH

9-11/4/2019

NUREMBERG

The trade fair for powder processing.





10-11/04/2019

PARMA

International food exhibition.



18/04/2019

MILAN

Exhibition on technology for the food&beverage industry.



04-09/05/2019

FRANKFURT

Fair for the meat processing industry.

TUTTOFOOD

06-09/05/2019

MILAN

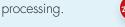
B2B show to food & beverage.

MACFRUT

08-10/05/2019

RIMINI

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



mcTER

09/05/2019

ROME

Exhibition on Energy efficiency.

PULIRE

21-23/05/2019

VERONA

Fair for professional cleaning.

SPS/IPC **DRIVES/ITALIA**

28-30/05/2018

PARMA

Fair for manufacturers and suppliers in the industrial automation sector.



25-28/06/2019

SÃO PAULO

Exhibition for product from packaging materials industry.

mcT COGENERAZIONE



27/06/2019

MILAN

Exhibition for applications of cogeneration.

SNACKEX

27-28/06/2019

BARCELLONA

Fair of savoury snacks, nut trade.

IBIE

8-11/09/2019

LAS VEGAS

Fair for bakery and confectionery indizeus



FACHPACK

24-26/09/2019

NUREMBERG

International packaging trade fair. Zeus



ANUGA

05-09/10/2019

COLOGNE

Exhibition of food&beverages.



RESTAURANTS, CAFES AND LOUNGES

07-08/10/2019

RODA AL BUSTAN (DUBAI)

Restaurants, cafés and lounges' evezeu



4P EAST MED

15-18/10/2019

BEIRUT

Fair on packaging, processing, printing.



2019-2020

HOST

18-22/10/2019

MILANO

Technological exhibition for bakery and pasta and pizza production and for the hospitality world.



22-25/10/2019

PARMA

Fair on processing technologies, from packaging to logistics.

SAVE

23-24/10/2019

VERONA

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

BRAU BEVIALE

12-14/11/2019

NUREMBERG

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

SIMEI

19-22/11/2019

MILANO

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

SPS

26-28/11/2019

NUREMBERG

Fair for manufacturers and suppliers in the industrial automation sector.

MAROCCO FOODEXPO

06-08/12/2019

CASABLANCA

International food, processing, packaging and machinery exhibition.

SIEMA MAROCCO EXPO

06-08/12/2019

CASABLANCA

International food, processing, packaging and machinery exhibition.

SIGEP

18-22/01/2020

RIMINI

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

PROSWEETS

02-05/02/2020

COLOGNE

Fair for the sweets and snacks industry.

FRUIT LOGISTICA

05-07/02/2020

BERLIN

Fair for fruit and vegetables.

INTERPACK

07-13/05/2020

...

DÜSSELDORF

Technology fair for packaging, packing, bakery, pastry.

CIBUS

11-14/05/2020

PARMA

International food exhibition.

SPS/IPC DRIVES/ITALIA

26-28/05/2020

PARMA

Fair for manufacturers and suppliers in the industrial automation sector.

FISPAL

19-16/06/2020

SÃO PAULO

Exhibition for product from packaging.

LATINPACK

12-14/08/2020

SANTIAGO CHILE (CHILE)

International packaging trade fair.

SIAL

18-22/10/2020

PARIS

Fair on food products.



ALL4PACK

23-26/11/2020

PARIS

Exhibition about packaging technology.

ANUGA FOODTEC

23-26/03/2021

COLOGNE

Fair on food and beverage technology.

IBA 24-28/10/2021

MONACO

Fair for the bakery and confectionery industry.











MEDIO ORIENTE 2019

GULFOOD

17-21/02/2019 **DUBAI**



Fair for food and hospitality.

DIAZAGRO

25-28/02/2019





Fair for companies operating in the agro-food sector.

PROPAK VIETNAM

19-21/03/2019





Fair for packaging, bakery, pastry.

DUBAI DRINK TECHNOLOGY EXPO

26-29/03/2019 **DUBAI**



Fair for the beverage industry.

GASTROPAN

28-30/03/2019

ARAD



Fair for the bakery and confectionery industry.

PROPAK ASIA

12-15/06/2019





Fair for packaging, bakery, pastry.

IRAN FOOD BEV TEC

18-21/06/2019

TEHRAN

Fair for food. beverage&packaging technology.



GULFOOD MANUFACTURING

29-31/10/2019 **DUBAI**

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



HOSPITALITY OATAR

12-14/11/2019

DOHA

Fair of Hospitality and HORECA



DUBAI



Fair dedicated to the region's fresh produce industry.

PACPROCESS

09-11/12/2019

NEW DELHI

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

FOOD PEX

12-14/12/2019

NEW DELHI

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

GULFOOD

16-20/02/2020

DUBAI

Fair for food and hospitality.

GULFHOST

06-08/04/2020

DUBAI

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

IRAN FOOD BEV TEC

15-18/06/2020

TEHRAN

Fair for food, beverage&packaging technology.



RUSSIAN-CHINA

UPAKOVKA - UPAK ITALIA

29/01-01/02/2019



BEVIALE MOSCOW

19-21/02/2019

MOSCOW

MODERN BAKERY

12-15/03/2019

MOSCOW

BAKERY CHINA

06-09/05/2019

SHANGHAI

INPRODMASH

10-12/09/2019

AGROPRODMASH 07-11/10/2019

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- Reduced waste

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