

FOOD

PROCESSING

it. MAGAZINE

n° 3-2023

BEVERAGE & PACKAGING

**PROCESS
AND PACKAGING**

ICF:WELKO

FOOD

expro®



POWTECH

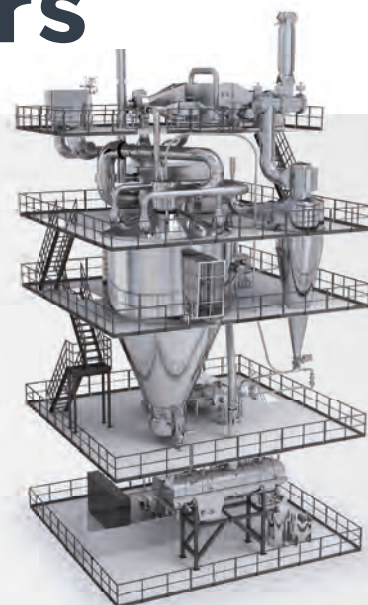
International Processing Trade Fair for

stand: HALL 4
STAND 4-269

Mixed Flavours

GLOBAL PARTNER FOR **FOOD** INDUSTRY

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



ICF & WELKO S.p.A. - Via Sicilia, 10 - 41053 Maranello (MO) - ITALY

www.icf-welko.it/food

Brau^{'23} Beviale

28–30 November 2023
Nuremberg, Germany



We unite variety.

Find out what drives the beverage industry worldwide.

Do you want to keep an eye on current topics along the entire process chain of the beverage industry? Then you can't miss BrauBeviale in Nuremberg.

The international community of the beverage industry will meet here from 28–30 November 2023. Be part of it!

www.braubeviale.de/en

YONTEX



CONVEYORS

MH is an Italian Company with 30 years of experience in engineering and building conveyor lines for food packaging. It's product portfolio goes from conveyors for machine connection, elevators, mergers and whatever accessory may be needed to realize a turnkey plant.



MODUL-FLEX

BUFFERING SYSTEMS

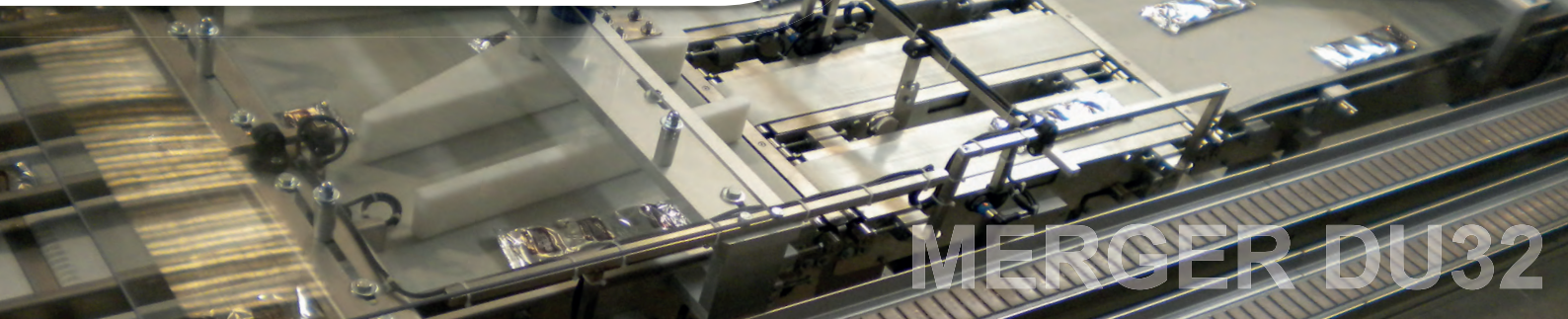
MH is specialized in buffering solutions LIFO zero pressure both with single or double spiral for packaged product or FIFO with multiple belt for the naked one.



BAT BUFFER

MERGERS & DIVIDERS

In order to comply with the increasing productivity rate and speed of packaging lines MH developed a set of dynamic mergers & dividers in achieve the correct distribution of products between the primary and secondary packaging machines.



MERGER DU32





Satinox

Since 1982



2023
22. - 26.10.
Munich
www.iba.de

VISIT US!

HALL B2 BOOTH 100

40 YEARS

ANNIVERSARY

Via Progresso 20, 36035 Marano Vicentino (VI) - Italy
Tel/Fax +39 (0)445 622821 - info@satinox.com



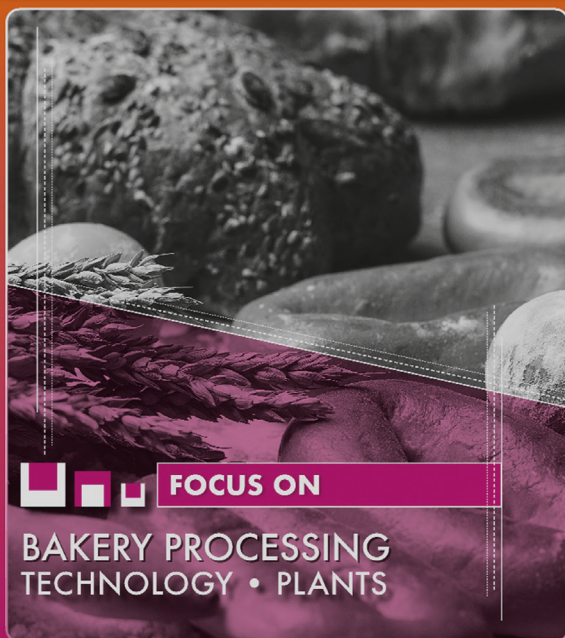
FOOD

PROCESSING

it. MAGAZINE
n° 6-2022

BEVERAGE & PACKAGING

**PROCESS
AND PACKAGING**



FOCUS ON

**BAKERY PROCESSING
TECHNOLOGY • PLANTS**

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



itfoodonline.com



CONTENTS

>01-37 POWTECH SPECIAL

>38-56 WAITING FOR IBA

>57-81 PACKAGING

>82-99 NEWS

>100-120 AUTOMATION



ICF & WELKO SPA

COLOURS AND FRAGRANCES
FOR EVERYDAY LIFE.

PG. 6-7



SATINOX SRL

KNOWLEDGE, TECHNICAL EXPERTISE AND
QUALITY: PRODUCT IDENTITY.

PG. 41



SONIA V. MAFFIZZONI
Editorial Manager

Safety, quality, product shelf life, sustainability, cost-effectiveness, and consumer preferences: in the food sector, technologies align with these concepts and serve as the cornerstone to ensure the best business results and to address the major cultural, social, and environmental changes that we are all called upon to respond to. Food is tradition, ancient art, wisdom passed down from generation to generation. But today, more than ever, it is also a capability for innovation, ongoing research, and a response to market needs and opportunities.

Consider cultivated meat, which will soon be a reality on our tables, as well as the entire plant-based food trend, including fake meat, and new ingredients derived from insects, along with increasingly faster and more efficient production processes. The future is just a step away. Let's walk towards it fearlessly, knowing that once again the market will be fully capable of meeting the challenges.





ETIPACK SPA

**LABELLING SYSTEM
FOR COWLESS MILC® MILK BOTTLES.
PG. 60**



C&G DEPURAZIONE INDUSTRIALE SRL

**PLANTS FOR THE TREATMENT
OF INDUSTRIAL WASTEWATER.
PG. 90**





SCANNY3D SRL

**GEOMETRIC DEFORMATION CONTROL
ON GLASS BOTTLES
PG. 104-105**



**EDITRICE
zeus**

editorial management and registered office:
Editrice Zeus Srl:
Via Cesare Cantù, 16
20831 Seregno (MB) - Italy
Tel. +39 0362 244182 / +39 0362 244186
web site: www.editricezeus.com
e-mail: redazione@editricezeus.com
portal: www.ifoodonline.com
skype™: editricezeus

Editrice Zeus:  

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

year XXXIV - issue n. 3 - June 2023

managing editor

Enrico Maffizzoni
direzione@editricezeus.com

editorial manager

S.V. Maffizzoni
redazione@editricezeus.com

editorial production

Sonia Bennati
bennati@editricezeus.com

account dep. manager

Elena Costanzo
amministrazione@editricezeus.com

project and layout design

ZEUS Agency
grafica@editricezeus.com

creative dep.

ZEUS Agency
grafica@editricezeus.com

translations

Leomilla Translation

in partnership with:

Thai-Italian Chamber of Commerce
info@thaitech.org

printing

ZEUS Agency

Italian Magazine Food Processing

Europe: single issue: Euro 25

Annual (six issues): Euro 120

Outside Europe: single issue: US\$ 30

Annual (six issues): US\$ 170

Subscription payment can be made in the name
of Editrice Zeus srl, by bank money transfer or cheque.

Italian Magazine Food Processing

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

Registration: Court of Monza no. 10 of 05.09.2018.

Shipment by air mail art. 2 comma 20/b law 662/96 Milan.

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

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

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

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



ICF & WELKO: colours and fragrances for everyday life



For thousands of years, man has been dedicating himself to the preparation of food, not only to satisfy the taste and the sense of smell, but also to provide a certain aesthetic pleasure to those who receive it.

All food has always been combined with spices and other organic substances to change its taste, smell and appearance.

But not only that, colours and flavours are also used to create perfumes for the body or to make the use of otherwise anonymous substances or products more pleasant.

Colours and flavours in powder form have always been necessary in both the private and industrial circle for the preparation of foods, fragrances



Guarantee a production process without contamination that could compromise the quality of flavors or smells.



and other chemical and non-chemical products that present themselves to our sensory organs. It is therefore essential for companies to be able to produce these substances in full compliance with the natural features that are intrinsic in the ingredients used, with the aim of giving pleasure to end users.

It is also essential, especially in this sector, to be able to guarantee a production process where there is no contamination that could compromise the quality of flavours or smells.

In the market of Flavours and Colours for the food and chemical industry, I.C.F. & Welko S.p.A. has reached a high level of proven experience over

the years and for this reason has been chosen as a partner also by important international companies with production sites in various parts of the world.

Our technological knowledge of the sector enables us to offer our customers both small plants for the production of powders of various flavours or colours in small batches, and large plants for the production of large pro-

duction batches. All this is done in full compliance with international environmental and safety standards, and fully meeting the expectations of each individual customer.

In this industrial circle, too, customer's satisfaction and trust are always our first target. 🏢

www.icf-welko.it

ICF:WELKO
FOOD

FOOD
processing

“GREEN PUSH, PLANT-BASED FOOD, AND THE CONSCIOUS CONSUMER: WHAT CHANGES FOR COMPANIES”

We clearly see the major changes that consumers are demanding from companies. In a market increasingly leaning towards sustainability, some trends that were previously niche are now gaining traction. Among these, the plant-based revolution, the need for transparency, and the focus on waste reduction.

Climate Change and Consumer Awareness

Climate change, the greenhouse effect, an ever-growing global population, and a planet already in resource deficit by July: these concepts, once reserved for experts, are now common knowledge. The awareness that our consumption patterns are unsustainable is a fact for many. Information, or rather accurate information, holds great power.



by Elisa Crotti





Hence, dietary choices that were previously limited to smaller groups, often motivated by ideological stances, are now finding broader acceptance.

The market is revealing unexpected needs, and companies must adapt to continue thriving. In the food sector, people now talk about a “smart era of food processing,” focused on safety, shorter and traceable supply chains, and direct-to-consumer sales models. A new vision emerges, grounded in an essential idea: sustainability.

The “Products” of Sustainability

There is a definite consumer-driven, green-oriented push, and companies are vocally responding. Sustainability has become the keyword underpinning all corporate communications.

However, how this concept is shifting consumer mindset and behavior has not been fully explored. It is undeniable that a desire for sustainable and conscious choices is not just an origin but a daily driving force.

Starting from the end-waste: the food sector accounts for about a quarter of the world’s greenhouse gas emissions, a significant portion of which is due to waste. Reducing this waste has become urgent for both consumers and companies.

Solutions are being sought in terms of production processes, ecological footprint analysis, and improved, longer-lasting packaging.

Plant-Based Food

Awareness of health impacts and ecological footprints of our food choices is steering consumers towards different consumption patterns.

The focus is primarily on plant-based foods—completely vegetarian and free from animal products. According to a recent study, approximately 22 million Italians consume them regularly, and two-thirds have them at least once a month, while one in four does so at least once a week. The average growth has neared 3%, with particular attention towards “fake meat.”

Several factors are driving consumers in this direction. First, there's an increasing focus on health, with consumers cutting back on animal products to combat high cholesterol and other health issues. It's not a fad but a re-discovery of traditional diets rich in vegetables, grains, and legumes. Moreover, plant-based foods are also chosen for taste and convenience: a little goes a long way to complete a meal. Leading the Italian market are plant-based burgers and ready meals, recording an 11.7% increase, followed by ice creams and desserts (2.6%), and plant-based beverages (0.4%).

New Consumption, New Technologies

If plant-based products are a revisitation of ancient culinary traditions, they also require innovative production processes that guarantee safety, taste, accessibility, affordability, and sustainability. Concerns that these products consume a lot of water and produce large amounts of carbon dioxide have been dispelled; they actually have a reduced environmental impact.

There remains, however, a high demand for attention to climate impact, local communities, workers' rights, and production processes. In making agricultural production smarter, key roles are played by sensors, data analytics, predictive models using machine learning and artificial intelligence, and blockchain. Also, digital technologies can be leveraged to make smarter, more retail-friendly food packaging, focusing on extending shelf life and reducing waste—a significant consumer concern, as proven by the huge success of apps like “Too Good To Go.”

The keyword for the food industry is ultimately upcycling, transforming waste materials through collaborations that reuse byproducts in other supply chains, turning unused parts of plants into derivative products with strong health benefits, like enzymes, fibers, and extracts. These partnerships will undoubtedly lead to new business models. The change is self-perpetuating; what remains is to find the right direction.



MOVE YOUR BUSINESS FORWARD



AT THE WORLDWIDE
FAIR FOR SAVOURY
SNACKS

SNACKEX

XX International Trade Fair for Savoury Snacks & Nuts

STOCKHOLMÄSSEN
STOCKHOLM
19-20 JUNE 2024

SNACKEX.COM

TRENDS
TASTES
TECHNOLOGIES
SUPPLIERS
DECISION-MAKERS
DISTRIBUTORS
TRADE PARTNERS
CUSTOMERS

 European
Snacks
Association

 Stockholmsmässan



“POWDER PROCESSING and FLUID PROCESSING simply belong together”

POWTECH 2023 is launching with a new tagline. Heike Slotta, Executive Director Exhibitions, explains why “Processing of Bulk Solids” on its own has not accurately reflected the focus of the trade fair for some time now. For most experts in process engineering, the integrated processing of powders, fluids and liquids is part of their day-to-day business.

The new tagline deliberately focuses on project managers, production heads, and also process and product developers in the sectors that the visitors to POWTECH represent. All can benefit from the official expansion to the range of products and services.

Many visitors associate “Processing systems for powder and bulk solids” with the trade fair name POWTECH. The trade fair is now repositioning itself as the “International Processing Trade Fair for Powder, Bulk Solids, Fluids and Liquids”. Is POWTECH now dedicating itself to entirely new topics?

Slotta: Let me put it this way: We are taking the range of topics that POWTECH has been covering for a long time and working them into our communications.

Dealing with liquids has complemented the POWTECH topics of powder and bulk solids processing for decades. Many of our exhibitors not only offer individual plant components but also entire solutions and plants. And these often include systems for transporting liquids or for mixing materials in various aggregate states. In this



regard, POWTECH has never ruled out processes involving liquids. For example, a supplier of nozzle and dosing systems provides the very components that can turn a container with an agitator into a coating system.

Powder processing, bulk solid processing and fluid processing simply belong together. We are thus making it clear for visitors who have an interest in spray granulation, pulvo-drying or powder dispersion in liquid that they have come to the right place at POWTECH.

Which sectors benefit most from this repositioning?

Slotta: The sectors with the highest visitor numbers at POWTECH are the food and feed industry and the pharmaceutical/chemical industry. But of course, as a technology fair,

POWTECH appeals to a large number of sectors. Experts from all kinds of industries would welcome a larger range of products and services for the combination of powder and liquid processing.

The chemical industry, which includes dyes and detergents every bit as much as fertilizers or base chemicals such as sulphur, inherently brings together all possible process technologies. In the plastic manufacturing process, melting and granulation turn large solid components and additives into master batches.

Slurries, which play a role in battery manufacture as well as in the production of oat drinks and chocolate spreads, for example, are created using a combination of process technologies for solids and fluids. And even in the building and non-metallic



mineral sector, concrete is sometimes coloured using liquid dye.

But in my view, two sectors will benefit in particular: the cosmetic and the pharmaceutical industries. Make-up foundations and eyeshadow make use of a combination of liquid, paste and solid products. Formulas for medications also often contain raw materials in powder and liquid form. Thus, for example, the properties of many tablets are perfectly achieved only with a combination of spraying, mixing and drying during the film-coating stage.

Will POWTECH also deal with beverage technology in the future?

Slotta: Although the beverage sector is part of the food industry, it is not expressly at the heart of POWTECH's agenda. But exhibitors at POWTECH can still apply their innovative solutions to respond to specific problems from beverage production.

After all, bulk solids are often among the raw materials used in beverage production, and the end product is sometimes made available in powdered form. Think of soft drinks, juices or liquid foods. Flavouring agents, sweeteners, stabilizers and thickeners in powder form are used in their manufacture. And these mixtures are sometimes liquefied again at the end of the manufacturing process. Likewise, the growing market for cold, ready-to-drink coffees calls for a combination of fluid and powder processing. Innovative technology from POWTECH exhibitors can make the mixing of all kinds of powdered raw materials and liquids much more efficient. Not only beverage producers but also plant manufacturers in this sector can benefit from a visit to POWTECH.

To sum up, you could say that POWTECH is the technology trade fair for everyone involved in processing and analysing powders and solids in the product manufacturing process. Regardless of whether the raw materials or end products are in powdered, solid, paste or liquid form. 🏢

www.powtech.de

POWTECH
International Processing Trade Fair for
POWDER, BULK SOLIDS,
FLUIDS and LIQUIDS

FOOD
processing



Online auction machinery for the food industry at former location
John Rannoch Foods in Stowmarket (UK)



Online auction jam production lines and machinery for the food industry
due to company closure in Lleida (ES)



Online auction machinery for the food industry due to closing
production location butchery Fischer in Bamberg (DE)



Online auction machinery for the food and beverage industry
in Barcelona (ES)



Online auction slaughtering and processing machinery due to closure
of former chicken processing facility in Llangefni (UK)



Register for free Find and bid Win Pay and pick up



TARNOS: Vibrating Material Handling Equipment

There are standard and specific solutions for every process related with material handling: From controlled and precise dosing, transport, screening, sieving, elevation, product cooling in confined spaces, compaction, dusting, to horizontal and vertical packaging.

Vibrating equipment in industries such Food processing, chemical products, packaging and automation, is designed to handle the product with precision that may be required.

Besides meeting the high and strict hygienic requirements: IP ratings, stainless steel components and FDA paintings. Compliance with Atex regulations on requests under special executions can be supplied.

The applications are multiple and varied where vibrating feeders can be used.

From extraction of product from silos and hoppers to dosing of solids on conveyors belts, weighing machines or any other type.

Screens allows the sorting of product by sizes in a great variety of materials under diverse conditions.

When materials contain liquids, acids or are corrosive, stainless steel can be used in parts exposed to the product.

Additionally, enclosures are available for powdery applications.

Equipment will be executed with either electro mechanic or electromagnetic technologies, depending on the characteristics of the product to be handled, and concrete demands for the procedures to accomplish.

Vibrating sieves, with a mesh or perforated plate panel to sort product by size, separate, dedusting, or clean materials. As it happens with the feeders, it is possible do manufacture the trays with different designs.

The application of the smaller sieves is geared towards efficient sieving of fine materials. The higher models are used for separation, dedusting, waste disposal and draining of large flows of materials.

TARNOS has designed and manufactured Vibrating Material Handling Equipment for more than 60 years with the support and know-how of a strong pioneer in this field; Syntron.

The participation in many projects and applications through all these years, and even in different industries, provide the company with experience to solve problems in many critical handling processes. 🏢

www.tarnos.com

TARNOS



Food Processing, Chemical Products and Packing Industry

TARNOS

TARNOS has standard and specific solutions for every process related with material Handling; controlled and precise dosing, transport, screening, sieving, elevation, product cooling in confined spaces, compaction, dusting, horizontal and vertical packaging, etc.

Due to the safety requirements in these industries, the equipment is designed with IP ratings and finishes that meet the strict requirements contained in its regulations.



Processes

- Uniform product feed and output (Freezing tunnels, ovens, seasoning...)
- Separation of products by size.
- Washing and draining of products.
- Controlled instant dosing to weighers and selectors.
- Product elevating and cooling.
- Sprinkling powder.
- Dosing in additive lines.
- Fines and dust removal.
- Convey of product between different processes.
- Compaction of product by vibration.
- Product Alignment /Product Dispersion.

Products

Appetizers and Snacks.	Pyrite and minerals.
Pasta and Rice.	Pellets.
Candy and Sweets.	Soap.
Coffee, sugar and salts.	Detergents.
Legumes and Cereals.	Fertilizers.
Fruits and Vegetables.	Glass Fiber.
Olives and Pickles.	Carbon Fiber.
French fries and nuts.	Pigments.
Cornflakes.	Granulated resin.
Preserved Food.	Adhesives.
Cookies and Biscuits.	Plastic pieces.
Frozen food.	Tablets and pills.
Pet food.	Urea.





VIOLI SRL: design and manufacturing of industrial machinery

Violi Srl was founded in 1992 upon Mr. Giorgio Violi's experience and tenacity, that have been always engaged in the design and manufacturing of industrial machinery, typically used in the goldsmith sector.

The sensitivity to anticipate market needs and the ability to adapt the production to customer's demand have made Violi Srl a serious and reliable partner, fostering the fidelity and trust of many customers at both national and international level. Violi's technologically advanced divisions offers a range of standard or customized machinery, in order to meet the highest requests of the public and to appraise the competence of each production cycle.

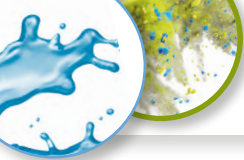
The use of new technologies allows to periodically check and analyze the production processes in order to maximize the quality and reliability of the machines.

As we all know the metal market fluctuates with the supply and demand of pure metal in the manufacturing industries. With the fast economy development of foreign growing countries the recycling and metal chip processing is more important than ever.

Environmental policies developed by governments of various countries according to EU directives and similar push the industries toward investments in equipment designed for the purpose above mentioned, helping them to bring significant economies of scale and develop an awareness of the savings. Recovery of precious







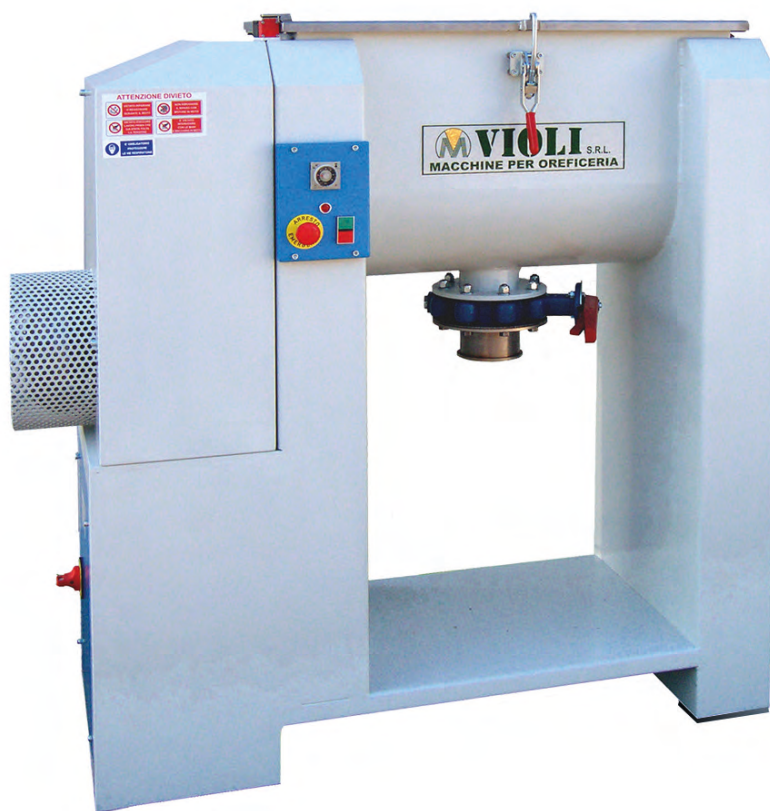
metals from industrial waste or recycling of used and obsolete materials is a key issue in the production cycle of companies operating in different sectors such as the RAEE sector; the goldsmith industry is just one of the macro sectors in which the regulated disposal of waste is necessary.

In fact, the intrinsic value of the treated waste is extremely high due to the presence of precious metals that must be recovered through a process that maximizes the yield.

Thanks to its know-how applied to the production cycles, Violi srl has developed a range of equipment that allow to simply and effectively treat wastes and to recover precious metals, according to the latest environmental and politics regulations.

Thanks to more than twenty years of experience in the national and international jewellery industry, Violi srl developed a line of "eco-friendly" equipment that allows to easy recover metals from the components of electronic cards.

In the first step, a patented machine for splitting components allows to separate components from electronic cards by using controlled heat process and mechanic action.



Through the selection of the components, elements that do not contain precious metals are removed (such as batteries, condensers, copper, aluminum, plastic pieces, etc); the others are crushed and then melted.

The result of the process is an alloy ingot composed by all precious and non-precious metals.

The process is easily and efficiently carried out, in perfect safety during all steps, and can be provided with different automations.


The automatic and manual crushing mills series MA and P designed by Violi Srl are used to crush and pulverize slags and ashes resulting from carbonization of goldsmith residues. The process is automatic and continuous.

The dust resulting from the process is filtered and separated from the metal

residues (which cannot be pulverized) through a stainless steel net.

The powders obtained by the mill should be mixed in order to obtain homogeneous products ready to be analyzed so as to determine the amount of precious and noble metals they contain.

The Violi MX series of mixers for powders, with capacities ranging from 50lt to 1500lt, can be equipped with options such as the electronic weighing system with load cells.

All the Violi Srl machines comply with the applicable international standards. For more information please contact our sales department tel. +39 0575 810487 fax. +39 0575 815903. 

Visit:
www.violimacchine.it



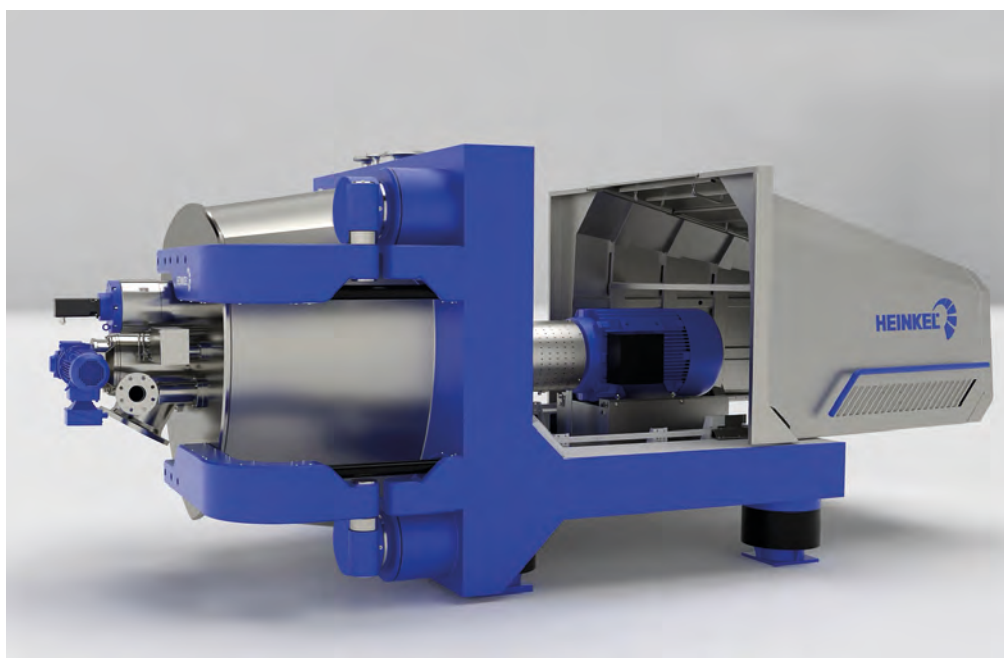


HEINKEL: presents newly developed BLUETECTOR® peeler centrifuge at POWTECH 2023

With the new BLUETECTOR® machine generation, HEINKEL is introducing a peeler centrifuge with state-of-the-art process technology at POWTECH 2023, which has also been optimised from an ecological point of view. The industry specialist, which is also ISO 14001 certified, is thus meeting the increasing demands for environmentally friendly and energy-efficient solutions. At reduced energy consumption, the peeler centrifuge offers both maximum flexibility in processing a wide range of solids as well as excellent performance and product quality.

The user benefits from a possible energy saving of 50,000 kWh per year with the BLUETECTOR® peeler centrifuge. This is achieved by innovative, only electric drive concepts, reducing friction losses to a minimum while at the same time providing maximum flexibility. The drum drive is considerably more ecological and economical thanks to an optimised electric motor without belt drive. In combination with other electric drives, the concept ensures environmentally friendly processes in hazardous areas up to ATEX zone 1. The new BLUETECTOR® machine generation convinces with clean machine areas without hydraulic oil and drive belts.

The new BLUETECTOR® peeler centrifuge also achieves savings of up to 35 percent in terms of the amount of cleaning liquid. The cleaning with integrated CIP system runs fully automatically and requires a low flooding volume due to the patented housing shape. As a result, the BLUETECTOR® peeler centrifuge not only requires



less cleaning liquid, but also correspondingly less filling time, which helps saving energy and reducing batch times.

The patented and optimised housing design enables simple filtrate drainage through the rear wall without any additional guidance for the liquid, thus additionally increasing the efficiency of the processes.

The fully electric discharge process offers variable settings for a wide range of solids, also ensuring shorter batch times due to the improved process control. The slidable machine cover reduces noise emissions and

increases cleanliness of the technical area as well as ease of maintenance.

With its new generation of machines, HEINKEL has succeeded in integrating professional design into the product development process.

The BLUETECTOR® peeler centrifuge received the "Special Mention" award at the renowned international Design Award Baden-Württemberg, known as "Focus Open", thus confirming the product development in international comparison. 🏆

Source:
www.henkel.com/category/news/



MANAGING FOOD INGREDIENTS by increasing **QUALITY**

Virto-Cuccolini's mission in the food sector

Safety, control, fineness degree, new products selection: those are the keywords summarising Virto-Cuccolini's support to the food industry. With the adoption of sieving technology from ceramic industry, a sector being characterized by highly challenging resistance and sieving efficiency requirements, in recent years, Virto-Cuccolini has stood out also in the lively and miscellaneous food industry, constant source for new ways to exceed sieving performances.

As a reliable supplier for most important food industries, the very core of Virto-Cuccolini's mission is all about the quality that careful and precise sieving can add to the various ingredients used to prepare foodstuff, with continuously improving features.

As examples we can take the many sieves supplied for hazelnut grains installed at important global players of the chocolate sector, where it is important to guarantee repeatability in final product configuration, regardless of its production site; Powder milk screening that efficaciously removes residues and lumps (unsuitable for the following mixing or processing stages), despite of the fats that tend to clog the mesh; Sugar – granulated and icing – also benefits from Virto-Cuccolini circular vibrating screens, which enable easier and more efficient cleaning operations thanks to simple machine construction: a particularly recognised advantage for medium productions that need to constantly control the effects of potential contamination due to frequent product change.








Separation through vibrating screens is an excellent solution also in case of production tailings recovery, for example in pasta and bread production, and for any other product whose look represents a quality feature. In this case, Virto-Cuccolini vibrating screens emerge as a fundamental support for recycling operations and to select new products from waste, in a circular economy viewpoint in which both environment and finance are getting advantages.

Virto-Cuccolini's experience has been developing progressively over time by assisting customers across the globe, and it grows along with not only the new challenges the food industry regularly deals with, but also the innovation input from other industrial sectors, which Virto-Cuccolini serves with the same or similar technology.

The company's test workshop in Reggio Emilia is always ready to control the capacity and granulometry performance of Virto-Cuccolini vibrating screens. 

www.virtogroup.com



“ PROTEIN ALTERNATIVES: HOW PLANTS BECOME ARTIFICIAL MEAT ”

Alternative proteins are one of the trend topics in machinery and plant engineering in the food industry, and thus also at POWTECH.

But how are they actually produced? And what challenges do product developers and machine designers face?

A short deep dive into a fascinating technology segment.

Nothing works without proteins. They are the cornerstone of all living things and provide our bodies with amino acids from which muscles, cells and tissues, as well as antibodies and hormones, are built. Eggs, meat, fish and dairy products are traditionally important sources of protein, but so are plant proteins - and these are becoming increasingly important for the world's food supply. But it is a long way from the soybean, lupin or wheat grain to the vegan sausage substitute, and a lot of technology is involved. The protein must first be extracted from the raw

materials and processed before it can be “textured” into a meat or sausage substitute.

The process starts with sorting and cleaning of raw materials, be they pulses, seeds or others, which are then first ground.

This still comparatively classic preparation process is then followed by protein extraction, which can be carried out differently depending on the raw material. This is often done in a multi-stage process with water or salt



solutions, but organic solvents are also used. The raw materials are first soaked to separate the proteins from the carbohydrates and other components.

Then the separated protein is precipitated from the solution (protein coagulation) and separated. Finally, the solution (concentrate or isolate) is processed directly or dried in a spray dryer to generate a powder. This powder forms the starting point for texturing - a process that ultimately leads to the meat-like product.

From the purification of soybeans to protein powder

Even this rough overview indicates that a wide variety of machines and equipment are needed in the various steps. So let's take a closer look at this using the example of the production of soy isolate: The soybeans are cleaned, ground and soaked in water.

They are then heated to release the proteins. Centrifuges or decanters make their big appearance during protein extraction: in their conical rotating drums, solid particles are forced outwards by centrifugal force and form a layer on the inner wall of the drum. The liquid collects in the centre and is discharged through an outlet. This continuously separates the protein solution from the plant residues in the first step.

After the initially dissolved protein has been "precipitated" into protein flakes by adding acid or salt, these are also concentrated in a decanter. In order to make the protein as completely usable as possible and to reduce the wastewater load, protein flakes that have not been separated in the decanter are separated in an additional plate separator; this works because the machine uses both centrifugal forces and gravity.

Finally, the coagulated proteins are washed and acid residues are neutralised, centrifuged again or filtered. Finally, the soy isolate is dried at low temperature - for example in spray dryers. As the name suggests, the protein-containing liquid is sprayed from above into a drying chamber where it falls towards a stream of hot air, causing the liquid to evaporate and the previously dissolved product to finally fall to the ground as a dry powder.

Texturing is the only way to create a competitive meat substitute

However, all these steps are only the preliminary work on the way to meat substitutes! Because in the end, it is not only the content and taste that are decisive for the consumer, but also the bite and mouth feel. In order to achieve a "customer experience" that is as true to

the original as possible, the vegetable proteins must be textured. This is usually done in special extruders, where various raw materials and spices of the recipe are first mixed and ground to achieve a uniform consistency. This mixture is dosed into an extruder and water is added via spray nozzles.

One or even two screws rotate in the elongated machine, transporting the material towards an opening (die) at the end of a cylindrical chamber. On this path, the mass is exposed to high pressure as well as defined shear forces and temperatures, whereby the protein denatures - this is referred to as the cooking extrusion process. At the end of the extruder, the product is discharged through a nozzle, producing fine fibres that are cut to a desired length. Depending on the process, either dry textured vegetable proteins (TVP) or those with a high water content (HMMA) can be produced. The latter are most similar to meat, while TVP have to be soaked in water before further processing.

High demands on the machine technology

The demands on the technology used are high: on the one hand, the machines must be flexible enough to process different recipes and raw materials. In addition, hygiene plays a major role - all components should be free of dead space and easy to clean. Because the centrifuges used in the first step have to set large masses in motion, energy efficiency plays an important role here. In addition, it is important to produce solids with the lowest possible moisture content in the separation step, because the subsequent drying is an energy-intensive process.

In texturing, the precision of the components used in terms of dosing accuracy and process parameters such as pressure and temperature is of great importance. With increasing demand and growing production volumes, integrated processes in which the complete line is optimally coordinated are also becoming more and more important. Automation also plays an important role here. It not only ensures high productivity, but also reproducible, consistent processes and complete documentation of the production parameters.

At POWTECH, machines and solutions for the entire process chain - from bean to granulate - will be on show. The new scope, which includes liquids as well as powders and bulk solids, takes into account the integrated, holistic view of the process chains.

The author:

Armin Scheuermann is a chemical engineer and freelance trade journalist.



TECHNICAL SERVICE KEEPS PLANTS UP-TO-DATE

Modernizing and expanding existing plants increases the efficiency and saves cost

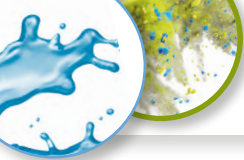
Plants in the food industry can produce high quality products for decades as long as they are regularly updated. Doing so doesn't always require extensive modernization work; however, it does require a constant dialogue with the plant manufacturer



The After Sales Service department of Zeppelin Systems GmbH looks after most plants for as long as they are in use. The team not only takes care of regular maintenance work but also updates plants for today's and future chal-

lenges. These Revamping projects are an everyday challenge and encompass simple tasks like changing mechanical parts such as pipes or valves or even optimizing an entire plant, which can also mean exchanging a complete silo.

Projects are often driven by new legal requirements (e.g. ATEX), changes in the Ordinance on Industrial Safety and Health, new hygiene standards or changes in the EC Directive on Machinery (e.g. energy efficiency). The Revamping



team also gets involved when a new product or a new recipe is planned to be processed in the plant.

Another common case: A plant has been operational for two years already and the daily routine unveils handling bottlenecks. This happened in a cookie production plant in Saudi Arabia where the dosing of glucose/syrup mixture was done by hand – a sticky task that was hard to control. “Of course it doesn’t make sense to redesign the whole plant for that,” explains Martin Faller, Head of Key Components & Customer Service at Zeppelin Systems. “We integrated an automated dosing system instead that added the automated batch tracking as a bonus feature on top.” This application is a good example of how a small customer request can develop into a substantial Revamping order. “We learn through experience that the plant operators are often not involved enough at the planning stage of the plant,” says Faller. Many Revamping projects provide the opportunity to optimize the plants for the local requirements while implementing measures to improve productivity.

Simply update the mechanics

Many Revamping projects are initiated in order to upgrade the control technology, usually from the Simatic S5 to the S7 system. “Operators are used to software changes, but who thinks about updating a discharge aid? Mechanics can be brought to a whole new level just as well,” Faller claims. There was a project where originally just a recipe change was planned. This required changing the powdered sugar dosing from one line to two. In the end, not only were the old steel vessels exchanged for stainless steel ones but the filters as well to meet the ATEX requirements. In order to eliminate a bottleneck, the buffer vessels

were enlarged and equipped with special discharge screws that had an integrated mixer with intermittent operation. This led not only to an increase of throughput but also to a reduction of clotting and sticking, putting an end to the frequent plant downtimes. Another good example are plants in the Middle East, where fluctuations in quality hinder the continuous supply of raw material. This is often countered by an increase in silo capacity which, in turn, leads to Revamping programs. The same tendency is true for Europe, although here the driving factor is fluctuation in price rather than in quality, but the demand for Revamping projects is just the same.

Whole-grain flour presents new challenges

Sometimes consumer trends trigger Revamping projects. The Brandt group employs more than 800 people in three locations in Germany. Brandt is the market leader in Germany with a share of 80% of the zwieback business and sells its products worldwide – six million zwieback toasts a day, along with crispbread and chocolate. 60 tons of zwieback are produced every day in the Ohrdruf (Germany) plant



close to Gotha near Erfurt, Thuringia. Zeppelin Systems (formerly Reimelt) supplied this plant twelve years ago and since then, the maintenance team around the technical director Steffen Keichel has been taking care of maintenance, optimization and operation. In 2012, Brandt approached Zeppelin Systems in order to adjust the plant to





new demands from the market. "The content of whole-grain flour had increased year after year," reports Keichel. Until then, the whole-grain flour required had always been weighed manually and added to the dough. This was feasible but very labor-intensive and always prone to human error, requiring additional strict control that used up time reserved for other tasks. Therefore, changing the dosing and weighing of whole-grain flour from manually to fully automatic was necessary. "We designated an existing silo to whole-grain flour and modified it accordingly," says Keichel, describing the plant integration. The silo is 16 meters high, has a discharge unit and an additional separate sifting machine. Diverter valves were changed and pipes newly routed. "This might sound relatively simple, but on top of all mechanical integration work, the silo and the new diverter valves had to be integrated into the programming and visualized in the user interfaces," he explains. Brandt gladly relied on Zeppelin Systems for the planning and realization of the Revamping. "Zeppelin Systems knew the plant in and out, making the silo integration a very fast job," says Keichel. Thanks to perfect preparation and planning and

a very experienced team, the Revamping was completed in less than three days. Today the production planning is done more flexibly and manual weighing is history. "We have not only gained new freedom in planning and are more flexible in production, we also have more time for other tasks now," he adds while praising the excellent cooperation. "I am sure we will turn to Zeppelin Systems again when another project such as this one arises."

Trust is everything


From a customer's view, Revamping projects are less time-consuming than rebuilding complete plants, which requires substantially larger investments and often causes production downtime.

Zeppelin Systems is convinced that Revamping is the logical consequence resulting from the long-lasting and very close relationship with their customers. "We stay close to the customers from the very beginning of the plant to its end," says Faller and adds: "We did that even long before the term lifecycle management was coined." For Faller, Revamping is not just a department in an organization. "The basis for our Revamping projects is the trust of our customer

and our constant dialogue with him. Often enough plant operators don't know what technology offers today." Zeppelin has the vast experience of the most unconventional solutions realized in more than 1,000 plants world-wide. Operators can count on getting the best solution possible.

ABOUT ZEPPELIN SYSTEMS GMBH

The Strategic Business Unit (SGE) Zeppelin plant engineering with its 1,300 employees at 20 locations world-wide is specialized in the development, the production and the construction of components and systems for the handling (storage, conveying, mixing, metering and scaling) of high quality bulk materials and liquids. In this area Zeppelin Systems supports its customers from the project development phase via engineering, production, job site installation, commissioning to the after sales service.

The customers of the SGE plant engineering belong to the chemical industry, plastic producers and processors, the rubber and tyre industry as well as the food industry. For further information. 

www.zeppelin-systems.com





Plan and operate **process plant safely**

POWTECH Nuremberg, booth 2-216: Glatt focuses on hygienic design competence, efficient processes and occupational health and safety

Glatt, the pioneer of fluid bed and spouted bed technology for bulk solids processing, will be presenting cutting-edge safety concepts at POWTECH 2023 in Nuremberg (Germany) that go far beyond current legal requirements. As a plant manufacturer and operator, Glatt combines professional engineering with extensive technological know-how from its own practi-

cal experience. Visitors to the stand can discover which comprehensive concepts and innovations Glatt has developed and how they pay off in



terms of product quality, fire/explosion protection, operational safety, heat recovery and environmental compatibility.



Glatt takes a holistic approach to planning new facilities and converting existing ones.

This not only focuses on optimal particle design, but also ensures sustainable operation, especially in bulk materials processing industries.

In addition to optimised space concepts and complete building solutions, Glatt's expertise extends to waste and environmental management, energy concepts and the handling and containment of toxic and highly active substances.

Hygienic design and product safety

Particular attention is paid to hygienic and safe production, especially in the food sector and for items destined for the consumer market.

Glatt has implemented robust processes in production facilities to meet the requirements of the Global Food Safety Initiative's Food Safety System Certification 22000 (FSSC), which minimises product liability in the event of damage.



Glatt specialists take structural and conceptual aspects into account, as well as the process itself, to develop new concepts for the dust- and contamination-free handling of highly active toxic products, for example.

Design improvements such as securing individual components against overpressure-induced bursting are also part of the process and make cleaning and maintenance work on fluidised bed and spouted bed systems significantly safer for employees.

Tailor-made explosion protection

Glatt offers various explosion prevention devices and measures that have been assessed theoretically and subsequently proven in practical tests.

Ignition sources are avoided as far as possible, all parts are earthed and an appropriate plant design is chosen to ensure maximum safety.

Customers can select from the most appropriate option, whether that's ex-

plosion suppression, pressure relief, inert gas or vacuum operation.

At the Glatt Technology Centre in Weimar, not only are tests done on the production and functionalisation of powders, granulates and pellets, but further trials are run to optimise the process.

Safety-relevant processes can also be tested at laboratory scale before being used in production.

"Our many years of experience as a plant manufacturer and operator enable us to offer our clients customised safety concepts that meet their specific requirements.

We focus on forward-thinking action and stand for maximum protection, efficiency and quality in bulk solids production," says Dr Michael Jacob, Head of Process Technology at Glatt Ingenieurtechnik.. 

foodfeedfinechemicals.glatt.com

For more than 30 years, Glatt Ingenieurtechnik GmbH plans and implements international projects from the enlargement or modernization of existing production facilities to the construction of whole new factories.

The plant engineering and process expert combines professional engineering with sound technical know-how derived from patented process technologies, such as Glatt powder synthesis and fluidized and spouted bed methods for granulation and coating processes.

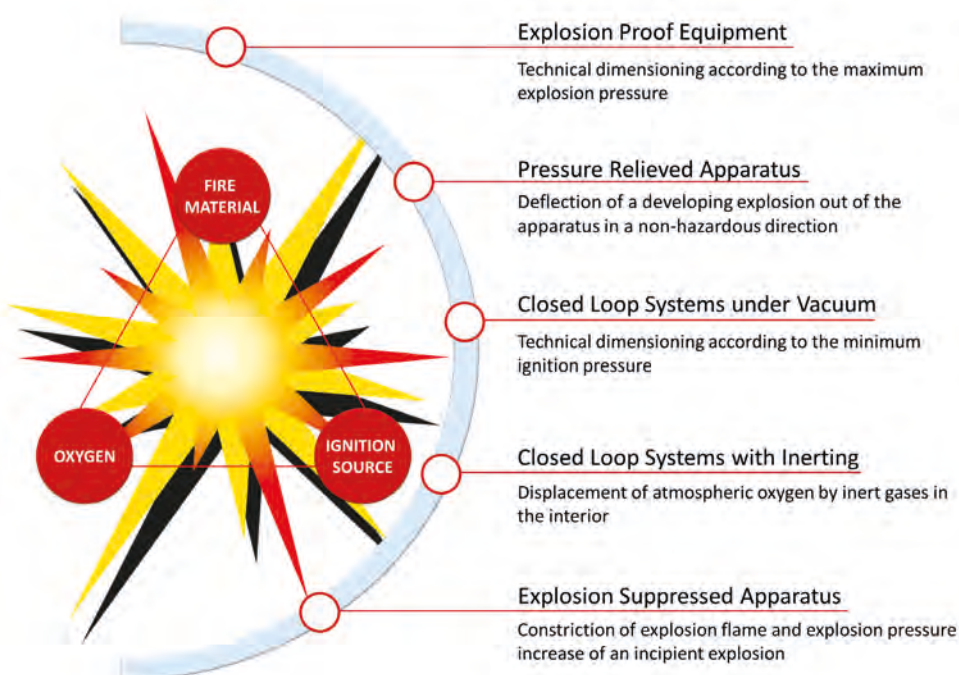
The focus of the projects is on processes in the field of particle design and particle engineering for the development, optimization, functionalization and production of powder and bulk goods such as granulates and pellets.

These are used in the food, feed, chemicals and fine chemicals industries.

Glatt is also a leading partner in the engineering of pharmaceutical and biotechnological facilities for the manufacture of solid, semi-solid, liquid and sterile dosage forms.

The company's headquarters are in Weimar, Germany, and affiliates are located in Germany, Europe, India and the USA.

As an integral part of the international Glatt Group, Glatt Ingenieurtechnik can draw on a global network of some 3000 employees. Numerous agencies exist worldwide as contacts for the full range of goods and services.





NEW LABORATORY MIXER for the foodstuffs and pharmaceutical industries Expanded R&D Center

MTI Mischtechnik presents an all-new line of laboratory mixers developed for the pharmaceutical and foodstuffs sectors.

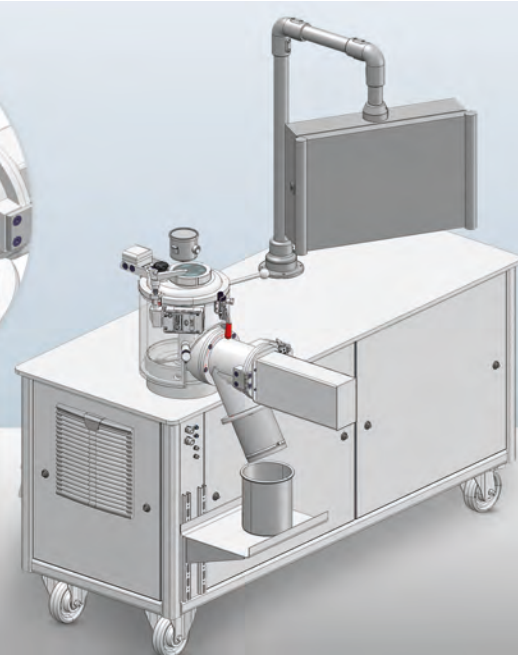
The design corresponds to these industries' very exacting hygiene requirements; the systems can nevertheless be flexibly adapted to the special needs of diverse applications. The model shown at stand 1-254 in hall 1 was configured at the request of an industry leader who will use it for recipe development in dairy processing.

A further highlight is MTI's UT 250 vertical universal mixer having a working volume of 205 liters; this unit, too, is built to a very high standard. In addition, MTI presents the latest capacity expansion of its R&D Center that will provide further flexibility gains in developing customer-specific machine configurations and in implementing pilot production runs.

New laboratory mixer for elevated hygiene requirements

The MTI laboratory mixer premiered fulfils elevated hygiene requirements, whether in homogenising different recipe ingredients or as a friction mixer for carrying out thermal processes.

The energy input is adjustable over a wide range via the machine's rotational speed and hence, the



MTI Mischtechnik premieres its newly developed line of laboratory mixers for the foodstuffs and pharmaceutical industries. The version presented at the trade fair is tailor-made for dairy processing needs on behalf of an industry leader.
© MTI Mischtechnik

peripheral velocity of the mixing tool. Moreover, the mixture can be tempered by water via the mixer's double jacket. Thus, the application range of the new laboratory mixer covers broadly diverse process tasks, including coating, agglomerating and vacuum drying.

The food-grade model provides a vessel volume of 10 liters at a working volume of 2 to 8 liters. The laboratory mixer's design allows an easy scale-up to industrial operation for recipes and processes developed

to volume production standard. Its outer parts and all surfaces in contact with the mixture are made of stainless steel 1.4541, with the latter industrially ground to a grit 1200 high-quality finish.

At a drive capacity of 5.5 kW, the rotational speed of the individually configurable mixing tool can be variably selected between 300 rpm and 3,000 rpm adequate to circumferential speeds between 3.7 m/s and 37 m/s. For additional flexibility in the laboratory the mixer can



be moved on casters. As has been standard on MTI products for many years, the new laboratory mixer features a clearly structured touch panel and a Siemens S7 control for manual and automatic operation.

Still more versatility in developing for and with customers

For a number of years, MTI – with its excellently equipped in-house R&D Center – has been on record as a particularly efficient partner in the development of tailor-made mixer technology.

With its most recent expansion, the company's laboratory provides more scope, e.g., for trials on a larger production scale, as well as a dedicated area for testing under ATEX conditions plus special rooms for mixing products subject to a high contamination risk.

Since October 2016, MTI's experienced team has been reinforced by process engineer René Weiffen, who brings additional expertise to the task of resolving R&D challenges for, and with, MTI's customers.

Ulrich Schär, General Manager at MTI, comments: "With the launch of the new laboratory mixer for particularly exacting hygiene requirements



Determined to leave no mixing problem unresolved, MTI Mischtechnik continues to expand its R&D Center (left).

In process engineer René Weiffen (right), customers now have a further expert at their service. © MTI Mischtechnik

and the ongoing expansion of its R&D capabilities, MTI emphasises its role as a leading innovator in the mixing industry. Already, our standard line-up of machines meets the conditions for integration into Industry 4.0 environments. But we place an equally strong focus on individual

developments addressing highly specific customer objectives.

With our ambition not to leave any mixing problem unresolved, we have gained a strong market position among the world's leading mixer manufacturers in recent years."



MTI Mischtechnik International GmbH, established in 1975, is an internationally leading manufacturer of mixing and processing equipment for the plastics processing, chemical, food and pharmaceutical industries. With a staff of more than 50 employees working at its headquarters site in Detmold, Germany, the company manufactures mixer systems noted for their outstanding mixing performance as well as energy and cost efficiency. The portfolio includes vertical high-speed mixers, horizontal mixers, heating/cooling mixer combinations, universal mixers, laboratory mixers as well as tailor-made systems. With an export rate of around 80%, MTI Mischtechnik is globally aligned and, as an owner-managed family business, relies on quality that is "Made in Germany". 🏠

www.mti-mixer.de



Screening equipment **MADE IN ITALY** **SINCE 1956**



MR – Vibratory Sieves the vibrating sieving machine is used for the separation, classification, scalping, dedusting and selection of powders and liquids. Allows to achieve up to 5 different particle sizes, extremely robust construction and ease to disassembly. Available with ATEX certification, FDA IQ-OQ procedures, GMP, BFM fittings, Jacob fittings and finishes for the food and pharmaceutical industry.

Available in the following models:
16" (Ø 400 mm) – 20" (Ø 500 mm)
– 24" (Ø 600 mm) – 30" (Ø 800 mm)
– 36" (Ø 900 mm) – 48" (Ø 1200 mm) – 60" (Ø 1500 mm) – 72" (Ø 1800 mm) – 90" (Ø 2250 mm).

Features: the vibration is through an unbalanced motor with a double extended shaft, fitted at both ends with eccentric weights. Rotation of the top eccentric weights creates vibration in the horizontal plane, which causes material to move across the screen cloth to periphery increasing the horizontal throw, causing oversize material to discharge at a faster rate. The tangential component of motion is controlled by the angle of lead given to bottom weights with relation to top weight. Variation in lead angle controlled the spiral pattern of material travel over the screen cloth.

Benefits:

- Low power consumption;
- Varied range of applications;
- High processing rate per unit area of screen;
- Accurate separation;
- Screening up to 200 mesh;
- Applicable different anti blinding systems;



- Modular design to yield up to 6 predetermined fractions;
- Dust-free and noiseless processing;

- Dry separation: Pulps, Woods, Animal Feeds, Foods, Grains, Cosmetics, and Chemicals;

Application:

- Solid/Liquid separation: Paper & Pulp, Food, Ceramics, Chemicals, Minerals, Waste Disposal, Paint and Pigments;
- Dry classification: Food, Pharmaceutical, Petrochemicals, Fertilizers, Ceramics and Pigments;

MSC - Check screening machines:

Low profile Check Screener is a round separator used for the safety screening and check screening of powders and liquids by removing the oversize contamination. Available with ATEX certification, FDA IQ-OQ



procedures, GMP, BFM fittings, Jacob fittings and finishes for the food and pharmaceutical industry.

Available in the following models: 16" (Ø 400 mm) – 20" (Ø 500 mm) – 24" (Ø 600 mm) – 30" (Ø 800 mm) – 36" (Ø 900 mm) – 48" (Ø 1200mm) – 60" (Ø 1500 mm) – 72" (Ø 1800mm) – 90" (Ø 2250 mm).

Features: the vibration is through a twin unbalanced motors with a double extended shaft, fitted at both ends with eccentric weights. Increasing the eccentric mass, increases the horizontal throw, causing oversize material to discharge at a faster rate. The vertical motion also minimizes blinding of screen by "near size" particles.

Benefits:

- eliminate oversized and purify material;
- higher throughput per unit mesh area;
- easily to dismantle and clean;
- dust proof;
- can fit easily into existing installations and areas of limited headroom;

- lowers noise levels typically as 70dBA;

Application: featured industries are Food & Beverage, Pharmaceuticals, Chemicals, Coatings, Ceramics, Metal Powders, Water Processing, Recycling.

Centrifugal Sifters: The centrifugal sifter TURBOWEST is particularly suitable for control sieving of solid products.

The centrifugal sieve sturdy construction and ease of integration into existing plants, makes it an easy choice for sieving a large range of powders and granules, food, chemical, pharmaceutical and plastic products. Successfully used for screening dry or humid bulk materials, the centrifugal sifter, is recommended whenever bagged products or hygroscopic materials are being processed. Lumps and conglomerations are broken gently without any product loss. The Turbowest sieve is especially suited for gravity screening in line with pneumatic conveyors.

Features: The product is fed into the sifter trough the inlet and the internal screw feeds material to be sifted into

the sifting chamber. The materials is collected and distributed along the sifting surface by rotating paddles optional brushes, which forces the material through the screen. The separated fine material will discharge to the central outlet while the unsifted material will be discharged through the side outlet.

Benefits:

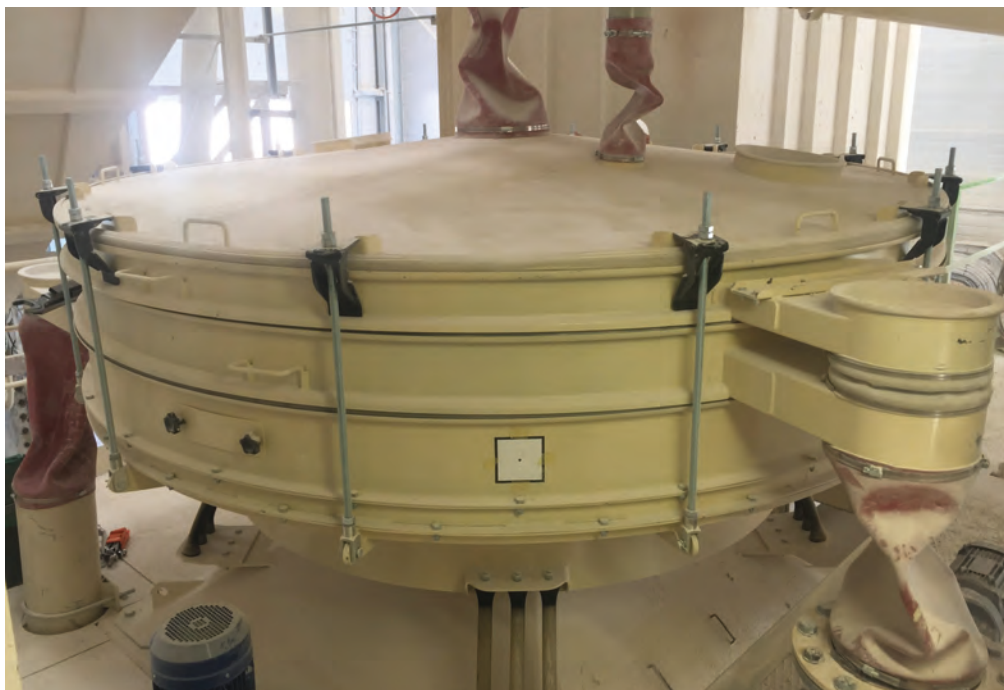
- Compact design;
- Heavy duty construction for continuous operation;
- Automatic material discharge;
- Vibration-free action;
- Easy and quick change of screen mesh;
- Inspection doors for quick cleaning of the machine;
- High throughput;
- Low power requirements;
- Available in stainless steel AISI 304L-316L.
- Certification for ATEX, FDA-FOOD, GMP available

Application: the centrifugal sifters are suitable all sectors with a widely varying range of products such as: food industry, chemical, pharmaceutical, plastic materials, metal powders, cement and sand.

Tumbler Screeners: The VAN Tumbler Screening Machine has a three-dimensional movement for classification, separation, dedusting and safety screening of dried products in powders or in granules. It allows up to 6 separations. Available with ATEX certification, FDA IQ-OQ procedures, GMP, BFM fittings, Jacob fittings and finishes for the food and pharmaceutical industry. Available in the following models: 1200 (Ø 1200mm) – 1600 (Ø 1600 mm) – 2000 (Ø 2000 mm) – 2250 (Ø 2250 mm) – 2600 (Ø 2600 mm). **Features:** the movement of a tumbler screening machine is usually compared with simple hand screening similar to the "gold washing pan". The product is continuously fed into



the centre of the top screen, from where it spreads out evenly to the outside across the entire screening surface. While the finer particles fall through the screen near the centre, the coarser ones successively towards the periphery. All the material is moved in a spiral pattern with increasing acceleration of the particles and this 3D movement of the machine can be drawn and recorded on paper in the form of an ellipse. Various effective mesh debinding systems (Ultrasonic, balls, etc) are available for this purpose. The modular design enables different setup variations and product can be re-screened 2 to 3 times to increase yield and the screening efficiency.



Benefits:

- extremely high screening efficiency (up to 99%);
 - easy dismantling and cleaning of all parts;
 - low noise level (<78dB);
 - reduced maintenance cost;
 - modular design for double screening or high capacity;
 - low acceleration and gentle separation of the product;
 - not destroy fragile and delicate products;
 - possibility to install lifting device for quick screen frame change;
- Application: the machines are suitable all sectors with a widely varying range of products such as: animal feed, building materials, chemicals, fertilizer, food, beverages, tobacco, metal powders, minerals, pharmaceuticals, plastics, rubber, recycling and wood. 🏭

Visit: www.vibrowest.it



Vibrowest, in the continuous process of growth and expansion, is proud to announce a new production facility of more than 15.000 sqm located in the northern of Milan.

The new site is implemented with the latest technology to save energy and a new testing laboratory area.



Efficiency and Effectiveness are **GVF IMPIANTI SRL** key-words

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

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

The wide range of production full of transversal products characterizes the company organization, which is divided in 6 main divisions: dense phase pneumatic conveying systems, bulk material handling systems and equipment, mixing and dosing technology, filtration 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 produce 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 efficiency and the effectiveness of the adopted solution.

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



GVF
IMPIANTI



quality and innovation, which makes the customer's job easier and which guarantees 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 industrial machineries' market, companies need to provide Mission-Driven Machines which are smarter, more functional 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



FOUNDRY
Foundry Machinery



BULK
Move Stock Treatment



RECYCLING
Recycling Plant



PNEU
Pneumatic Conveyor



MIX
Dosing & Mixing



FILTER
Filtration Technology



why GVF Impianti's main objective 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 firstly 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 supplying 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"



IN-HOUSE ENGINEERING

One of the most powerful strength of the company is its ability to design and produce in-house standardized 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 solution, not only in terms of productivity, but also in terms of efficiency and effectiveness. This allows GVF Impianti to be able to project the entire systems' functioning 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 follow 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 Impianti Srl has decided to request and obtain the WPS (Welding Procedure Standard) certification.

The company is now able to produce PED compliant vessels for its pneumatic conveyors, certified by TÜV (CE0948).

Indeed, the management strongly believes that the in-house production



of products is part of the company's strength, because it allows products customization 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 machines and its complete turn-key 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 mechanical 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 CONVEYING 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 satisfy 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 distinctive 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 strengthened by a thermal treatment. In addition, the outlet 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 performance 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, efficient product/air ratio, low operational and maintenance costs.

PNEUMATIC CONVEYING COMPONENTS 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 diverter valves).

Indeed, very interesting are the two-ways diverter valves 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 terminal 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 flow up to 12 destinations. 

Visit:
www.gvfimpianti.it

WONDERFUL COCONUT!

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

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

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

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

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

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

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





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

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

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

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

Franklin Baker products are distributed in Italy by Faravelli. 🏠

For more info please contact Faravelli Food Division:

food@faravelli.it



Satinox. Knowledge, technical expertise and quality: product identity

Satinox has been manufacturing **perfectly welded stainless steel bowls** for more than 30 years.

They are made by hands to fit the machines used to knead and mix dough for the **bakery** and **pastry** sector as well as for the **chemical** and **pharmaceutical** sector.

The company was founded in 1982 and since then it has been a strong believer in **the value of manual metalwork fabrication**.

All bowls are made by **expert and specialized workers**, able to manufacture **robust, versatile** and **long-lasting tailor-made** products.

Satinox can count on a team that works together with **passion** and **professional expertise**, uses **high-quality materials** and is continuously fine-tuning its metal fabrication and welding techniques.

In fact technical expertise and knowledge go hand in hand with the **quality of the materials** and the ability to turn traditional artisan metalwork fabrication into expert joining technique.

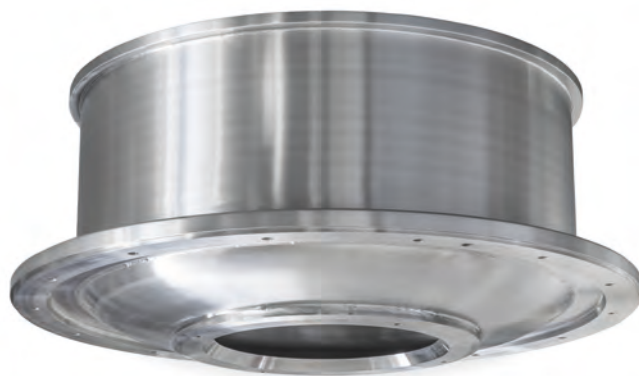
From project development to product manufacturing careful examination of any special production needs is definitely essential to find the ideal solution to optimize bowl performance, and consequently machine performance.

Strict compliance with the drawings, the painstaking attention to tolerances along with machining precision guarantee tailor-made products of any shape and size. 🏭

www.satinox.com



40 YEARS
ANNIVERSARY



A UNIQUE and COMPLETE HIGH-TECH WORLD

GORRERI Food Processing Technology® is world-wide known for its ability to manufacture customized and designed turnkey solutions and to produce machineries and technologies unequalled for performance and results.

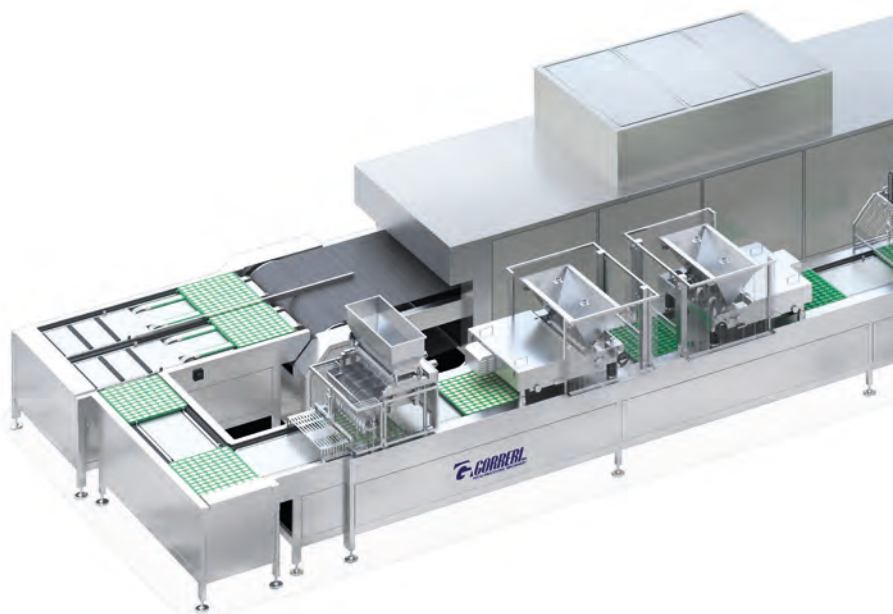
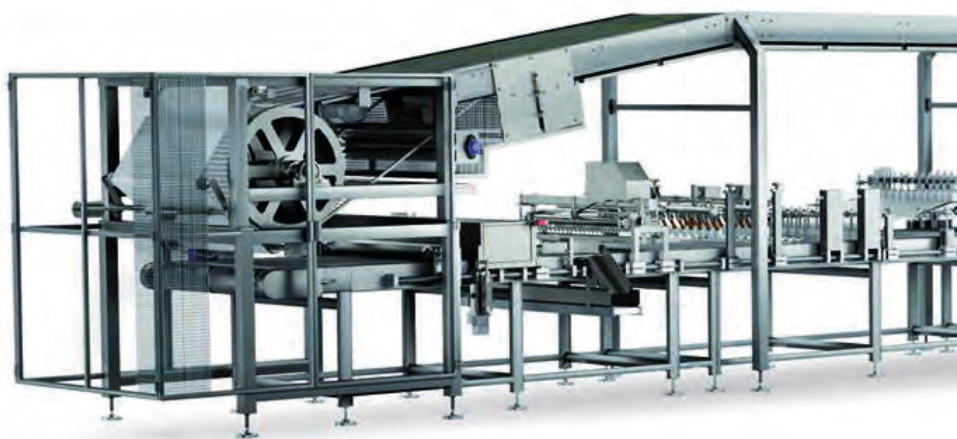
GORRERI'S RANGE is very wide and complete.

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

MATCHLESS MIXING SYSTEMS.

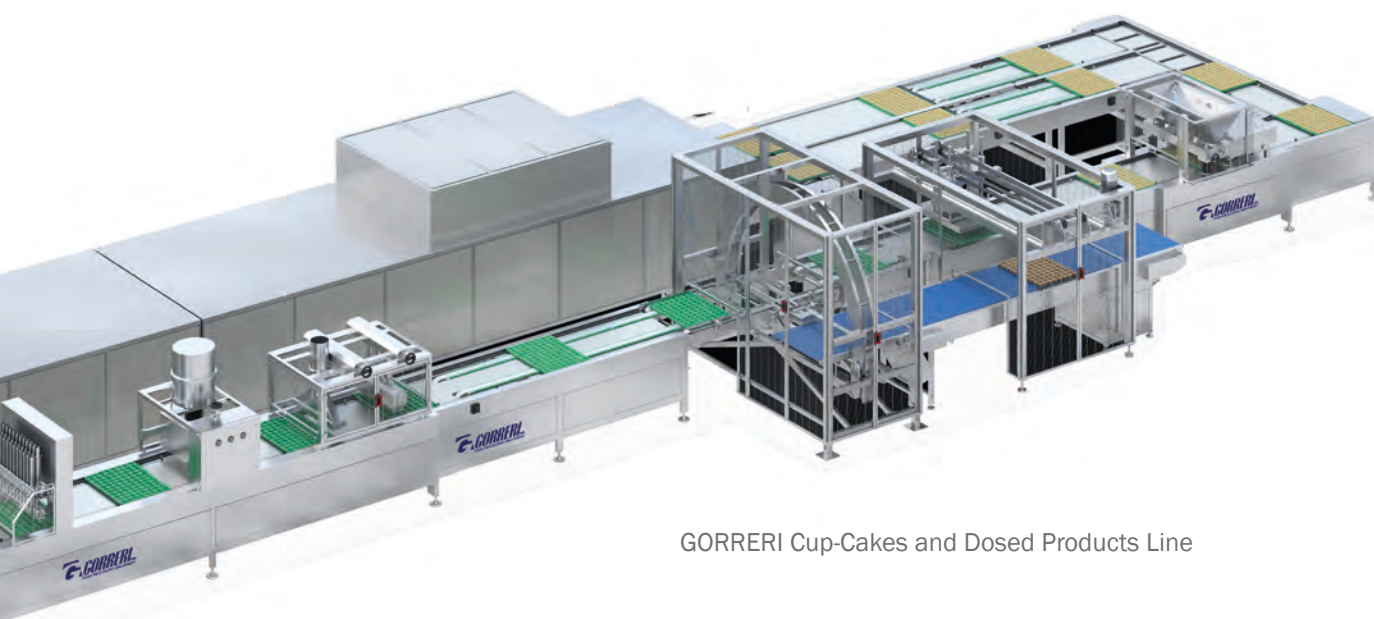
GORRERI TURBOMIXER®, the famous and unique turboemulsifier with vertical head is an innovative in-continuous mixing system, fruit of many years of experience that through a bright solution like VERTIMIX TECHNOLOGY® is able to emulsify, in few minutes, batters, cream, mousse, sponge-cake with a final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

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



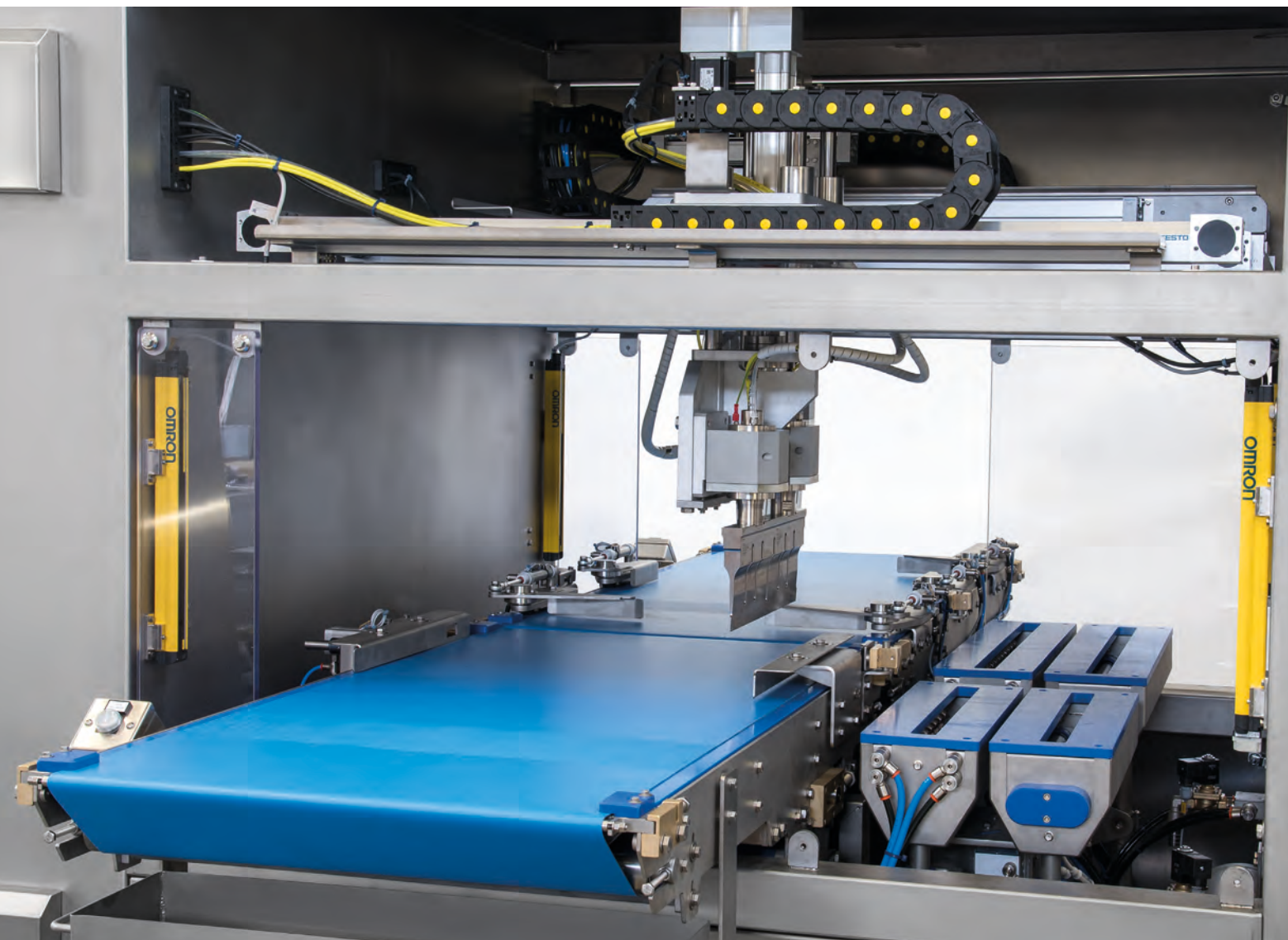


GORRERI Sponge-cake Line



GORRERI Cup-Cakes and Dosed Products Line





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

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

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

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

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





Gorreri TURBOMIXER GMG Series

recent and innovative technologies, Clean, simple and essential design to avoid contamination and dust.

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

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

VISIT:
www.gorreri.com



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

A PHILOSOPHY THAT MAKES GORRERI'S MACHINERIES UNMISTAKABLE.

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

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

automatic uploading and downloading of the ingredients and much more.

COMPLETE PRODUCTION LINES. More than 50 years of experience in the confectionary sector process make Gorreri Company able to design turn-key and tailored solution for the production of Sponge Cake based products, Layer-cakes, Pies and Tarts, Muffins, Eclairs and each kind of Dosed Product.

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



The CONFECTIONERY SECTOR in the era of healthy food

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

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

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

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

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

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

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



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



innovation its competitive advantage, stands out.

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

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

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

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

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

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

But in **Cesarin** the focus is not exclusively on the sweet pastry side. Over the years, the company has established itself on the international market also for the search for a line of vegetables dedicated to the food industry.

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

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

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

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

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

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

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






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

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

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

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

For more information:
Cesarin S.p.A Verona (Italy)
www.cesarin.it



Cesarin®
dal 1920

“THE PRESENT AND FUTURE OF THE EUROPEAN CONFECTIONERY INDUSTRY: CHALLENGES AND INNOVATIONS”

The European confectionery industry faces challenges such as rising raw material costs, consumer demand for healthier products, and global competition. Companies are innovating with low-sugar, natural, and sustainable products

The confectionery industry is one of the driving sectors of the European economy, thanks to its tradition, innovation, and product quality. In recent years, however, the sector has faced several challenges, including rising costs of raw materials, increasing consumer awareness of health and environmental issues, and global competition.

One of the main problems that has arisen concerns the rising costs of raw materials, such as sugar, cocoa,



by [Walter Konrad](#)



images: pexels.com

and hazelnuts. This has resulted in increased production costs for confectionery companies, which have tried to compensate by raising the prices of their products. Furthermore, consumers are becoming increasingly demanding in terms of health and the environment, requiring healthier and more natural products. In response, many companies have developed products with low sugar and fat content, using natural and organic ingredients.

Global competition is another major challenge for the sector, with many confectionery producers from emerging countries seeking to enter the European market by offering lower-priced products compared to local companies. This competition is particularly evident in the chocolate sector, where producers from emerging countries are trying to gain market share.

Despite these difficulties, the sector is trying to innovate and adapt to changing consumer demands. Many companies are developing low-sugar and low-fat products using natural and organic ingredients. In addition, many producers are working to reduce the environmental impact of their production by using biodegradable packaging and reducing carbon emissions.



PROFESSIONAL BAKING SOLUTIONS

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



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

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

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

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

als, guarantee the high quality of the products.

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

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

 **europa**
bakery • pastry • pizza *ovens*

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

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

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

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

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

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

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

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

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

www.europa-zone.com
FACEBOOK @europaforni
INSTAGRAM @europaovens



The TOP QUALITY industrial mixers

Escher Mixers specializes in the production of mixing machinery for the bread and pastry-making sectors. Over the years we have gained specialized knowledge that has allowed us to develop machines and solutions to meet the needs of a variety of clients and different types of markets. Our machines are renowned for their sturdiness, durability, accurate finishes, and for the quality of the dough they produce.

BAKERY Equipment

We propose Spiral and Wendel mixing concepts. Both solutions can be with removable bowl through a Patented® bowl locking and motion system MR-MW Line or bottom discharge system MD-MDW Line with conveyors belts or bowl lifters which can be matched with automatic solutions with linear system and storage of the resting bowls in vertical or linear storages, rotating automatic systems-carousel, scraps recovery systems, transverse hopper systems and star-cutting / guillotine / roller with guillotine and other customized solutions.

PASTRY Equipment

The range of Planetary Mixers with double tool for the pastry industry is characterized by the lack of oil lubrication systems, improving hygiene and reducing machine maintenance. A wide range of interchangeable tools is available for different uses and doughs. For industrial productions, we have developed the PM-D Line with independent tool movement, with individual speed regulation and the possibility to reverse the motion. While the PM-DB Line with the bridge structure allows automatic insertion of the ingredients, air insufflation to reduce mixing times and increase volume, dough processing with negative / positive pressure and cleaning through CIP washing system. Various bowl discharge options are available. 🏠



ESCHER

mixers



Level regulation without blemish

Smart level sensors in CHOCOLATE PARADISE

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

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

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




BALLUFF

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

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

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

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

www.balluff.com



WE SERVE ALL!



IP67 stainless steel
Automatic plant



DIAMOND X
Stainless steel box motion

DIAMOND 850
High-performance
packaging machine



+39 0445 605 772

Via Lago di Albano, 70

36015 Schio (VI) - Italy

sales@ifppackaging.it

www.ifppackaging.it

ifp
PACKAGING

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

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

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

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

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

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

Muriel Joncheray, Global Key Account Manager Consumer Flexibles,

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

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

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



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



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

Carsten Bertram, Head of Global Packaging Innovation Dishwashing at

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

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

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

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

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

www.mondigroup.com

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



Labelling system for *COWLESS milc*[®] milk bottles

In addition to environmentally responsible business, ecology is also increasingly important in production and packaging of food.

COWLESS milc[®] has built an ecologically responsible way to produce plant-based milk by planting cashew trees at farms.

This way CO₂ is not emitted but absorbed, which contributes to its reduction in the atmosphere. In addition, biodiversity, animal welfare and soil quality are increased.

A unique, self-developed production process

Every step of the production process is carefully considered; nature and the people behind the production always come first. For the production of the nut milk a completely new production line was assembled in the Netherlands in Ouderkerk on the Amstel.

COWLESS milc[®] for a unique, self-developed production process, started looking for specialized machine man-

ufacturers and, for labelling the glass bottles, Etipack BV was contacted. After an intense process of design, both of the adhesives for the label and line specifications, the company finally installed an Etipack System 5.

Customized Etipack labelling system


System 5 consists of several modules for the application of adhesive labels. At the input of the system, the bottles are spaced by means of two DRP side belts. A seal label is placed on top of the cap, which is then pushed on the side of the bottle with a pneumatic roller.

This guarantees the daily fresh quality of the milk. When the seal has been applied, the bottle is clamped between an upper belt and the conveyor belt.

Two Strong 200 label dispensers, apply one front and one back label. The label on the back is first marked with lot number and production date. At the end of the labelling system, the

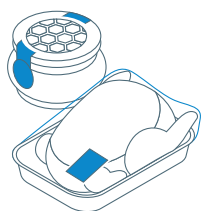
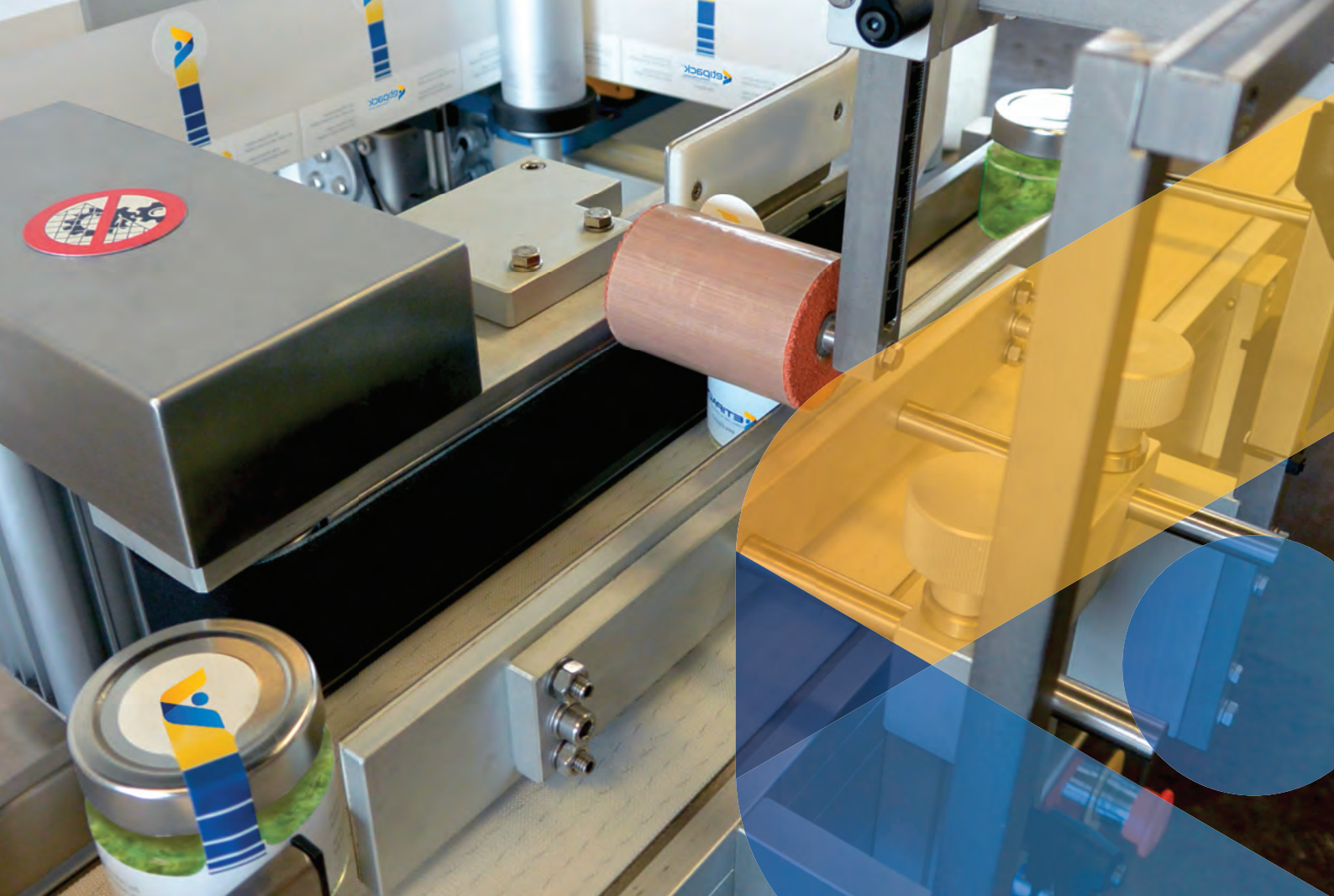
labels are further adhered thanks to two large application rollers.

Etipack has been known for many years as a reliable partner for labelling projects. Etipack's extensive range of labelling systems makes it possible to customize standard systems with different standard modules.

The years of experience and personal involvement in finding the best solution is confirmed again with this collaboration with *COWLESS milc*[®]. 

Read the original Case Study at www.etipack.nl





etipack
FOOD

A COMPLETE RANGE
OF SOLUTIONS FOR
**LABELING,
CODING,
PACKAGING**
DEDICATED TO THE
FOOD INDUSTRY.



System 4/2



System 1



Whizzy Cut & Feed

etipack.it/en/sector/food/

 **etipack**[®]
labelling, coding, caring

SCIENCE AND THE CONSUMER: the key to the packaging circular economy

*Winfried Muehling, Marketing & Communications
Director, Pro Carton*



PRO CARTON
PACKAGING FOR
A BETTER WORLD



In the current discussion around single-use and reusable packaging, I feel a crucial dimension is being lost: the consumer. Consumer engagement plays an essential role and policies to promote the circular economy will be most effective if they consider the factors that shape consumer behaviour and demands.

Consumers want to do 'the right thing', but legislators and businesses must first create the conditions for them to act. Their buy-in is absolutely crucial.

The European Commission's proposal to amend the Packaging and

Packaging Waste Regulation (PPWR) - which focuses on the implementation of reusable packaging - has proved a source of controversy, not least, because it appears to contradict the will of the consumer.

One of the conclusions from our 2023 consumer research, which examined the attitudes of over 5,000 Europeans towards the environment and packaging, was that consumers have a high level of trust in packaging material manufacturers and brand owners when it comes to securing a future with recyclable packaging solutions. In fact, 92% of consumers in Europe see the responsibility with

packaging suppliers and brand owners, and only 8% with legislators.

Advocating for a mandatory reuse system undermines the ability of these stakeholders to innovate in such a way that drives the circular economy and to further improve recycling abilities in a sustainable and widespread way. This one-size-fits-all approach is a hindrance, not an aid.

Fortunately, there is another option: Life Cycle Assessments (LCAs). LCAs of packaging materials identify, quantify and assess sources of environmental impact throughout a product's life cycle, taking into account the supply

of raw materials for all packaging components, use of packaging and disposal after use.

The result is that product packaging can be scientifically evaluated on a case-by-case basis, accounting for the concerns and demands of the consumer, and closely evaluating the environmental impact of the packaging solutions chosen.

However, in disregarding science in favour of top-down regulation, we are seeing potential cracks start to appear in the Commission's plans.

In Germany, in a bid to comply with the proposal, fast food restaurants have set up deposit systems for reusable packaging - including for "take-out" consumption.. These require consumers to store reusable packaging, rinse it and return it to the restaurant to

redeem their deposit. The system risks alienating consumers by demanding a less convenient habit change, driving up the costs of value meals (for a family, the deposit could be more than 10 euros) and creating uncertainty around food hygiene - a non-negotiable criterion.

The importance of consumer acceptance cannot be overstated if high return rates, and high rotation rates, are to be achieved.

Unfortunately, there is little evidence to suggest consumers are on board. Our recent survey, in which more than 1,000 German consumers were polled about their packaging preferences revealed that two-thirds (66%) of respondents demonstrated a low acceptance level of mandatory deposit schemes. Furthermore, in the fast-food setting, behaviours are largely the

same, with 61% preferring to dispose of their packaging for recycling, compared to 39% who would choose to store, rinse and return reusable plastic packaging to a collection point.

It is worth remembering that Germany is a country in which deposit return systems have been used for decades in different variations.

Navigating this complex issue requires us to be agile and flexible – neither of which is possible with the current approach. Professionally prepared LCAs provided us with a clear avenue towards the circular economy, educating business owners on the best solution on a case-by-case basis, with close adherence to the demands of the consumers, and the interests of the environment. 🏠

www.procarton.com



itfoodonline.com

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

editricezeus.com

Publisher since 1981

EDITRICE ZEUS Via C. Cantù, 16 - 20831 Seregno (MB), Italy
tel. +39 0362 244.182 - 0362 244.186

Food&Beverage packaging: tailor-made solutions for your plant

*BBM Service is able to offer a 360° support
and tailor-made service*

Italian excellence. BBM SERVICE is an Italian company with a long and renowned experience in the beverage sector, specialized in the turnkey supply of water and beverage bottling plants.

Flexibility, speed, constant presence and ability to work on all the machines in the line: these are just some of BBM's strengths. For more than 15 years, BBM has been a technical partner of some of the most renowned brands in the sector, such as Nestlé Waters, Coca Cola HBC, Refresco, Group, Heineken and many others.

A single partner, from audit to start-up

BBM Service is a single interlocutor with whom to interface for market

and budget analysis, layout study, supply and installation of machines, management of safety protocols, and logistics. What are BBM Service's turnkey services?

Excellence in used bottling machinery - delivered in 90/120 days

BBM has an impressive selection of 200+ used packaging machines, completely overhauled and updated, to ensure performance equal to the latest generation. BBM offers the best of the second-hand market, including blow moulders, fillers, labellers, shrink wrappers, wrap-around case packers, tray formers, palletizers and much more! Customers can see the machines and follow the over-

haul and start-up process at the BBM showroom in Lenna (Bergamo, Italy) or at a distance.

Quality assurance

All machines are subjected to a complete series of tests. Any defective components are replaced with compatible spare parts to obtain maximum performance. For even greater security, BBM provides a 6-month full warranty on all its overhauled machines.

Available in just 90/120 days

After the customization phase of the machine, BBM's specialized technicians are ready to carry out the transport, assembly, and start-up at the customer's site.





Green investment

The growing problem of industrial material disposal makes it necessary to adopt a new philosophy, where old machinery is not demolished, but withdrawn from suppliers such as BBM. Buying overhauled means making a conscious, convenient, and environmentally friendly choice

Visit the BBM online store

At www.bbmpackaging.com you can browse the complete catalogue of used machines. Each page is complete with layouts, technical details, and videos of the machines in action. Contact info@bbmpackaging.com for a free quotation.



Technical assistance and engineering

With twenty years of experience and a team of over 50 qualified technicians, BBM offers a complete range of services to support the customer: disassembly and transfer of the line, format changeover, scheduled plant maintenance, and training. BBM also provides 24/7 remote assistance service. What else?

BBM offers its know-how for highly specialized engineering interventions. Their portfolio consists of machinery

upgrades to fully exploit the potential of the machine and achieve energy and cost savings. BBM is specialized in upgrades on blow-moulding machines of all major manufacturers; Thanks to a few, simple installations it is possible to obtain a saving of 35% on energy consumption.

Compatible spare parts

Whether it is normal wear and tear or urgency, BBM is the best option for the supply of spare parts compatible with the machines of the main OEMs.





All spare parts are tested in a certified laboratory; in fact, BBM has always invested in research and development to provide customers with free pass material of the highest quality, at prices 10-20% lower than the market average. The vast entourage of foreign agents is responsible for facilitating commercial and logistics operations in the supply of spare parts in EU and EXTRA EU territories.

Contact BBM Service for a free quotation info@bbmpackaging.com

CAN YOU BELIEVE THESE CONVEYORS ARE USED?

Supply of revamped bottling line conveyors

Supply of revamped bottling line conveyors. Conveyor belts are one of the main components of the lines, they are the ones that manage the proper functioning of the whole plant and determine its speed. BBM specializes in supplying pack, bottle and air conveyors. What makes us special?

- Competitive delivery times; by reclaiming existing parts, BBM guarantee delivery of high quality material in short period of time
- The recovery of existing material. BBM Service's engineering department is committed to recovering some of the old equipment, using the "cut and sew" technique. The goal? To optimize costs and promote sustainable investment. In fact, BBM's mission is to give a second life to disused machinery. Reducing the disposal of heavy industrial material by recycling existing materials guarantees environmental and economic benefits that would not be achieved by buying new equipment only. BBM advocates a circular economy, which aims at not throwing away what still works.



But how? BBM restores elements in good condition and replaces worn components. An example of revamping includes the replacement of slide guides, drive and idler wheels, and the refurbishment of shafts. In the case of roller conveyors, it is also possible



to repaint them, thanks to the collaboration with Colorsolution, a company that is part of the BBM group.

Not only that: BBM can carry out the adjustment of the containment guides and the automatic format change. The transmission via articulated joints and encoder boxes ensures maximum positioning accuracy, repeatability of adjustments and drastically reduced changeover times.

BBM exploits the original structure of the belts and recovers their motors, maintaining their mechanical seal

and reliability. They carry out component revamping by integrating new and used/revamped components ad hoc, significantly reducing costs for the customer.

- **Management software upgrade and re-layout**

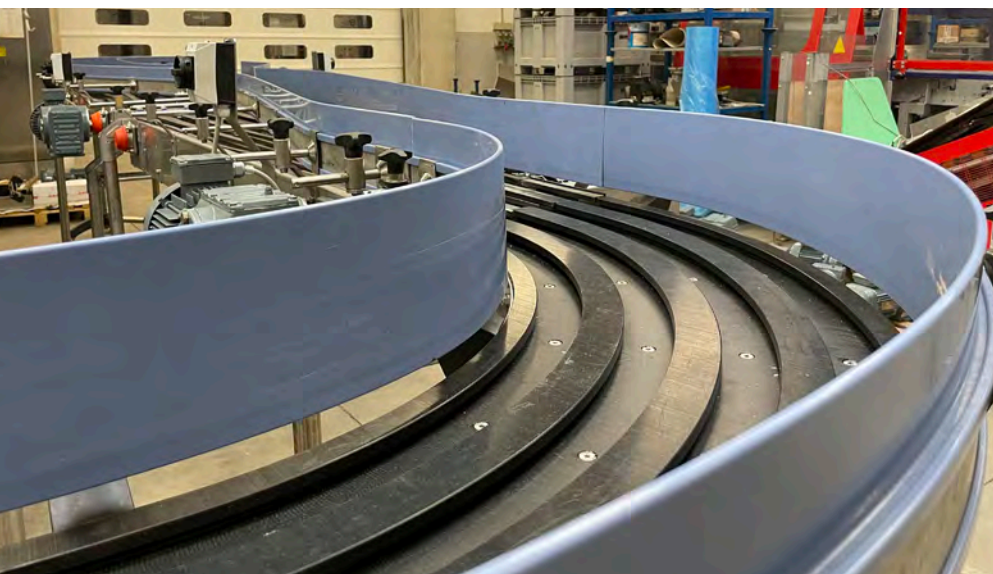
Thanks to the cooperation with exceptional partners, BBM can carry out upgrades on existing switchboards to improve the operation of production flows, also and especially in the function of new raw materials (e.g. reduced bottle

weight). In addition, to improve the overall result, BBM Service's technical department is dedicated to engineering the lines with **possible re-layouts** that optimize space and production.

Thanks to their specialised technicians, BBM are able to offer tailor-made solutions, preventive maintenance, advice on the current situation and a flexible and fast field service.

In short, what are the advantages? Short delivery times, competitive prices and quality equal to the latest generation's make us the ideal partner to support you in your future line revamps or 'new' supplies. 🏭

www.bbmpackaging.com



BBM
YOUORIENTED SOLUTIONS



PERSPECTIVE

**PERSPECTIVE of NVC NETHERLANDS PACKAGING CENTRE on
Draft IENW/BSK-2022/263822 by Ms. VLWA Heijnen MSc.**



This PERSPECTIVE comprises three parts:

1. Introduction of association NVC and its position on packaging and environment
2. Analysis of packaging and environment over the period 2013-2022
3. Policy recommendations for the year 2023 and beyond



1. Introduction of NVC and its position on packaging and environment

Every second, the world packs some 320,000 products - and the world's population unpacks them later and in a different location. NVC was founded in 1953 and now unites over five hundred companies with an interest in continually improving packaging. The NVC membership includes retailers, packaging suppliers, machine suppliers, branded article manufacturers, pharmaceutical companies, companies in the chemical industry, packaging printers, co-packers, design agencies, recyclers, testing institutes, and so on.

NVC supports its member companies by providing them with up-to-date and reliable business information, by jointly carrying out innovation projects, by educating and training their employees in packaging and by 'matching' supply and demand in the market ('market support').

Specific to packaging and environment, these include the following activities:

- a. Inform member companies of global legislative and regulatory developments through the NVC Members-only Environment Regulations Guide MERGE
- b. The NVC Workshop Sustainable Innovation in Packaging (Live Online, so 100% interactive and participation possible from any location worldwide)
- c. The PUMA Project towards the end of packaging as an environmental problem (see the enclosed PUMA MANIFESTO and all background information at: www.nvc.nl/puma)
- d. Stimulating innovation in the sector by scouting new techniques and linking supply and demand through exhibitions, conferences and the NVC online Buyer's Guide

NVC works with a 'holistic' vision to improve the activity of packaging, obviously in the Netherlands but especially also on an international scale, given the structural developments in the actors involved in packaging, like the raw material suppliers, the packer-filler industry, the logistics and the retail.



NVC has played an active role in the development of European (CEN) standards in the field of packaging and packaging waste since 1994 resulting from the European Packaging and Packaging Waste Directive of December 1994. Thanks in part to NVC's initiative and its active role in the standards development itself, the world (ISO) standards in this area were published in 2012. Photo: the plenary meeting of the ISO working groups on 6 May 2011 in Atlanta USA at the Coca Cola headquarters.



The PUMA MANIFESTO has now been published in nine languages (Dutch, English, French, Italian, Korean, Japanese, Chinese, Spanish and Portuguese). The German-language edition will be published on Wednesday 3 May 2023 during the PUMA World Conference in Düsseldorf, Germany. From 4-10 May 2023, the world's largest packaging exhibition with more than 100,000 visitors will take place there: the interpack2023. NVC will promote the results of the PUMA World Conference there from a dedicated stand (ENB/03) at the Main Entrance North.

NVC is not a 'vertical' trade association, like, for example, FNLI (the umbrella organisation of the food industry in the Netherlands) or CBL (the trade association of Dutch supermarkets) or NRK (the federation of plastics and rubber manufacturers). As such, NVC's primary tasks are therefore not to 'lobby' the central government to promote specific industry interests. However, we do appreciate maintaining good contacts in this regard.

NVC communicates 'across the board' via NVC News and in the various social media. The NVC website attracts about **sixty thousand unique visitors** annually (about 60% of whom are based outside the Netherlands). Some **thirty thousand professionals** and organisations located worldwide follow NVC daily via social media, especially Twitter and LinkedIn.

NVC is worried about the state of affairs regarding packaging and the environment in the Netherlands and worldwide in 2022. The first European legislation on packaging and packaging waste dates back to December 1994(!) and we are now on the eve of the year 2023. In the meantime, a proposal for follow-up legislation was launched by the European Commission on 30 November 2022: the Packaging and Packaging Waste Regulation PPWR.

As a society and industry, we unfortunately have to conclude that the problems have clearly not been solved over the past 29 years. On the contrary, they seem to have actually gotten worse. Why is this? What can we learn from the past and how can we all do better in the future? How do we **end packaging as an environmental problem**? You can find this NVC basic position in our PERSPECTIVE on the Draft Decision of the Minister.

2. Analysis of packaging and environment over the period 2013-2022

The first significant European legislation on packaging and the environment dates from [December 1994: the European Packaging and Packaging Waste Directive](#). At that time, the Netherlands already had the Packaging Covenant, with the actor on the industry side towards the central government being the Stichting Verpakking en Milieu SVM. There came a Second Covenant in the Netherlands, with SVM.PACT (Project Administration Covenant Two) as the implementing organisation, and the European Directive was transposed into Dutch law in the year 1997.

With the Extended Producer Responsibility EPR comes a financing system for collection and recycling. After an 'interwar period' in which the central government started levying a Packaging Tax, [the Packaging Waste Fund Foundation StAV took office in the year 2013](#). In conjunction with - and paid for by - the StAV, several other foundations came into being, each of which started working in a subfield.

To be mentioned in this context is the [Knowledge Institute for Sustainable Packaging Stichting KIDV](#). This organisation has the Stichting StAV as its only client, with the mutual performance agreement being confidential. Over time, the pricing for specific materials (plastics) by Stichting StAV has been linked to whether or not they comply with Recyclechecks to be drawn up by KIDV. The operational relationship between Stichting StAV and Stichting KIDV is characterised by intensive personal ties (the former Stichting KIDV director is now Stichting StAV director).

To [address litter, the Stichting Nederland Schoon SNS](#) was set up. Its funding was originally linked to the moderated introduction of deposit fees on specific types of emptied packaging. April 2022, the Stichting StAV presented a plan to collect a whole range of 'deposit-fee sensitive' emptied packs (bottles, cans) through a large number of 'circular hub' collection sites. The plan did not include a public cost budget and went off the table soon after presentation.

Now, after a legal joust and a three-month delay, [deposit fees will be introduced across the full breadth of the relevant packaging spectrum on 1 April 2023](#). What are the costs going to be? The question also arises as to the usefulness of the continued existence of, or funding by, the Stichting StAV of the Stichting SNS.

Regarding the [Stichting Nedvang, a different corporate form is envisaged for the coming years](#): a Private Limited Company (BV). This raises the question of the (future) ownership structure, including the financial allocation of any profits generated by this BV.

StAV's internal organisation comes up for discussion in a report by ILT Inspectorate¹ which audited the accounts for the year 2019. The report contains damning conclusions

regarding the [limited financial, accounting robustness of the organisation](#), including the remarkable way the auditor approved the StAV financial statements for the year in question. The question is, whether these criticisms have now been addressed and durably covered by the Stichting StAV.

The substantiation of the rates used by the StAV Foundation is also unclear, with sudden rate changes (/increases) of up to +1000% occurring in recent years². There are concerns about the [unsatisfactory substantiation of the proposed rates](#) and about the possibility that the Stichting StAV, after having been granted the General Binding Declaration (AVV) by the Minister, has a free hand for five years to implement substantial and unexpected rate increases.

The accountability of the Stichting StAV and the policy structure it funds is also negatively discussed in a recent study by the University of Utrecht³. It analyses for various product categories, including packaging, the extent to which collection and recycling takes place in a transparent manner, with an unambiguous allocation of the various responsibilities. [The situation for the packaging sector is outlined as unfathomable](#).

Finally, there are questions about the data available to the Stichting StAV in the context of its levies. To [what extent are the personal and business data of the Dutch industry paying the fees shared](#) with the Stichting KIDV, the Stichting Nederland Schoon and Nedvang BV - and then through these entities with third parties engaged by them (consultancies, lawyers, self-employed professionals, and so on)?

All in all, major concerns have grown at NVC over the past decade about the effectiveness of the policy structure around the StAV Packaging Waste Fund Foundation as set up in the year 2013 and legitimised by the central government. The concerns focus on two questions:

- 1. What charges does the Stichting StAV want to charge, with what justification?**
- 2. What environmental performance will be achieved by the Stichting StAV with these targeted levies?**

Question 1 has increased in importance now that there is talk of a possible tripling of the envisaged levy per Dutch company, while this was denied in so many words by a representative of Stichting StAV in an NVC members' meeting in early 2022. The foundation's draft multi-year budget is insufficiently conclusive. The foundation does not commit to the level of tariffs for the coming years. What will be the costs (revenues) of the introduction of deposit fees as of 1 April 2023? The basic organisational system costs (at €12.5 million a year equivalent to a workforce of 100 FTEs and significantly increasing) also lack substantiation.

¹ www.ilent.nl/actueel/nieuws/2022/07/08/afvalfonds-behaalt-recyclenorm-voor-2019-maar-de-onderbouwing-schiet-tekort

² www.afvalfondsverpakkingen.nl/nl/tarieven (other metals)

³ studenttheses.uu.nl/handle/20.500.12932/518



Question 2 is almost even more important, especially now that the definition of 'recycling' is changing. A look at the Model in the PUMA MANIFESTO makes this clear. In fact, the 2013-2022 period looked at the amount of Collect-Control and not at the amount of 'newly usable, circular' materials actually created via a material recycling Backend process. Also, it is fundamentally flawed to exclude energy aspects from Collect-Control and Backend processing.

Essential for sustainable decision-making is the elaboration of the Circular Materials Plan (CMP1) promised by the Minister to be published by mid-February 2023, including an analysis of the desired material flows in the context of the Circular Economy of the Netherlands.

The NVC Survey The future of the packaging recycling in the Netherlands certainly will take into account the insights of the CMP1. The results of the NVC Survey will be presented on 5 April 2023.

Finally, an [analysis of the timeframe leading up to the Draft AVV decision](#) over the past twelve months. In the spring of 2022, we communicated our concerns to the Stichting StAV and on 11 May 2022 we met with the management. We had constructive discussions with various industries, the policy department of the Ministry, the Inspectorate and several Members of Parliament.

A total of over hundred NVC member companies actively participated in one or more of the NVC member meetings on the topic. NVC attended the parliamentary debates of the

relevant Lower House parliamentary committee and actively shared the information with NVC member companies and the industry as a whole.

The Draft Decision with an intended entry into force of 1 January 2023, was published on 7 November 2022. Given the deadline for the submission of PERSPECTIVE by interested parties like NVC (six weeks, i.e. until 19 December 2022 at the latest) and the intended entry into force of 1 January 2023, [the Minister has only a week and a half to make a decision](#). This is questionable for a dossier with an impact of at least €2 billion in costs for business and - in our view, much more importantly - with an obligation to future generations to now actually start making an end to packaging as an environmental problem in the Netherlands and worldwide.

Based on the above, one conclusion must unfortunately be that the policy structure in place since 2013 to manage packaging collection and recycling has serious shortcomings anno 2022. This entails significant risks for the Netherlands society, both in terms of costs in an economically turbulent period and in terms of (not) meeting environmental targets in a world where environmental issues rightly need to be addressed.

The decision-making on Draft Decision IENW/BSK-2022/263822 by Ms. VLWA Heijnen MSc., Minister for Infrastructure and Water Management, regarding a General Binding Declaration AVV of the levies by the StAV Waste Fund Foundation (Stichting Afvalfonds Verpakkingen) is a [decisive benchmark](#) in the context of the above.

3. Policy recommendations for the year 2023 and beyond

With regard to the Draft AVV Decree, we submit the following recommendations for the Minister's consideration. Of course, the Minister is free to adopt them entirely, partially or not at all. In all cases, we would appreciate receiving a motivation and will actively share them with our member companies and the sector as a whole.

1. [Postpone your final Decision until 1 July 2023.](#)
2. [Include in your final Decision the insights from your CMP1 \(to be published mid-February 2023\) and ideally the results of the NVC Survey the future of the packaging recycling in the Netherlands 2023-2027 \(results known 5 April 2023\).](#)
3. [As a condition for a final Decision, ask the Stichting StAV for an analysis addressing the years 2023-2027 of the budgeted costs in relation to the environmental results. This analysis should also include the impact of the various Stichting KIDV recycling checks on costs and environmental results to be achieved.](#)
4. [In your final Decision, require the Stichting StAV to pre-determine rates for all years covered by the AVV.](#)
5. [As part of your final Decision, request disclosure of the performance agreement between Stichting StAV and Stichting KIDV including the annual reviews for the past years 2013-2022.](#)
6. [Engage Parliament prior to your final Decision, especially in the run-up to the public meeting of the Parliamentary Committee on IenW in the spring of 2023.](#)



Gouda, 14 December 2022
NVC NETHERLANDS PACKAGING CENTRE

Stationsplein 9k, 2801 AK Gouda, The Netherlands
☎ +31-(0)182-512411 ✉ info@nvc.nl

Sharing the future in packaging
www.nvc.nl

SLIMFRESH



GB Bernucci is an historic company operating in the food packaging since 1946. In accordance with the law and in compliance with quality requirements, **GB Bernucci**, with its business partners, provides a wide range of packaging solutions and is constantly dedicated to the research and development of innovative products made of eco-friendly materials that comply with its Mission: **Food Safety, Respect for the Environment & Search for innovative packaging.**

SLIMFRESH

One of the most extraordinary products that **GB Bernucci** offers is **Slimfresh**: it is an innovative and environmentally friendly packaging solution, made of a laminated cardboard base with a food liner and coated with a top as a second invisible skin around the product. This coating offers the possibility of

extending food shelf life, ensuring freshness and time lasting. Recycling and sustainability are the guidelines of this new eco-friendly packaging: with a simple gesture you can remove the paper from the film ensuring an efficient recycling. **Slimfresh** is indeed recyclable with paper.

The versatility of the product and its immediate display are the strengths of his new packaging. In addition, thanks to a completely customizable paper based with four colour printing, it offers a new advertising solution and it also give the opportunity to pack irregular shapes for better merchandising.

Upon request, **Slimfresh** can be produced with paper branded FSC (Forest Stewardship Council). FSC, is the international NGO that established a certification system to ensure responsible forest management and sustainability in the wood-paper supply chain.

FSC issues two different certifications: FMC (Forest Management Certification) and COC (Chain of Custody).

In summary, this skin-pack is the solution to meet the various needs of the consumer, manufacturer and environment.

PAPERSEAL

Paperseal® is an innovative, eco-friendly and sustainable tray that offers brands and retailers the opportunity to replace Modified Atmosphere Packaging (MAP) plastic trays and Vacuum Skin Packaging (VSP) trays with a barrier-lined paperboard alternative.


Compared to traditional trays, this new packaging allows a plastic reduction of about 90% as the thin inner layer can be easily removed and disposed separately, ensuring an efficient recycling.





This tray is recommended for cheese, fresh or processed meat, ready-made products, frozen foods, snacks, salad and fruit. The hermetically-sealed tray ensures the product remains fresh, with up to 28 days of shelf life, depending on the application. Minimum bulk and maximum advantage in one single

packaging. The exclusive sealing process leads to a perfectly sealed surface. It is possible to customize the whole surface of the tray with an offset print up to 5+5 colors, both internally and externally, ensuring a 360° communication that perfectly meets the requirements of each

customer. PaperSeal® Cook is a brand new tray technology for oven and microwave-ready chilled and frozen food applications. It has been created to match the functionality and performance of existing trays. . 

www.gbbernucchi.com



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



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

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

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

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

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

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



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

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

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

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

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

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

www.makrolabelling.it



FIORINI INTERNATIONAL: the partner for sustainable paper packaging solutions

Fiorini International produces small and medium paper bags for international customers in the human food and pet food industry, agriculture, chemical industry, hygiene and personal care segments and for global leaders in large-scale distribution: a range of products and finishes that supplies a flexible solution to every need.

Achieving excellence by focusing on the continuous improvement of quality of products, services and processes and designing a sustainable production model to ensure environmental and human respect are the main values that drive the definition of the strategies and everyday actions.

A constant consolidation of the market share and the new challenging opportunities in the packaging industry have been the main drivers for Fiorini International to become a strategic partner in the Drive to Paper process and in the design of sustainable packaging

solutions, fully and easily recyclable, compliant with existing filling technologies, according to the European directives.

In order to measure and evaluate sustainability and performance and design the path for a sustainable development, Fiorini International has started its sustainability performance assessment with a series of activities focused on minimising environmental impact and to creating awareness of sustainability culture, offering solutions and answers to the community and engaging the entire company network, supporting by a strategic scientific partner Università Milano Bicocca and Toroto, a leading environmental company.

The company commitment to sustainability development has been awarded with the Leader in Sustainability 2023 award: the important acknowledgement is the result of a research by Il Sole 24 Ore and Statista that exami-

ned about 1,500 Italian companies based on 45 key sustainability environmental, social and economic indicators.

The continuous analysis of trends and consumer habits, and the ongoing research into technological solutions and innovative materials have aided an organic and rapid growth in the packaging industry, leading the company to successfully diversify production, while firmly maintaining the eco-friendly commitment to the exclusive use of paper, FSC certified in compliance with the forest chain of custody and ecosystem.

Made up of 2 manufacturing companies, located in Italy and the Czech Republic, and 2 trading companies operating in France and China, Fiorini International stands out as a worldwide production, commercial and logistic network. 🏢

www.fiorinint.com



FIORINI INTERNATIONAL

PAPER SUSTAINABLE
packaging

FSC, Recycled, Sedex, BRCGS, ISO 9001, ISO 14001, ISO 26001, ISO 45001, ISO 50001, ISO 52001, ISO 54001, ISO 56001, ISO 58001, ISO 60001, ISO 62001, ISO 64001, ISO 66001, ISO 68001, ISO 70001, ISO 72001, ISO 74001, ISO 76001, ISO 78001, ISO 80001, ISO 82001, ISO 84001, ISO 86001, ISO 88001, ISO 90001, ISO 92001, ISO 94001, ISO 96001, ISO 98001, ISO 10001, ISO 102001, ISO 104001, ISO 106001, ISO 108001, ISO 11001, ISO 112001, ISO 114001, ISO 116001, ISO 118001, ISO 12001, ISO 122001, ISO 124001, ISO 126001, ISO 128001, ISO 13001, ISO 132001, ISO 134001, ISO 136001, ISO 138001, ISO 14001, ISO 142001, ISO 144001, ISO 146001, ISO 148001, ISO 15001, ISO 152001, ISO 154001, ISO 156001, ISO 158001, ISO 16001, ISO 162001, ISO 164001, ISO 166001, ISO 168001, ISO 17001, ISO 172001, ISO 174001, ISO 176001, ISO 178001, ISO 18001, ISO 182001, ISO 184001, ISO 186001, ISO 188001, ISO 19001, ISO 192001, ISO 194001, ISO 196001, ISO 198001, ISO 20001, ISO 202001, ISO 204001, ISO 206001, ISO 208001, ISO 21001, ISO 212001, ISO 214001, ISO 216001, ISO 218001, ISO 22001, ISO 222001, ISO 224001, ISO 226001, ISO 228001, ISO 23001, ISO 232001, ISO 234001, ISO 236001, ISO 238001, ISO 24001, ISO 242001, ISO 244001, ISO 246001, ISO 248001, ISO 25001, ISO 252001, ISO 254001, ISO 256001, ISO 258001, ISO 26001, ISO 262001, ISO 264001, ISO 266001, ISO 268001, ISO 27001, ISO 272001, ISO 274001, ISO 276001, ISO 278001, ISO 28001, ISO 282001, ISO 284001, ISO 286001, ISO 288001, ISO 29001, ISO 292001, ISO 294001, ISO 296001, ISO 298001, ISO 30001, ISO 302001, ISO 304001, ISO 306001, ISO 308001, ISO 31001, ISO 312001, ISO 314001, ISO 316001, ISO 318001, ISO 32001, ISO 322001, ISO 324001, ISO 326001, ISO 328001, ISO 33001, ISO 332001, ISO 334001, ISO 336001, ISO 338001, ISO 34001, ISO 342001, ISO 344001, ISO 346001, ISO 348001, ISO 35001, ISO 352001, ISO 354001, ISO 356001, ISO 358001, ISO 36001, ISO 362001, ISO 364001, ISO 366001, ISO 368001, ISO 37001, ISO 372001, ISO 374001, ISO 376001, ISO 378001, ISO 38001, ISO 382001, ISO 384001, ISO 386001, ISO 388001, ISO 39001, ISO 392001, ISO 394001, ISO 396001, ISO 398001, ISO 40001, ISO 402001, ISO 404001, ISO 406001, ISO 408001, ISO 41001, ISO 412001, ISO 414001, ISO 416001, ISO 418001, ISO 42001, ISO 422001, ISO 424001, ISO 426001, ISO 428001, ISO 43001, ISO 432001, ISO 434001, ISO 436001, ISO 438001, ISO 44001, ISO 442001, ISO 444001, ISO 446001, ISO 448001, ISO 45001, ISO 452001, ISO 454001, ISO 456001, ISO 458001, ISO 46001, ISO 462001, ISO 464001, ISO 466001, ISO 468001, ISO 47001, ISO 472001, ISO 474001, ISO 476001, ISO 478001, ISO 48001, ISO 482001, ISO 484001, ISO 486001, ISO 488001, ISO 49001, ISO 492001, ISO 494001, ISO 496001, ISO 498001, ISO 50001, ISO 502001, ISO 504001, ISO 506001, ISO 508001, ISO 51001, ISO 512001, ISO 514001, ISO 516001, ISO 518001, ISO 52001, ISO 522001, ISO 524001, ISO 526001, ISO 528001, ISO 53001, ISO 532001, ISO 534001, ISO 536001, ISO 538001, ISO 54001, ISO 542001, ISO 544001, ISO 546001, ISO 548001, ISO 55001, ISO 552001, ISO 554001, ISO 556001, ISO 558001, ISO 56001, ISO 562001, ISO 564001, ISO 566001, ISO 568001, ISO 57001, ISO 572001, ISO 574001, ISO 576001, ISO 578001, ISO 58001, ISO 582001, ISO 584001, ISO 586001, ISO 588001, ISO 59001, ISO 592001, ISO 594001, ISO 596001, ISO 598001, ISO 60001, ISO 602001, ISO 604001, ISO 606001, ISO 608001, ISO 61001, ISO 612001, ISO 614001, ISO 616001, ISO 618001, ISO 62001, ISO 622001, ISO 624001, ISO 626001, ISO 628001, ISO 63001, ISO 632001, ISO 634001, ISO 636001, ISO 638001, ISO 64001, ISO 642001, ISO 644001, ISO 646001, ISO 648001, ISO 65001, ISO 652001, ISO 654001, ISO 656001, ISO 658001, ISO 66001, ISO 662001, ISO 664001, ISO 666001, ISO 668001, ISO 67001, ISO 672001, ISO 674001, ISO 676001, ISO 678001, ISO 68001, ISO 682001, ISO 684001, ISO 686001, ISO 688001, ISO 69001, ISO 692001, ISO 694001, ISO 696001, ISO 698001, ISO 70001, ISO 702001, ISO 704001, ISO 706001, ISO 708001, ISO 71001, ISO 712001, ISO 714001, ISO 716001, ISO 718001, ISO 72001, ISO 722001, ISO 724001, ISO 726001, ISO 728001, ISO 73001, ISO 732001, ISO 734001, ISO 736001, ISO 738001, ISO 74001, ISO 742001, ISO 744001, ISO 746001, ISO 748001, ISO 75001, ISO 752001, ISO 754001, ISO 756001, ISO 758001, ISO 76001, ISO 762001, ISO 764001, ISO 766001, ISO 768001, ISO 77001, ISO 772001, ISO 774001, ISO 776001, ISO 778001, ISO 78001, ISO 782001, ISO 784001, ISO 786001, ISO 788001, ISO 79001, ISO 792001, ISO 794001, ISO 796001, ISO 798001, ISO 80001, ISO 802001, ISO 804001, ISO 806001, ISO 808001, ISO 81001, ISO 812001, ISO 814001, ISO 816001, ISO 818001, ISO 82001, ISO 822001, ISO 824001, ISO 826001, ISO 828001, ISO 83001, ISO 832001, ISO 834001, ISO 836001, ISO 838001, ISO 84001, ISO 842001, ISO 844001, ISO 846001, ISO 848001, ISO 85001, ISO 852001, ISO 854001, ISO 856001, ISO 858001, ISO 86001, ISO 862001, ISO 864001, ISO 866001, ISO 868001, ISO 87001, ISO 872001, ISO 874001, ISO 876001, ISO 878001, ISO 88001, ISO 882001, ISO 884001, ISO 886001, ISO 888001, ISO 89001, ISO 892001, ISO 894001, ISO 896001, ISO 898001, ISO 90001, ISO 902001, ISO 904001, ISO 906001, ISO 908001, ISO 91001, ISO 912001, ISO 914001, ISO 916001, ISO 918001, ISO 92001, ISO 922001, ISO 924001, ISO 926001, ISO 928001, ISO 93001, ISO 932001, ISO 934001, ISO 936001, ISO 938001, ISO 94001, ISO 942001, ISO 944001, ISO 946001, ISO 948001, ISO 95001, ISO 952001, ISO 954001, ISO 956001, ISO 958001, ISO 96001, ISO 962001, ISO 964001, ISO 966001, ISO 968001, ISO 97001, ISO 972001, ISO 974001, ISO 976001, ISO 978001, ISO 98001, ISO 982001, ISO 984001, ISO 986001, ISO 988001, ISO 99001, ISO 992001, ISO 994001, ISO 996001, ISO 998001, ISO 10001, ISO 1002001, ISO 1004001, ISO 1006001, ISO 1008001, ISO 101001, ISO 1012001, ISO 1014001, ISO 1016001, ISO 1018001, ISO 102001, ISO 1022001, ISO 1024001, ISO 1026001, ISO 1028001, ISO 103001, ISO 1032001, ISO 1034001, ISO 1036001, ISO 1038001, ISO 104001, ISO 1042001, ISO 1044001, ISO 1046001, ISO 1048001, ISO 105001, ISO 1052001, ISO 1054001, ISO 1056001, ISO 1058001, ISO 106001, ISO 1062001, ISO 1064001, ISO 1066001, ISO 1068001, ISO 107001, ISO 1072001, ISO 1074001, ISO 1076001, ISO 1078001, ISO 108001, ISO 1082001, ISO 1084001, ISO 1086001, ISO 1088001, ISO 109001, ISO 1092001, ISO 1094001, ISO 1096001, ISO 1098001, ISO 110001, ISO 1102001, ISO 1104001, ISO 1106001, ISO 1108001, ISO 111001, ISO 1112001, ISO 1114001, ISO 1116001, ISO 1118001, ISO 112001, ISO 1122001, ISO 1124001, ISO 1126001, ISO 1128001, ISO 113001, ISO 1132001, ISO 1134001, ISO 1136001, ISO 1138001, ISO 114001, ISO 1142001, ISO 1144001, ISO 1146001, ISO 1148001, ISO 115001, ISO 1152001, ISO 1154001, ISO 1156001, ISO 1158001, ISO 116001, ISO 1162001, ISO 1164001, ISO 1166001, ISO 1168001, ISO 117001, ISO 1172001, ISO 1174001, ISO 1176001, ISO 1178001, ISO 118001, ISO 1182001, ISO 1184001, ISO 1186001, ISO 1188001, ISO 119001, ISO 1192001, ISO 1194001, ISO 1196001, ISO 1198001, ISO 120001, ISO 1202001, ISO 1204001, ISO 1206001, ISO 1208001, ISO 121001, ISO 1212001, ISO 1214001, ISO 1216001, ISO 1218001, ISO 122001, ISO 1222001, ISO 1224001, ISO 1226001, ISO 1228001, ISO 123001, ISO 1232001, ISO 1234001, ISO 1236001, ISO 1238001, ISO 124001, ISO 1242001, ISO 1244001, ISO 1246001, ISO 1248001, ISO 125001, ISO 1252001, ISO 1254001, ISO 1256001, ISO 1258001, ISO 126001, ISO 1262001, ISO 1264001, ISO 1266001, ISO 1268001, ISO 127001, ISO 1272001, ISO 1274001, ISO 1276001, ISO 1278001, ISO 128001, ISO 1282001, ISO 1284001, ISO 1286001, ISO 1288001, ISO 129001, ISO 1292001, ISO 1294001, ISO 1296001, ISO 1298001, ISO 130001, ISO 1302001, ISO 1304001, ISO 1306001, ISO 1308001, ISO 131001, ISO 1312001, ISO 1314001, ISO 1316001, ISO 1318001, ISO 132001, ISO 1322001, ISO 1324001, ISO 1326001, ISO 1328001, ISO 133001, ISO 1332001, ISO 1334001, ISO 1336001, ISO 1338001, ISO 134001, ISO 1342001, ISO 1344001, ISO 1346001, ISO 1348001, ISO 135001, ISO 1352001, ISO 1354001, ISO 1356001, ISO 1358001, ISO 136001, ISO 1362001, ISO 1364001, ISO 1366001, ISO 1368001, ISO 137001, ISO 1372001, ISO 1374001, ISO 1376001, ISO 1378001, ISO 138001, ISO 1382001, ISO 1384001, ISO 1386001, ISO 1388001, ISO 139001, ISO 1392001, ISO 1394001, ISO 1396001, ISO 1398001, ISO 140001, ISO 1402001, ISO 1404001, ISO 1406001, ISO 1408001, ISO 141001, ISO 1412001, ISO 1414001, ISO 1416001, ISO 1418001, ISO 142001, ISO 1422001, ISO 1424001, ISO 1426001, ISO 1428001, ISO 143001, ISO 1432001, ISO 1434001, ISO 1436001, ISO 1438001, ISO 144001, ISO 1442001, ISO 1444001, ISO 1446001, ISO 1448001, ISO 145001, ISO 1452001, ISO 1454001, ISO 1456001, ISO 1458001, ISO 146001, ISO 1462001, ISO 1464001, ISO 1466001, ISO 1468001, ISO 147001, ISO 1472001, ISO 1474001, ISO 1476001, ISO 1478001, ISO 148001, ISO 1482001, ISO 1484001, ISO 1486001, ISO 1488001, ISO 149001, ISO 1492001, ISO 1494001, ISO 1496001, ISO 1498001, ISO 150001, ISO 1502001, ISO 1504001, ISO 1506001, ISO 1508001, ISO 151001, ISO 1512001, ISO 1514001, ISO 1516001, ISO 1518001, ISO 152001, ISO 1522001, ISO 1524001, ISO 1526001, ISO 1528001, ISO 153001, ISO 1532001, ISO 1534001, ISO 1536001, ISO 1538001, ISO 154001, ISO 1542001, ISO 1544001, ISO 1546001, ISO 1548001, ISO 155001, ISO 1552001, ISO 1554001, ISO 1556001, ISO 1558001, ISO 156001, ISO 1562001, ISO 1564001, ISO 1566001, ISO 1568001, ISO 157001, ISO 1572001, ISO 1574001, ISO 1576001, ISO 1578001, ISO 158001, ISO 1582001, ISO 1584001, ISO 1586001, ISO 1588001, ISO 159001, ISO 1592001, ISO 1594001, ISO 1596001, ISO 1598001, ISO 160001, ISO 1602001, ISO 1604001, ISO 1606001, ISO 1608001, ISO 161001, ISO 1612001, ISO 1614001, ISO 1616001, ISO 1618001, ISO 162001, ISO 1622001, ISO 1624001, ISO 1626001, ISO 1628001, ISO 163001, ISO 1632001, ISO 1634001, ISO 1636001, ISO 1638001, ISO 164001, ISO 1642001, ISO 1644001, ISO 1646001, ISO 1648001, ISO 165001, ISO 1652001, ISO 1654001, ISO 1656001, ISO 1658001, ISO 166001, ISO 1662001, ISO 1664001, ISO 1666001, ISO 1668001, ISO 167001, ISO 1672001, ISO 1674001, ISO 1676001, ISO 1678001, ISO 168001, ISO 1682001, ISO 1684001, ISO 1686001, ISO 1688001, ISO 169001, ISO 1692001, ISO 1694001, ISO 1696001, ISO 1698001, ISO 170001, ISO 1702001, ISO 1704001, ISO 1706001, ISO 1708001, ISO 171001, ISO 1712001, ISO 1714001, ISO 1716001, ISO 1718001, ISO 172001, ISO 1722001, ISO 1724001, ISO 1726001, ISO 1728001, ISO 173001, ISO 1732001, ISO 1734001, ISO 1736001, ISO 1738001, ISO 174001, ISO 1742001, ISO 1744001, ISO 1746001, ISO 1748001, ISO 175001, ISO 1752001, ISO 1754001, ISO 1756001, ISO 1758001, ISO 176001, ISO 1762001, ISO 1764001, ISO 1766001, ISO 1768001, ISO 177001, ISO 1772001, ISO 1774001, ISO 1776001, ISO 1778001, ISO 178001, ISO 1782001, ISO 1784001, ISO 1786001, ISO 1788001, ISO 179001, ISO 1792001, ISO 1794001, ISO 1796001, ISO 1798001, ISO 180001, ISO 1802001, ISO 1804001, ISO 1806001, ISO 1808001, ISO 181001, ISO 1812001, ISO 1814001, ISO 1816001, ISO 1818001, ISO 182001, ISO 1822001, ISO 1824001, ISO 1826001, ISO 1828001, ISO 183001, ISO 1832001, ISO 1834001, ISO 1836001, ISO 1838001, ISO 184001, ISO 1842001, ISO 1844001, ISO 1846001, ISO 1848001, ISO 185001, ISO 1852001, ISO 1854001, ISO 1856001, ISO 1858001, ISO 186001, ISO 1862001, ISO 1864001, ISO 1866001, ISO 1868001, ISO 187001, ISO 1872001, ISO 1874001, ISO 1876001, ISO 1878001, ISO 188001, ISO 1882001, ISO 1884001, ISO 1886001, ISO 1888001, ISO 189001, ISO 1892001, ISO 1894001, ISO 1896001, ISO 1898001, ISO 190001, ISO 1902001, ISO 1904001, ISO 1906001, ISO 1908001, ISO 191001, ISO 1912001, ISO 1914001, ISO 1916001, ISO 1918001, ISO 192001, ISO 1922001, ISO 1924001, ISO 1926001, ISO 1928001, ISO 193001, ISO 1932001, ISO 1934001, ISO 1936001, ISO 1938001, ISO 194001, ISO 1942001, ISO 1944001, ISO 1946001, ISO 1948001, ISO 195001, ISO 1952001, ISO 1954001, ISO 1956001, ISO 1958001, ISO 196001, ISO 1962001, ISO 1964001, ISO 1966001, ISO 1968001, ISO 197001, ISO 1972001, ISO 1974001, ISO 1976001, ISO 1978001, ISO 198001, ISO 1982001, ISO 1984001, ISO 1986001, ISO 1988001, ISO 199001, ISO 1992001, ISO 1994001, ISO 1996001, ISO 1998001, ISO 200001, ISO 2002001, ISO 2004001, ISO 2006001, ISO 2008001, ISO 201001, ISO 2012001, ISO 2014001, ISO 2016001, ISO 2018001, ISO 202001, ISO 2022001, ISO 2024001, ISO 2026001, ISO 2028001, ISO 203001, ISO 2032001, ISO 2034001, ISO 2036001, ISO 2038001, ISO 204001, ISO 2042001, ISO 2044001, ISO 2046001, ISO 2048001, ISO 205001, ISO 2052001, ISO 2054001, ISO 2056001, ISO 2058001, ISO 206001, ISO 2062001, ISO 2064001, ISO 2066001, ISO 2068001, ISO 207001, ISO 2072001, ISO 2074001, ISO 2076001, ISO 2078001, ISO 208001, ISO 2082001, ISO 2084001, ISO 2086001, ISO 2088001, ISO 209001, ISO 2092001, ISO 2094001, ISO 2096001, ISO 2098001, ISO 210001, ISO 2102001, ISO 2104001, ISO 2106001, ISO 2108001, ISO 211001, ISO 2112001, ISO 2114001, ISO 2116001, ISO 2118001, ISO 212001, ISO 2122001, ISO 2124001, ISO 2126001, ISO 2128001, ISO 213001, ISO 2132001, ISO 2134001, ISO 2136001, ISO 2138001, ISO 214001, ISO 2142001, ISO 2144001, ISO 2146001, ISO 2148001, ISO 215001, ISO 2152001, ISO 2154001, ISO 2156001, ISO 2158001, ISO 216001, ISO 2162001, ISO 2164001, ISO 2166001, ISO 2168001, ISO 217001, ISO 2172001, ISO 2174001, ISO 2176001, ISO 2178001, ISO 218001, ISO 2182001, ISO 2184001, ISO 2186001, ISO 2188001, ISO 219001, ISO 2192001, ISO 2194001, ISO 2196001, ISO 2198001, ISO 220001, ISO 2202001, ISO 2204001, ISO 2206001, ISO 2208001, ISO 221001, ISO 2212001, ISO 2214001, ISO 2216001, ISO 2218001, ISO 222001, ISO 2222001, ISO 2224001, ISO 2226001, ISO 2228001, ISO 223001, ISO 2232001, ISO 2234001, ISO 2236001, ISO 2238001, ISO 224001, ISO 2242001, ISO 2244001, ISO 2246001, ISO 2248001, ISO 225001, ISO 2252001, ISO 2254001, ISO 2256001, ISO 2258001, ISO 226001, ISO 2262001, ISO 2264001, ISO 2266001, ISO 2268001, ISO 227001, ISO 2272001, ISO 2274001, ISO 2276001, ISO 2278001, ISO 228001, ISO 2282001, ISO 2284001, ISO 2286001, ISO 2288001, ISO 229001, ISO 2292001, ISO 2294001, ISO 2296001, ISO 2298001, ISO 230001, ISO 2302001, ISO 2304001, ISO 2306001, ISO 2308001, ISO 231001, ISO 2312001, ISO 2314001, ISO 2316001, ISO 2318001, ISO 232001, ISO 2322001, ISO 2324001, ISO 2326001, ISO 2328001, ISO 233001, ISO 2332001, ISO 2334001, ISO 2336001, ISO 2338001, ISO 234001, ISO 2342001, ISO 2344001, ISO 2346001, ISO 2348001, ISO 235001, ISO 2352001, ISO 2354001, ISO 2356001, ISO 2358001, ISO 236001, ISO 2362001, ISO 2364001, ISO 2366001, ISO 2368001, ISO 237001, ISO 2372001, ISO 2374001, ISO 2376001, ISO 2378001, ISO 238001, ISO 2382001, ISO 2384001, ISO 2386001, ISO 2388001, ISO 239001, ISO 2392001, ISO 2394001, ISO 2396001, ISO 2398001, ISO 240001, ISO 2402001, ISO 2404001, ISO 2406001, ISO 2408001, ISO 241001, ISO 2412001, ISO 2414001, ISO 2416001, ISO 2418001, ISO 242001, ISO 2422001, ISO 2424001, ISO 2426001, ISO 2428001, ISO 243001, ISO 2432001, ISO 2434001, ISO 2436001, ISO 2438001, ISO 244001, ISO 2442001, ISO 2444001, ISO 2446001, ISO 2448001, ISO 245001, ISO 2452001, ISO 2454001, ISO 2

NATURE PRESERVES ITS PRODUCTS,
FOR EVERYTHING ELSE THERE IS **TECNO PACK**



Find out the new **TECNO PACK** technology

Ecological and sustainable, it grants a vertical
reduction of power consumption.

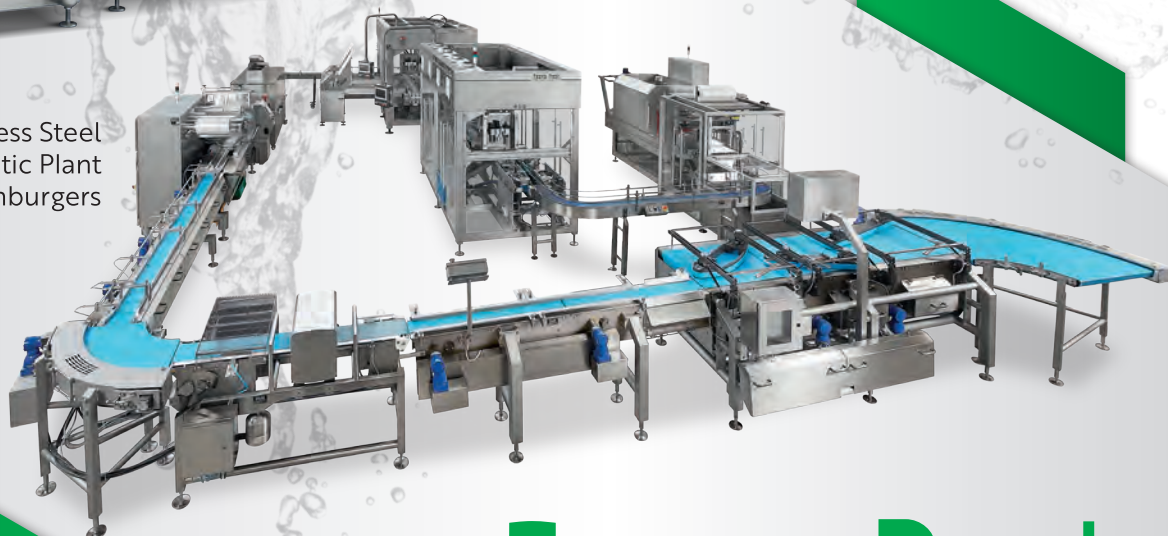
NEW MODEL!
FP 100 DUAL LANE



Difficult films? Compostable?
Biological or paper ones?

**WE ARE READY
and YOU?**

IP 65 Stainless Steel
Automatic Plant
for Hamburgers



+39 0445 575 661
Via Lago di Albano, 76
36015 - Schio (VI) - Italy
www.tecnopackspa.it
comm@tecnopackspa.it

Tecno Pack

P A C K A G I N G M A C H I N E S

Wrapping up quality with TAILORED PACKAGING SOLUTIONS

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

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

In addition to the different varieties of bread and pizza made with different types of flour, the Valdarno brand bo-



asts a rich pastry production that also includes the typical traditional pastries from Siena produced by the historic company Fiore 1827, acquired by Dolcezze Savini in 2017.

Among these specialities there are three important IGP products: two of them are from Siena and they are Panforte and Ricciarelli, while the almond biscuits named Cantuccini are linked to the Tuscan territory.

For a long time, Dolcezze Savini has focused its activity on a production that pays particular attention to the importance of some elements such as natural ingredients, reduced gluten products,

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



Tecno Pack
PACKAGING MACHINES

IFP
PACKAGING

SP
general system pack

palm oil-free products and a clearer labelling system.

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

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

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

production of partially baked bread, the new investment has opened more space for artisanal production with the strengthening of the production of handmade pizza dough. The company has also developed a complete electronic management system, making it part of the world of industry



4.0. This innovation process has found full achievement in the strengthening of its packaging sector, for which Dolcette Savini has called upon the group Tecno Pack, a leading company in the supply of packaging technologies.

For over 30 years Tecno Pack has been designing, manufacturing and distributing horizontal packaging machines and automatic packaging systems for the food industry and other sectors. Tecno Pack is a group of companies including Tecno Pack, IFP

and GSP. Based in Schio, in the province of Vicenza, Tecno Pack stands out for being a pioneer and innovator in the packaging industry, developing cutting-edge solutions, increasing the digitalization of machines and plants, offering its customers excellent results with limited investments.

The partnership between Tecno Pack and Dolcette Savini has resulted in the development of three packaging lines, specifically designed by the group for the bread sector of the Tu-

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

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





ne, designed to wrap small, medium and large-sized items as well as thin solid products;

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

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

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

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

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

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



B.M. GROUP SRL: all-around service: CNC machining - pre-treatments - anodizing

B.M. Group S.r.l. was founded more than 50 years ago and its Quality Management System is certified to the worldwide standard ISO 9001:2015. We count on two different production hubs – located in Thiene and Zanè – both easily accessible with the highway.

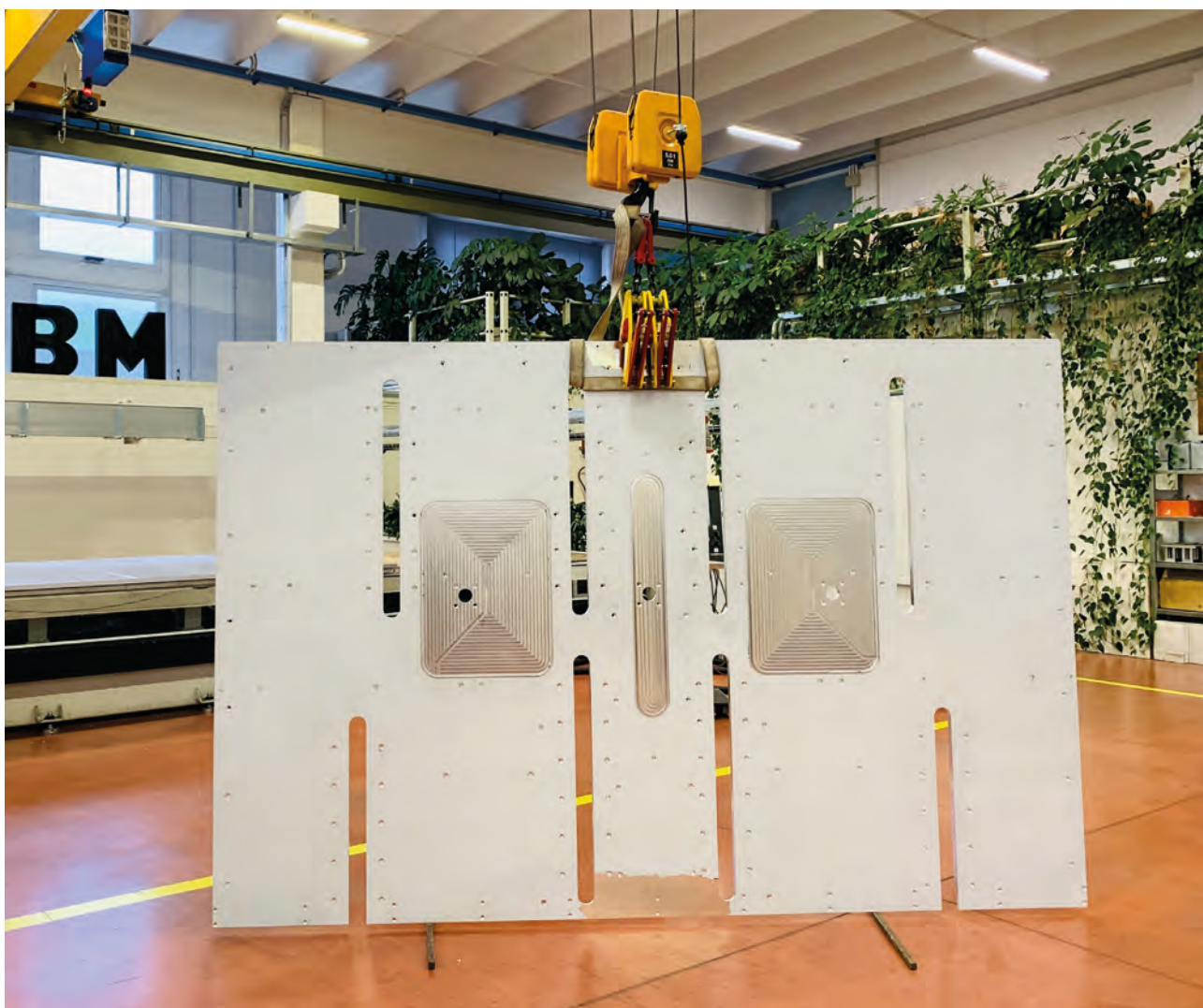
Our Chairman, **Mr. Silvano Busin**, has developed a deep knowledge of both sector through the

years and for this reason he in person is managing the technical department. On the other hand, our VP **Ms. Marina Vitacca**, is managing both communication strategies and research departments. Moreover, our team is made up with young and qualified staff aiming at continuous self-improvement, in line with our Management working philosophy.

CNC Machining of big-sized aluminum plates has en-

abled us to establish also abroad in the main European markets and to meet the requirements of a niche sector in which B.M. Group S.r.l. has recognized the potential.

Aside from the CNC Machining we perform pre-treatments as mechanical brushing with different types of finishing or chemical pre-treatments, as well as anodizing.



Our strong point is the speed of service, thanks to our warehouse which allows us to stock materials of different alloys (5083, 6082, 7075 etc.) and thicknesses, and also to our machines up to 13 meters long and 2,5 meters wide that enable us to machine multiple plates at the same time.

Upon the customer request we are able to release declaration of compliance with the order, as well as the normative MOCA (food-related norm), measurement reports, anodizing and/or material certificates as regulated by the European standard UNI EN 10204.

We were able to conjugate our know-how with the passion that has always distinguished us. We like thinking that our customers may find a partner able to make a difference. 🏠

www.bmgroupsrl.com



“ EXPLORING TRACEABILITY IN THE BEVERAGE INDUSTRY: FROM PRODUCTION TO CONSUMER ”

A journey through technologies and practices ensuring safety and transparency in beverage products

In recent years, traceability has become a key concept in the beverage industry. Consumers are increasingly interested in knowing the origin and quality of the products they purchase, prompting companies to implement increasingly sophisticated systems to ensure safety and transparency throughout the entire production chain. In this article, we will explore the technologies and practices that are revolutionizing the concept of traceability in the world of beverages.



Our Editorial Office

One of the primary tools used for traceability is radio frequency identification (RFID) technology. This technology allows for the application of small RFID tags to bottles, containing unique digital information. RFID tags

can be read and recorded during each stage of the production and distribution process, enabling companies to monitor and trace the journey of each individual bottle. This means that product authenticity can be





verified, potential security issues can be identified, and detailed information about the entire supply chain can be obtained.

In addition to RFID, another technology that is gaining increasing importance is blockchain. Blockchain is a distributed and immutable digital ledger that securely and transparently records transactions. In the beverage industry, blockchain can be used to create reliable and tamper-proof traceability. Every transaction, from the purchase of raw materials to beverage production, can be recorded on the blockchain, allowing companies and consumers to access detailed information about the origin, ingredients used, and production practices. This ensures high food safety standards and promotes consumer trust in the product. However, traceability is not just about technology. Sustainable practices and collaboration among the various parties involved in beverage production are equally important. Many companies are committed to working in partnership with raw material suppliers, manufacturers, and distributors to ensure accurate traceability of beverage products while adhering to sustainability standards. This active involvement of all stakeholders contributes to creating a responsible and transparent supply chain.

Furthermore, the use of labels and warranty seals is another common tool to guarantee traceability in the beverage industry. Labels can provide information about the place of production, expiration dates, and quality certifications. Warranty seals, on the other hand, indicate that the product has not been opened or tampered with. These elements provide additional guarantees to consumers regarding the safety and authenticity of the products they are purchasing.



AI, digitalization, food safety: the future of technology for the food industry is on display at Cibus Tec

Nutrition and technology, these two intertwined concepts represent the beating heart of innovation for the food industry. On the consumers' side, the market is more varied and demanding with each passing day; that requires food companies to be up to a complex task, which is to identify and anticipate all sort of needs.

Moreover, food companies are nowadays coping with the emerging necessity of developing new virtuous

Held in Parma from 24th to 27th October, the trade show marks the comeback of China to European food-tech events and confirms its long-established mission to showcase innovative solutions for the whole industry



and efficient production models, featuring smart digital hi-tech options, innovative packaging solutions and – last but not least – new tracking systems for the industrial production.

These are the very burning issues around which a crucial match is to be played for several sectors related to the food industry. All these themes represent the core focus of Cibus Tec, the well-established Italian exhibition (and authentic milestone in the European expos' calendar of food tech and innovation events), taking place in Parma from 24th to 27th October 2023.

THE NUMBERS – 40,000 visitors are coming from all over the world.

Over 1,000 exhibitors (representing 30 different countries) are ready to showcase hundreds of innovative food technology solutions to the thousands of operators attending the show. Italy will be represented by all its top brands, but many other leading countries in the field of innovation, such as Germany, Spain, Netherlands, Turkey, India, USA and China, will bring their most renowned companies (incidentally, the complete catalogue is now available at the link <https://catalogo.fiereparma.it/manifestazione/cibustec-2023/>).

Speaking of China, this edition marks its comeback to the European trade show scene, representing an enormous asset for Cibus Tec, since it strengthens its cosmopolitan vision.

This is even more evident considering the size of this year's buyers program, involving more than 3,000 VIP operators coming from the most important global hubs of food processing.

The program is made possible by huge targeted investments and the long-term cooperation with both ITA – Italian Trade Agency and the Emilia-Romagna Region.





START-UPS: AN AUTHENTIC ADDED VALUE FOR THE EX-PO

Cibus Tec is undoubtedly the ideal stage to unveil the most interesting innovations and applications of AI. 100 accurately selected start-ups from every part of the globe will offer a complete overview on topics of interest related to food processing, such as cultivation, packaging and nutritional analysis processes.

FOOD SAFETY: A CRUCIAL POINT

With regards to the former topic, Cibus Tec develops a specific focus, confirming and reinforcing its positioning as the main platform to discuss food safety in the Italian landscape.

There are no doubts about the importance of this theme, which is gaining prominence thanks to the interest of a growing number of conscious consumers, who are more and more interested in the origins and the quality of the food they daily bring on their table.

This trend, that has not gone unnoticed by Cibus Tec organizers, is forcing a structural rethinking of many processes and paradigms, involving all the members of the sector, from producers to food processors, not to mention distributors and food tech suppliers. The main goal of all these players, meeting in Parma next October, is to put on the market safer and better tracked products, if possible, supported by a simple, clear communication, allowing consumers to seriously rely on the brands and build up a long-term trustful relationship with them.

That is why the next edition of Cibus Tec, taking place in Parma from 24th to 27th October 2023, is going to be remembered as a special occasion for food tech. Visitors will join a leading platform, where they may start a dialogue on the future of the industry and share knowledge on a bunch of complex and serious issues for the whole food sector. 🏛️





CIBUSTEC

INSPIRING INNOVATION

IN FOOD AND BEVERAGE TECHNOLOGIES

24|27 OCT. 2023

PARMA | ITALY

www.cibustec.com | info@cibustec.com  



madeinitaly.gov.it



C&G, PLANTS for the treatment of industrial wastewater

C&G Depurazione Industriale Srl is an Italian company which has been designing and manufacturing plants for the treatment of industrial wastewater around the world for over 40 years, with the aim of providing clients with a complete, personalised service which fully respects the environment around us.

The company has a team of engineers and highly specialised personnel that follows each client from the design to the construction and installation of the machine, including assistance and post-sales maintenance.

C&G supplies machinery and support technologies to a wide variety of production sectors with one common objective: to treat and improve the quality of a particular liquid.

The main sectors where our products are applied include galvanic industries, where it is possible to recover Chrome VI, Nickel, Brass, Copper and precious metals, while treating the wastewater produced by these industries. Other fields of application include graphic arts, mechanical, chemical and petrochemical industries,

pharmaceutical, cosmetic and food industries.

C&G is a pioneer in vacuum evaporation technology, and offers a wide range of evaporator models all of which are characterised by low electrical consumption, the use of elec-

tricity or alternative energy sources, automatic 24 hour functioning, compact, robust design, constancy and quality in the results obtained, and absence of smell or vapours. The principal objectives of C&G are: to reduce the disposal costs and water consumption costs of a company up to 90%, to recycle the water used in an industrial line; to recover precious metals, to eliminate any possible risk of sanctions by environmental control authorities, to modernise production and to improve the image of a company. 🏠

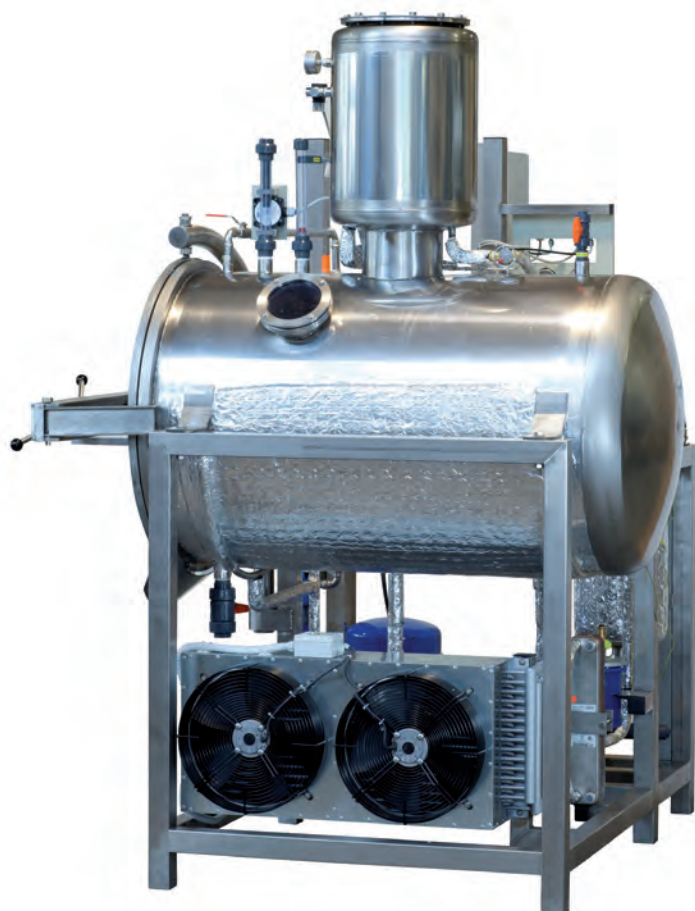
www.cgdepur.it

C&G s.r.l.
SOCIO FONDATORE UNIAQUA





C&G s.r.l.
SOCIO FONDATORE UNIAQUA



C&G DEPURAZIONE INDUSTRIALE SRL

Via 1° Maggio, 53 - 50067 Rignano S.Arno - Firenze - Toscana - Italia

info@cgdepur.it - www.cgdepur.it - tel. +39 0558303450 - +39 0558303454 - Fax +39 0558303368

New Success for AKOMAG

In recent years there has been a strong growth in the market of gallon water bottles, both in Italy and worldwide.

Dispensers showed a positive trend, apart from the temporary setback caused by the Covid-19, mainly involving offices, factories, warehouses and various communities.

The success of gallon bottles, in particular those of reusable PET or PC bottles, obviously involves the need to guarantee the safety of water, and consequently the cleaning of containers and dispensers. Which must be accurately and periodically sanitized. The water used to fill the gallon bottles, which can be natural spring water or water from other sources, must comply

with the quality parameters defined in Community legislation on water intended for human consumption.

Used empty gallon bottles, if still intact, can be reused. But before being inserted in a new filling cycle, they must be inspected for integrity, absence of discoloration and possible odours.

After that, they must be washed with water and specific detergents and rinsed thoroughly with special machines. Like those built by Akomag, for example, an Italian company specialized in the design and production of machines and plants for the bottling industry.

Washing, rinsing, filling, capping The Monobloc washer for gallon bottles Sira has been designed by

Akomag for washing and sterilizing PET or PC gallon bottles or other bottles of various sizes, to be filled with still water.

The washing cycle adapts to the various production needs of the end customer and is very effective. For this machine Akomag has designed and produced a special spraying and brushing device for gallon bottles that ensures total cleanliness.

Through the use of special mobile nozzles furniture (penetrating and rotating), the machine washes the bottle internally at high pressure (5 bar). While the outside is brushed by means of nylon brushes.

The machine can be quickly adapted to the different bottle formats by sim-



SIRA

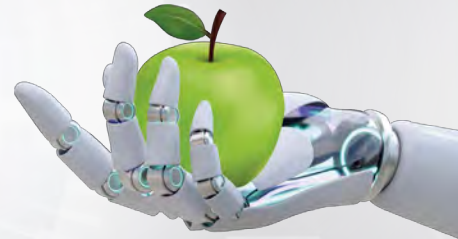
AKOMAG



India's Largest International Supplier Fair For Food & Drink Technology

7-9 September 2023

Bombay Exhibition Centre, Mumbai



+91 85914 71184

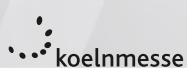
(Share your visiting card,
we will get you registered for FREE)

www.anutecindia.com

Co-Located with:



Organised by:



Unlock the Future of Food & Beverage Processing
Innovate. Automate. Elevate.

Why Attend Anutec India 2023



500+ Exhibitors,
52+ Countries participation



Pre-booked business
meetings



Product launches &
live demonstrations



Intralogistics & Automation
Industry pavilions



Packaging Theatre -
highlighting global trends



Specialized conferences by
the key industry associations

Get ready to savor the moment:

Save the dates



September 2023

For More Information |

Priya Datar



priya.datar@koelnmesse-india.com



+91 98670 04675

Supporting Associations



Visitor Registration is Now Open!





SIRA

AKOMAG



SIRA

AKOMAG

ply setting the type of container to be handled on the control keyboard.

The stainless steel control board installed next to the monobloc is easily accessible for the operator. The panel is equipped with a touch-screen for the complete manage-

ment of all line functions, and the display of operating parameters and alarms.

The Monobloc features an automatic de-capper in stainless steel: a pneumatic system grips the bottle neck while ejecting the cap. The system is

safe, but it can be equipped with a system for the selection and ejection of gallon bottles that have not been properly de-capped.

The bottles are then filled by means of special inverter- controlled pumps.

A valve designed by Akomag guarantees a laminar flow and no contact between the valve and the bottle.

The filling is carried out by means of a special metering device that ensures extreme filling accuracy.

The capper consists of soundproof vibrating hopper, a descent channel, and a tear-off pick-up head.

The closure of the bottle is guaranteed by an inclined pressure belt characterized with adjustable pressure.

All adjustments are automatic and managed from the control panel. 🏠

www.akomag.com

FACHPACK 2024



Your Guide for a Packaging Industry in Transition.

a Newsletter from FACHPACK >

SAVE THE DATE

> 24.-26.9.2024

NUREMBERG, GERMANY

**WORKING TOGETHER
ON TOMORROW'S
PACKAGING CONCEPTS >**

**EUROPEAN TRADE FAIR
FOR PACKAGING, TECHNOLOGY AND PROCESSING**

NIRSO EZIO: since 1969, an Italian excellence

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

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

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

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

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

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

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

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



The Premier PROCESSING & PACKAGING Event for Vietnam and beyond



After the success of ProPak Vietnam in 2022, there are many positive feedbacks on business opportunities generated during the show dates. The 15th edition attracted 10,720 trade visitors to the event to do face-to-face business and provided countless product demonstrations to engineering community. Coming back **Saigon Exhibition & Convention Center (SECC), District 7, Ho Chi Minh City from 8th – 10th November 2023**, ProPak Vietnam 2023 will continually serve the packaging & processing industry in Vietnam and beyond. This is the dedicated place for B2B connect activities, product & technology showcase, industry sharing sessions for enterprises who are working in food, beverage, pharmaceutical, cosmetics, consumer goods and many other related sectors. Secure your participation in the 16th edition of ProPak Vietnam to obtain a chance for real business opportunities you must invest in. ProPak Vietnam 2023 will bring an international-standard event to Vietnam and surrounding countries with significant features:



10.000 sqm

EXHIBITION AREA



450+

EXHIBITING COMPANIES



30+

COUNTRIES/REGIONS



11.000+

TRADE VISITORS

Organiser by



SES Vietnam Exhibition
Services Company
Limited

**RESERVE YOUR SPACE TO BE A PIONEER IN
THE PACKAGING & PROCESSING INDUSTRY IN VIETNAM!**



requested in the preparation of foods such as cured meats. Another strong point of the company concerns the sharpening of molds and blades of any shape and size, with a department that presents high quality machinery.

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

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

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

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

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

www.nirsoezio.it
info@nirsoezio.it



BRINGING SUCCESS RECIPE TO EVERY BUSINESS!



**FOOD + TECH
PAKISTAN**

**15TH INTERNATIONAL FOOD,
EQUIPMENT & TECHNOLOGY
EXHIBITION AND CONFERENCE**
KARACHI EXPO CENTRE

12th

13th

14th

**OCTOBER
2023**

ABOUT FOOD + TECH PAKISTAN

15th edition of Food + Tech Pakistan – A complete exhibition for our growing food industry. This exhibition will bring world's best food suppliers, manufacturers and technology to Pakistan. It is the most anticipated event for leading Technologists, Importers/Exporters/General Traders, Food Certification, Processing and Packaging Companies.

EXHIBITOR PROFILE

Food + Technology Pakistan is the most worthy platform for companies to meet with their industry peers having relevancy with the topics below:

- **Food Processing Technology & Equipment**
- **Food Innovation & Sustainability**
- **Food Safety**



**Book Your
Space**



**For Detailed
Exhibitor Profile**



Organiser



FAKT Exhibitions (Pvt.) Ltd.

304, 3rd Floor, Clifton Centre Block-5, Clifton
Karachi, Pakistan.

+92 21 35810637 - 38 - 39

enquiry@foodntechnology.com

www.foodntechnology.com

Solve Fermentation Challenges Through APPROPRIATE VALVE SELECTION

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

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

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

The secret to meeting customer expectation every time lies in your fermentation process.

To ensure quality, consistency and taste across various beverage styles and flavors, the fermentation process requires exact temperature control. To precisely control heating and/or cooling parameters, control tanks must be equipped with the right valve system.

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



The fermentation process in the beverage industry requires precise temperature control

Common Obstacles Make Tank System Upgrades Difficult

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

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

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

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

Because fermentation is such a vital process, it's no surprise beverage makers look for opportunities to install or upgrade their tank cooling and heating systems.

But these modifications aren't without their challenges. Many facilities, particularly smaller operations, have limited physical space.

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

Other challenges include:

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



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

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

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

How To Select Valves That Overcome Fermentation Challenges

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

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

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

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



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



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

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

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

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

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

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

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

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

They are also one-third the cost of ball

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

Automation Further Improves Temperature Control

In addition to proper valve selection, it's important to consider automating your fermentation heating and cooling systems to achieve even greater thermal precision.

For example, the G3 Electronic Fieldbus Platform makes this process quick, simple and painless. G3 integrates communication interfaces and input/output (I/O) capabilities into your pneumatic valve manifolds, which enables your PLC to more efficiently turn valves on and off, as well as channel temperature data from resistance temperature detector (RTD) sensors. Compact and modular, G3 includes

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

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

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

www.emerson.com



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

SCANNY3D: geometric deformation control on glass bottles

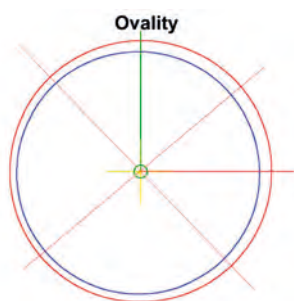
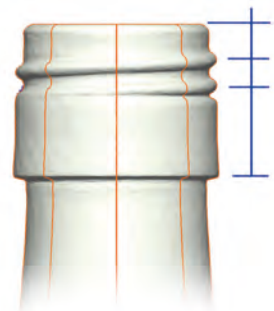
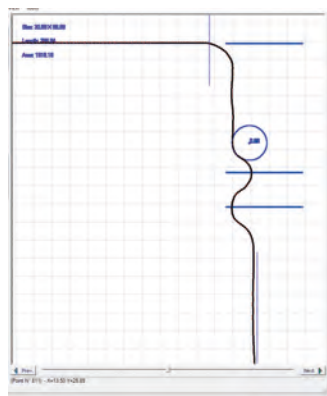
Scanny3D has designed and developed a double laser spot rotating 3D scanner. It is a patented device, 100% "Made in Italy" that performs a 360 ° scan without contact, at high speed, at very high resolution and in a completely automatic way.

The 3D scanner allows you to digitize and analyze bottles, plastic bottles, containers of any material and shape and various accessories.

The device returns a high fidelity 3D model and the supplied software offers numerous functions designed specifically for the beverage, packaging and bottling sector, among which the possibility of exporting the 3D model as a "solid", thus ensuring maximum compatibility with the main CAD-CAM software.

The scanner management software contains many features, including: section analysis and measurement; assessment of the centers of gravity; automatic alignment; symmetry calculation; quality check; evaluation of inclination and stability etc.

One of these functions, for example, allows you to obtain and analyze all



SCANNY3D®
Sistemi di scansione laser 3D
3D laser scanning systems


the sections of the bottle, easily carry out all measurements, evaluate the centroids of the sections, align the 3D model based on the center of gravity or the symmetry of a section and more. Among these numerous features, one is of particular importance for quality control on bottles. This function allows you to geometri-

cally and numerically evaluate the deformations of a bottle with respect to the "theoretical" model or with respect to a reference bottle.

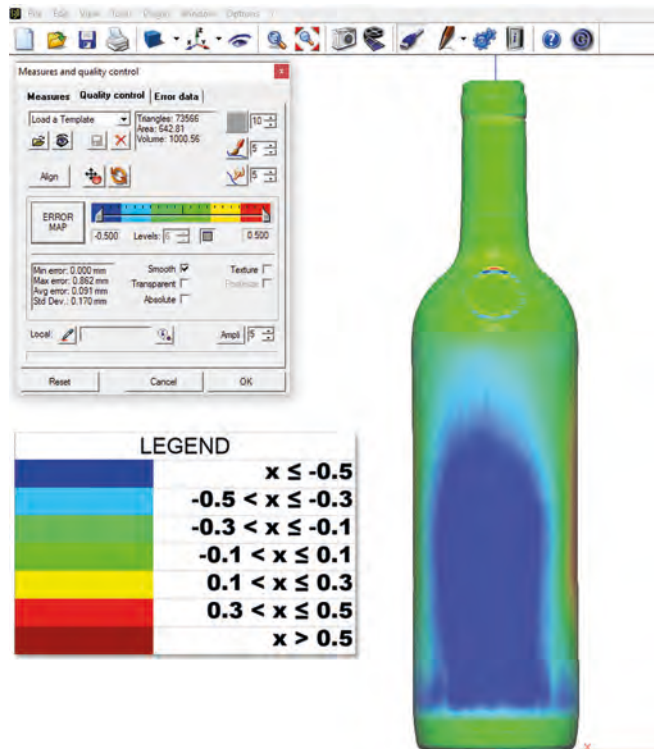
With this function, the software automatically calculates and displays the ovality of a section of the bottle, the accuracy of the bottleneck screw, the

symmetry of the neck, the inclination (slope) of the bottle with respect to the plane, any deformations in the lateral surface of the bottle. , and much more. The automatic screw control of the bottleneck, among other things, is very important to ensure a perfect closure of the cap.

These geometric evaluations are carried out automatically by the software, which generates both a graphical and numerical report, and it is possible to export the results in various formats (eg Excel) for statistical purposes.

The constant mission of the R&D department is to design systems that are increasingly accurate, reliable but at the same time easy to use for the end customer, thanks to the use of cutting-edge technologies. 

www.scanny3d.com



3D SCANNER
for bottling industry

100% AUTOMATIC

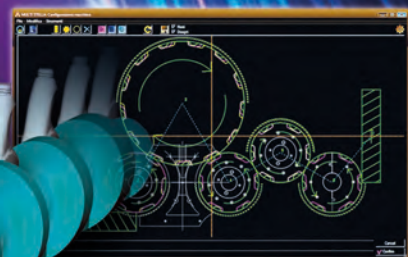


SCANNY3D®

3D laser scanning systems

PackSim
Advanced simulator for packaging & bottling

Software for automatic design
of SCREWS & STARS



SCANNY3D® S.r.l.

Via Archetti, 15 - 63831 Rapagnano (FM) - Italy

WWW.SCANNY3D.COM

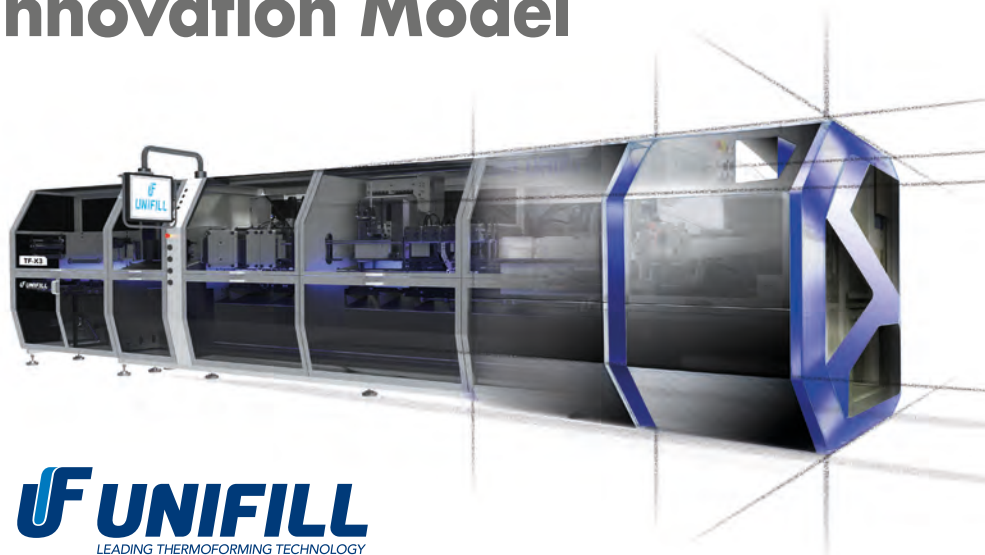
+39 0734-510410 info@scanny3d.com

UNIFILL: our Innovation Model

Founded in 1979, today UNIFILL is a leading Company in the design and production of high-tech automated machines for primary packaging, for filling liquid and semi-dense products in single-dose packages for food and non-food industry. We have installed more than 400 machines and developed a commercial network covering more than 52 countries. UNIFILL has its headquarters in the province of Modena-Italy, In the heart of the Packaging Valley, and has sales offices in China. Innovation has always been an asset of UNIFILL. Our culture, our history, our business model and living in a rich industrial ecosystem of technological contaminations, stimulates a process of continuous improvement. During these years we have been able to reach remarkable achievements thanks to our innovative technology and we also recently made notable investments to introduce updated solutions and new advanced lines as our generation "X".

The design that shapes the future

The new "X" series is the expression and the essence of over 40 years of UNIFILL history condensed into a new technology with an innovative design, revolutionary that combines the history and experience of an Italian territory where the Packaging, combined with the experience of automotive design have come together, giving thus forming to a new generation of machines. Ergonomic design for an innovative man-machine Interaction. The project was born with the aim of placing at the center the operator's comfort in the use and maintenance of technology. The new generation "X" is also equipped with IOT technologies and intelligent Sensors, that guide and help the operator by providing a unique and innovative work experience.

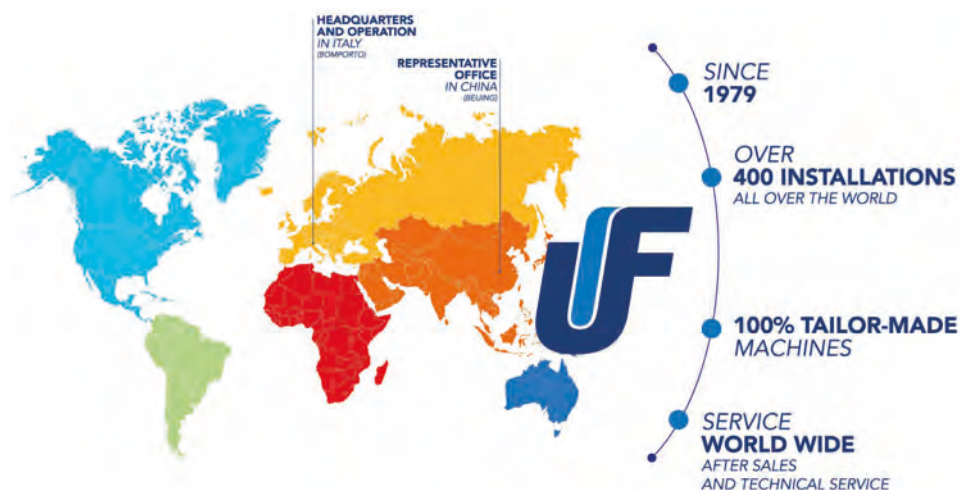


We are at a turning point in history

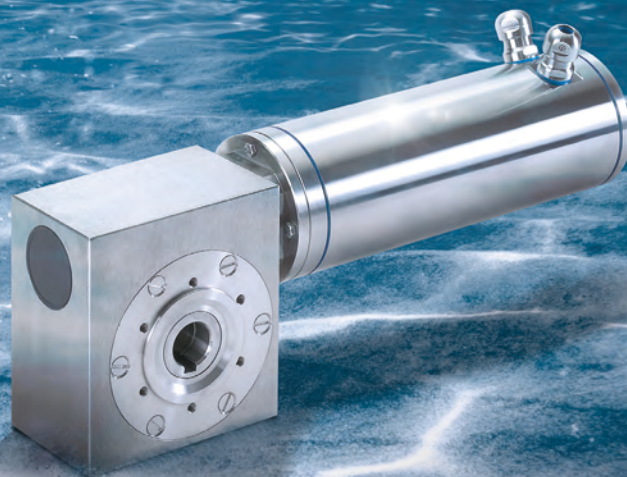
Today is not possible to think of a future without innovation. Digital transformation and ecological commitments are a reality, flexible ways that can represent the ultimate solution in every field, including packaging. Let's think about our UNIFILL suite, a digital services platform designed for our clients and business partners, which allows users to take advantage of several digital-service: real-time customers support, chat boxes, digital form and so on, including a QAP (qualification agent program), a digital service based on blockchain technology to become UNIFILL certified partner. In terms of sustainability, it is essential to expand and strengthen our partnerships with

leading suppliers in the design and production of sustainable materials. The process of studying and researching new materials cannot be carried out individually. Companies and suppliers must work together to achieve this goal. We are at a turning point of history. It is no longer a question of whether or not to adhere to particular innovation process. The point is whether we want to be spectators or protagonists. For UNIFILL, sustainability and attention to the environment have therefore become a constant focus of its business and is ready to play a leading role not only in paper solutions, but also using recyclable materials with single polymer (e.g. mono PE, mono PET and PP). 🏠

www.unifill.it



Free your power
we do it UNDERWATER



www.minimotor.com | sales@minimotor.com



CIBUSTEC
24-27 OCT. 2023 | PARMA | ITALY

PAD 2 Stand E004

INNOVATIVE AUTOMATIC DOSING SYSTEM: fast, accurate and eco friendly

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

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

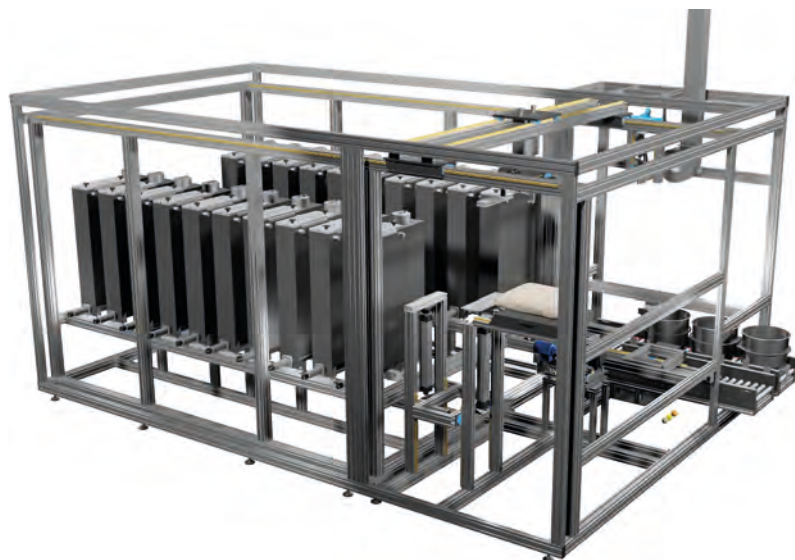
Why dosing is so important in food processing?

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

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

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

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



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

Full automatic dosing system

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

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

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

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

Semi-automatic dosing system

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





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

Key benefits of our automatic dispensing system

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

end products with uniformity features throughout time.

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

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

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

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

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

www.colorservice.eu

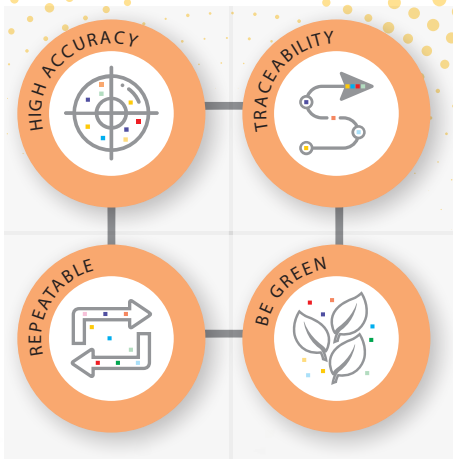


Certification ISO 9001



AUTOMATIC DOSING SYSTEM

FOR POWDERS AND LIQUIDS



100% MADE IN ITALY

**We are the FIRST company to dose
automatically your products**

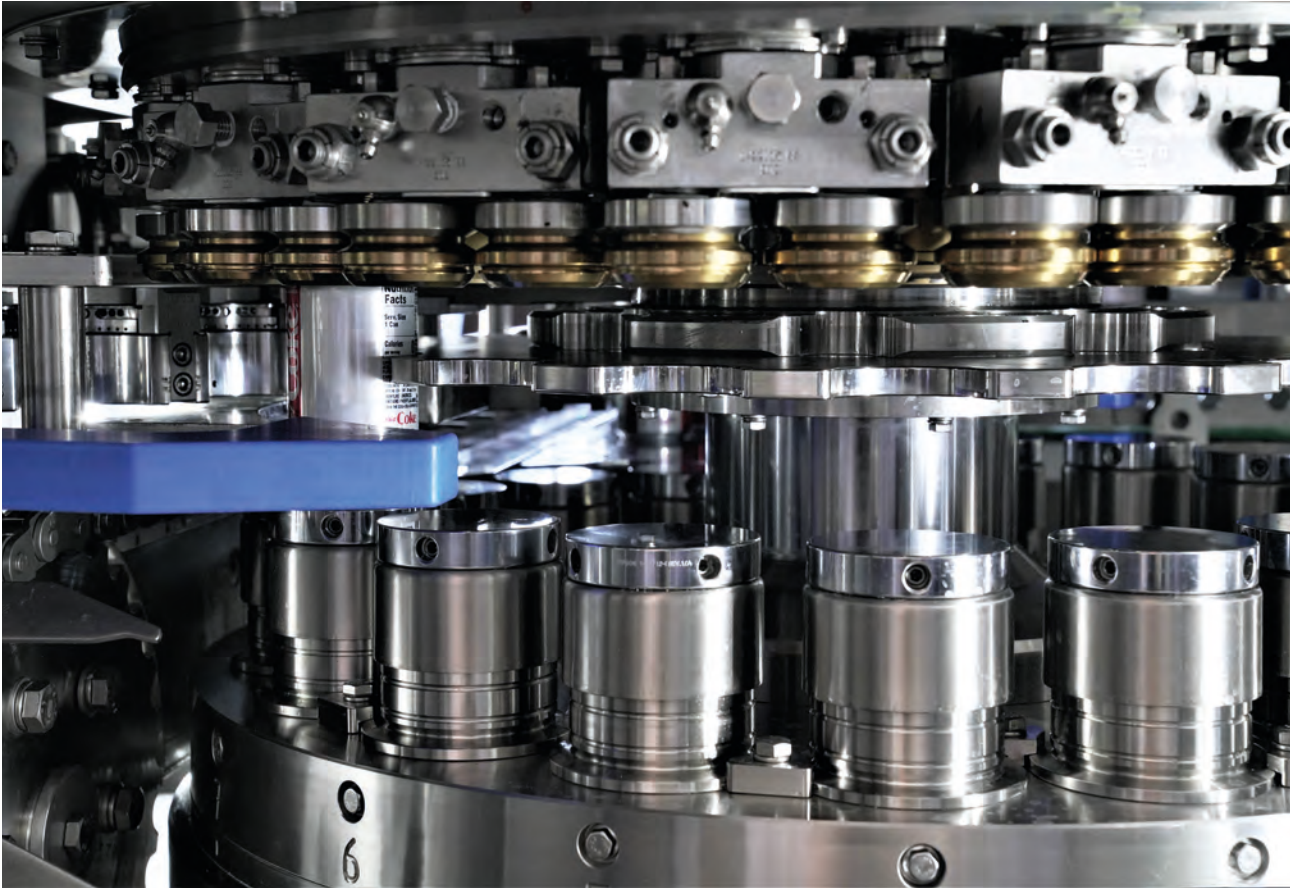


ColorService®

Dosing Technology



ANGELUS: can seaming equipment manufacturer



In the late 1800's and early 1900's, the invention of the double seam – a means of folding 5 layers of material in a way that interlocks a can end with a can body – transformed Food and Beverage packaging by eliminating the need for soldered seams to achieve a hermetic seal. By 1910, Henry L. Guenther had taken this advancement to the next level by designing and patenting the first machinery to create these double seams on cans. With that invention, the Angelus Sanitary Can Machine company was founded, with a vision of creating the finest machines of their kind, anywhere in the world.

Today, more than a century later, and with more than 16,000 seamers sold

in 132 countries across the globe, Henry's vision has been realized, and the Angelus name is still recognized as the standard for excellence in seaming technology and equipment. Joined with Pneumatic Scale Corporation in 2007, the combined company of Pneumatic Scale Angelus is a global leader in the design and manufacture of packaging machinery for liquid and dry filling, capping, can seaming, and labelling applications as well as state-of-the-art container handling solutions. The company is a division of BWV Packaging under the Barry-Wehmiller umbrella of companies.

In recent years, the company has introduced the Angelus V-Series line, designed to meet the specific needs of

the Food and Beverage markets. The same technology used for high-speed seaming applications has also been scaled for the needs of the craft beverage space. Angelus has manufacturing facilities in Ohio in the United States, as well as its Parma, Italy location.

In nearly all markets Angelus serves, concerns for sustainability and increased, pandemic-driven demand for shelf-stable products created a surge in can demand and a subsequent shortage of them. Though pressures have eased somewhat, with can makers working aggressively to increase production, it will still take time for supply to catch up with demand.

In addition, the lightweighting of cans brings challenges to seaming



equipment, as lighter cans can often lead to an increased risk for can damage during production and even transportation. Seamer suppliers like Angelus are responding with innovations to seamer design and container handling.

For Pneumatic Scale Angelus, consistent communication with can makers helps drive not only future product design, but also current partnerships with customers to analyze produc-

tion and mitigate potential areas for damage, not only at the seamer, but also upstream and downstream from the seaming process. Angelus currently has patents pending for several new developments in seamer design and container handling that it believes will provide superior solutions for its customers, as well as a competitive advantage for the company.

When asked about the future of sea-

mers for Food and Non-Food cans, Thomas Thiel, Product Line Leader for Can Seaming replied, "Angelus continues serving the Food and Beverage markets with seamers specially designed to address their unique needs. We have a long history of innovation in seaming, and we are excited about our plans to continue that legacy well into the future." 🏛️

www.psangelus.com



Pneumatic Scale Angelus

A Barry-Wehmiller Packaging Company

Raytec Vision Introduces Opportunity: AI-Driven Optical Sorter Setting New Standards in Food Sorting

Cutting-Edge Technology Redefines Precision and Quality Assurance

Raytec Vision, a leading provider of optical sorting solutions, proudly announces the launch of Opportunity, an innovative optical sorter that harnesses the power of artificial intelligence (AI) to revolutionize food sorting. Designed to meet the highest standards of accuracy and quality, Opportunity is

set to transform the food processing industry.

Opportunity combines advanced imaging technology with state-of-the-art AI algorithms, enabling it to analyze and sort food products with unprecedented precision. Its intelligent system learns and adapts to various sorting

requirements, ensuring consistent and reliable results. With this revolutionary technology, food producers can achieve optimal product quality, reduce waste, and enhance overall operational efficiency.

"At Raytec Vision, we are committed to pushing the boundaries of opti-



cal sorting technology,” said Nicola Avanzini, Head of Sales at Raytec Vision. “Opportunity represents a significant breakthrough, as it leverages AI to deliver unmatched results, setting new standards for the food processing industry.”


The AI-driven capabilities of Opportunity enable it to identify and eliminate defects, foreign objects, and contaminants in real-time. By swiftly and accurately removing imperfections, companies can enhance product quality and safety, thereby protecting their brand reputation and ensuring consumer satisfaction.

In addition to its precision sorting capabilities, Opportunity also offers a user-friendly interface, making easy for operators to monitor and manage the sorting process. Its intuitive

controls, coupled with real-time data visualization, allow for efficient decision-making and quick adjustments, resulting in increased productivity.

“With Opportunity, we aim to empower food processors to deliver the highest quality products to their customers,” added Nicola. “By leveraging AI and cutting-edge technology, we are re-defining what is possible in food sorting, while simultaneously improving efficiency and reducing costs.”

Raytec Vision continues to innovate and develop advanced solutions that address the evolving needs of the food processing industry. With Opportunity, food industries can embrace the future of optical sorting and achieve the utmost precision, quality, and efficiency in their operations.

For more information about Raytec Vision and their AI-driven optical sorter, Opportunity, please visit. 

www.raytecvision.com/en/



AN  ATS COMPANY



SYNTEGON LAUNCHES new pick-and-place platform

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

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

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

process technology to primary, secondary and transport packaging."

Maximum flexibility thanks to individual configuration

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

handle a wide variety of products. The Delta robots can be flexibly connected and, together with transport modules, seamlessly integrated into an overall system," explains Andreas Schildknecht, Product Manager Robotics at Syntegon. "Together with our customers, we can automate single process steps consecutively and in line with their needs or budgets, following the principle 'build as you grow'. Moreover, the platform can be scaled to suit different production



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



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

capacities, while multiple cells can be connected."

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

contamination for both current and future hygiene requirements in the food industry. Last but not least, the tool-free format changeover reduces downtime, allowing manufacturers to process different products on the same line and to respond quickly to changing market demands.

Automation is the future

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

the Syntegon RPP platform one step of many, albeit a very important one." In parallel, Syntegon will continue to develop further innovative automation technologies – and will soon introduce new developments to the market

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



Andreas Schildknecht, Product Manager Robotics at Syntegon

www.syntegon.com

EXHIBITIONS 2022-2023

PROWEIN

19-21/03/2023 
DUSSELDORF

International wine & spirits exhibition.

MECSPE

29-31/03/2023 
BOLOGNA

Fair for the manufacturing industry.

VINITALY

02-05/04/2023 
VERONA

International wine & spirits exhibition.

PROSWEETS

23-25/04/2023 
COLOGNE

Fair for the sweets and snacks industry.

MACFRUT

03-05/05/2023 
RIMINI

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

CIBUS

03-06/05/2023 
PARMA

Fair of food product.

INTERPACK

04-10/05/2023 
DUSSELDORF

Technology focused on packaging, bakery, pastry technology.

HISPACK

07-10/05/2023 
BARCELONA

Technology fair for packaging.

TUTTOFOOD

08-11/05/2023 
MILAN

Fair B2B show to food & beverage.

SPS/IPC/DRIVES/ITALIA

23-25/05/2023 
PARMA

Fair for industrial automation sector.

BEER&FOOD ATTRACTION

19-22/06/2023 
RIMINI

Fair for beers, drinks, food and trends.

FISPAL

27-30/06/2023 
SÃO PAULO

Fair for product from packaging.

MCTER

29/06/23 
ROMA

Exhibition on energy efficiency.

POWTECH

26/29/10/2023 
NUREMBERG

The trade fair for powder processing.

MIDDLE EAST 2022/23

GULFHOST

2023 
DUBAI

Fair of hospitality.

GULFOOD

20-24/02/2023 
DUBAI


Fair for food and hospitality.

GASTROPAN

17-19/03/2023 
ARAD

Fair for the bakery and confectionery.

DJAZAGRO

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

IRAN FOOD+BEV TEC

10-20/06/2023 
TEHRAN

Fair for food, beverage&packaging technology.

PROPACK ASIA

14-17/06/2023 
BANGKOK

Fair for packaging, bakery, pastry.

PACPROCESS FOOD PEX

07-09/09/2023 
MUMBAI

Fair for product from packaging.

ANUTEC

07-09/09/2023 
NEW DELHI

Fair for the food&beverage industry.

HOSPITALITY QATAR

06-08/11/2023 
DOHA

Fair of Hospitality and HORECA.

GULFOOD MANUFACTURING

07-09/11/2023 
DUBAI

Fair for packaging and plants.

EXHIBITIONS 2022-2023

HOST

13-17/10/2023 🏛️

MILAN

Fair for bakery production and for the hospitality.

SIAL

19-23/10/2023 🏛️

PARIS

Fair on food products.

IBA

22-26/10/2023 🏛️

MONACO

Fair for the bakery and confectionery industry.

CIBUS TEC

24-27/10/2023 🏛️

PARMA

Fair for food & beverage technologies trends.

SUDBACK

26-29/10/2023

STUTTGART

Fair for bakery and confectionery.

BRAU BEVIALE

28-30/11/2023 🏛️

NUREMBERG

Fair of production of beer and soft drinks.

SIMEI

2024 🏛️

MILAN

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

ANUGA FOODTEC

19-22/03/2024 🏛️

COLOGNE

Fair on food and beverage technology.

LATINPACK

16-17/04/2024 🏛️

SANTIAGO CHILE

International packaging trade fair.

FACHPACK

24-26/09/2024 🏛️

NUREMBERG

International packaging trade fair.

ALL4PACK

04-07/11/2024 🏛️

PARIS

Exhibition about packaging technology.

DRINKTEC

2025

MONACO 🏛️

Fair for the beverage, liquid food industry.

SAVE

2026

VERONA 🏛️

Fair for automation, instrumentation, sensors.



AKOMAG SRL
92-94

Frazione Diolo, 15/D
43019 Soragna - PR - Italy

ANGELUS SRL
112-113

Via Mercalli, 16
43122 Parma - Italy

B.M. GROUP SRL
82-83

Via Garziere, 36
36010 Zanè - VI - Italy

BBM PACKAGING SRL
64/67

Via Pregalleno, 24
24016 San Pellegrino Terme - BG
Italy

**C&G DEPURAZIONE
INDUSTRIALE SRL**
90-91

Via I° Maggio, 53
50067 Rignano S. Arno - FI
Italy

COLOR SERVICE SRL
108/111

Via Divisione Julia, 15
36031 Dueville - VI - Italy

**DUBAI WORLD TRADE CENTRE
DWTC**
III COV

P.O. Box 9292
Dubai
U.A.E - United Aarab Emirates

ETIPACK SPA
60-61

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

**FAKT EXHIBITIONS
PVT LTD.**
99

304, 3rd Floor, Clifton Centre,
Block - 5,
75600 Clifton Karachi
Pakistan

FIERE DI PARMA SPA
86/89

Viale delle Esposizioni, 393A
43126 Parma
Italy

FIORINI INTERNATIONAL SPA
76

Via Maestri Del Lavoro, 13
ZI Ponte Lucerta
60012 Trecastelli - AN - Italy

GB BERNUCCI SRL
72-73

Via Canova, 19/A
20154 Milano - Italy

GORRERI SRL
42/45

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

ICF & WELKO SPA
I COV-6-7

Via Sicilia, 10
41053 Maranello - MO - Italy

IFP PACKAGING SRL
57-78/81

Via Lago di Albano, 70
36015 Schio - VI
Italy

INDUSTRIAL AUCTION BV
13

Looyenbeemd 11
5652 BH Eindhoven
The netherlands

**KOELNMESSE YA TRADEFAIR
PVT. LTD.**
93

203, Start, Cardinal Gracious
Road, Opp. P&G Plaza, Chakala,
Andheri (East), 400099
Mumbai Maharashtra
India

M.H. MATERIAL HANDLING SPA
1

Via G. di Vittorio, 3
20826 Misinto - MB - Italy

MAKRO LABELLING SRL
74-75

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

MINI MOTOR SPA
107

Via E. Fermi, 5
42011 Bagnolo in Piano - RE
Italy

NIRSO EZIO SNC
96-98

Via Maroncelli, 67
20038 Busto Garolfo - MI - Italy

NÜRNBERGMESSE GMBH
IV COV - 12

Messezentrum,
90471 Nürnberg - Germany

**NVC - NEDERLANDS
PACKAGING CENTRE**
68/71

Stationsplein 9k - PO BOX 164
2801 AK - Gouda
The netherland

PRO CARTON
62-63

Tödistr. 42
8002 Switzerland

RAYTEC VISION SPA
114-115

Via F.lli Lumière
43122 Parma - Italy

SATINOX SRL
2-41

Via Progresso, 20
36035 Marano Vicentino - VI - Italy

SCANNY3D SRL
104-105

Via Archetti - Zona artigianale, 15
63831 Rapagnano - FM - Italy

SES VIETNAM EXHIBITION CO., LTD
INFORMA MARKETS
97

17-17A - 19 Ton That Tung
HCMC Pham Ngu Lao Ward, Dist. 1
Vietnam

TARNOS SA
14-15

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

TECNO PACK SPA
77/81

Via Lago Di Albano, 76
36015 Schio - VI - Italy

UNIFILL SRL
106

Via Aldo Moro 68-74-80
41030 Sorbara di Bomporto - MO - Italy



**GULFOOD
MANUFACTURING**

7-9 NOV 2023
DUBAI WORLD TRADE CENTRE

THE SMARTER FUTURE

Gulfood Manufacturing offers innovative solutions to connect the global food manufacturing industry, providing platforms to unveil new products, services and technologies, connect with industry leaders, address key challenges, create new business opportunities, and gain valuable insights into emerging market trends.



REGISTER TO VISIT
gulfoodmanufacturing.com

PLATINUM SPONSOR

Apical

4 EVENTS | 3 DAYS | 1 VENUE



**PRIVATE LABEL
MIDDLE EAST**



**THE SPECIALITY
FOOD FESTIVAL**

26.–28.9.2023
Nürnberg, Germany

POWTECH

International Processing Trade Fair for

POWDER BULK SOLIDS FLUIDS and LIQUIDS

Die Zukunft der Pulver- und Schüttguttechnologie erleben: Entdecken Sie auf der POWTECH die neuesten Entwicklungen und Innovationen rund um Prozesse, die aus Pulver, Granulat, Schüttgut und den bei der Herstellung beteiligten Flüssigkeiten Qualitätsprodukte herstellen und verarbeiten – auch im Bereich Umwelt, Recycling und Batterien.



Tragen Sie sich
den Termin
gleich in Ihrem
Kalender ein.

Im Verbund mit



PARTEC

International Congress
on Particle Technology

Ideelle Träger



NÜRNBERG MESSE