

# TECH4FOOD

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In caso di mancato recapito inviare al CMP di Milano Roserio per la restituzione al mittente previo pagamento resi.

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### product preview

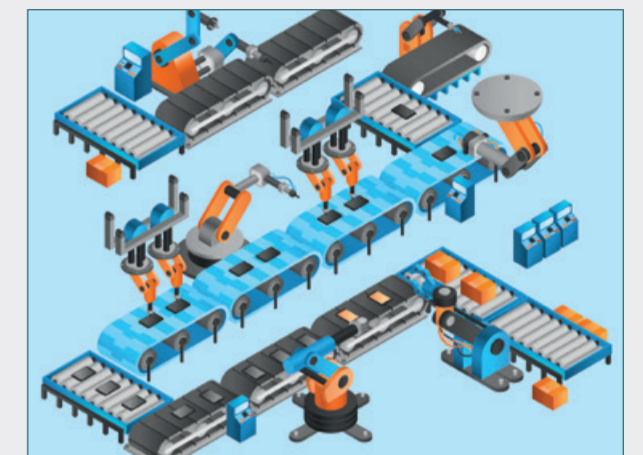
## GULFOOD MANUFACTURING... AND MUCH MORE

The biggest trade show in Middle East for the food and beverage processing and packaging industry is back for three days. With a wider exhibition profile. And business-intensive events and features.



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### zoom



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## Agriflex, watchword: customisation

Since over 40 years, clients' needs are at the core of the business of the firm, specialists in creating custom-made solutions for the food industry all over the world.

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### trends

## LIFE IN (BIO)PLASTICS

In a world full of rubbish, features, pros and cons of a (nearly) green material. Which is more and more diffused. And which can actually help fighting waste pollution.

on page 8 and 9





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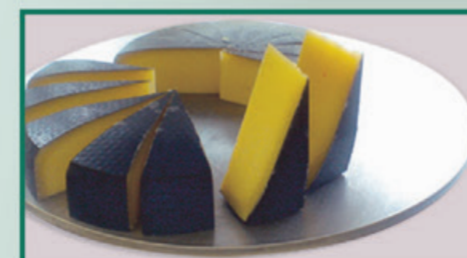
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U.A.E. Ras Al-Khaimah P.O. Box 35728 RAK  
 rak@facchinettinovara.it





# To whom the Nobel Prize?

By Angelo Frigerio

Stop plastics. Many have provided this direction. The European Parliament, to begin, that in March approved the directive that forbids to use, starting from 2021, some plastic items, such as, single-use dishes, cutlery, straws and balloon sticks. The directive was approved by 560 votes in favour, 35 against and 28 abstentions. In addition, 90% of plastic bottles are expected to be collected by Member States, through the separate collection of waste, by 2019. Besides, by 2025, plastic bottles must incorporate 25% of recycled contents and 30% by 2030. So, plastic forks, knives, spoons and sticks will be banned, as well as dishes, straws, cotton buds, balloon sticks, oxo-degradable plastics and food trays and cups in expanded polystyrene.

Furthermore, through the label, consumers must be informed on the environmental footprint of a cigarette with plastic filter – or of glasses and wipes, for example –, once dispersed in the environment. According to those who proposed the directive, this rule will

reduce environmental damage by 22 billion euros. According to a study by the European Commission, more than 80% of waste in the ocean are plastics. And products involved in the directive are equal to 70% of all rubbish in the oceans.

So far, so good. We all agree that it is necessary to cut down on plastic use, but we also need to pay close attention to the problem. Consider food packaging. At present, plastic allows to pack a product in a safe way, avoiding any bacterial contamination risk. A completely biodegradable film that can replace conventional plastics, does it exist? If the answer is in the affirmative, then I ask: how much does it cost?

We are all on the side of Mother Nature, but, when it comes to pay up, certainties crumble. That's why I warmly ask the industrial sector to work on sustainability, as soon as possible, while keeping in mind costs and food safety. The Nobel prize to whom will find a product with these features.

## A chi il premio Nobel?

Basta con la plastica: sembra ormai questa l'indicazione che da più parti emerge. Ha cominciato il Parlamento Europeo in marzo che ha approvato in via definitiva la direttiva che vieta, a partire dal 2021, l'utilizzo di alcuni articoli come piatti, posate, cannucce e bastoncini per palloncini. La direttiva ha ricevuto 560 voti a favore, 35 contrari e 28 astenuti. Si prevede inoltre che il 90% delle bottiglie di plastica dovrà essere raccolto dagli Stati membri, attraverso la differenziata, entro il 2019. Ancora, le bottiglie di plastica dovranno contenere – entro il 2025 – almeno il 25% di materiale riciclato ed entro il 2030 questa percentuale dovrà diventare del 30%.

Tra gli oggetti eliminati ci saranno quindi le forchette, i coltelli, i cucchiari e le bacchette di plastica, ma anche i piatti, le cannucce,

i bastoncini cotonati, i bastoncini per palloncini, le plastiche ossi-degradabili e i contenitori per alimenti e tazze in polistirolo espanso.

Inoltre si prevede l'obbligo di informare il consumatore in etichetta sull'impatto ambientale che può avere una sigaretta con filtri di plastica dispersa nell'ambiente. Così come di altri prodotti, per esempio bicchieri e salviette. Secondo chi ha proposto la direttiva, questa legislazione ridurrà il danno ambientale di 22 miliardi di euro. Secondo uno studio della Commissione, più dell'80% dei rifiuti marini è costituito da plastica. E i prodotti che rientrano nella direttiva costituiscono il 70% di tutti i rifiuti marini.

Fin qui tutto bene. Siamo tutti d'accordo che occorre limitare la massima l'uso della plastica, ma occorre prestare molta atten-

zione al problema. Pensiamo al packaging per gli alimenti. Oggi la plastica permette un confezionamento sicuro del prodotto evitando qualsiasi rischio relativo a eventuali contaminazioni batteriche. Possiamo dire oggi di aver trovato un film totalmente biodegradabile in grado di sostituire quello classico? Se la risposta è positiva, aggiungiamo: a che costi?

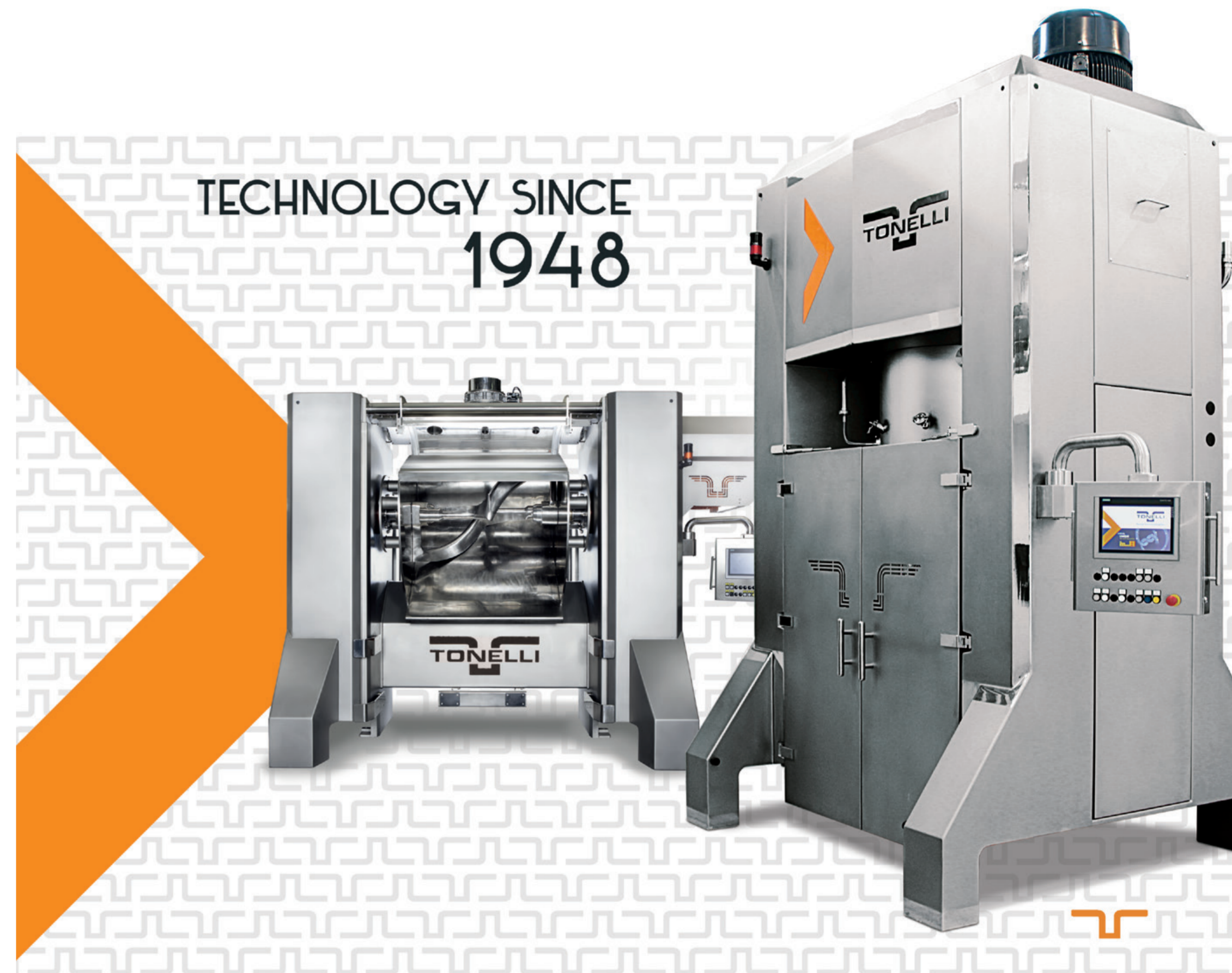
Siamo tutti dalla parte della Natura ma poi, quando si tratta di mettere mano al portafoglio, o alla carta di credito, alcune certezze evaporano. Ecco allora un pressante invito all'industria affinché lavori al più presto nella direzione della sostenibilità ambientale, ma tenendo ben presente il problema della sicurezza e dei costi. Il premio Nobel a chi sarà in grado di trovare quel prodotto con queste caratteristiche.

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**Sime:** the reference trade show for liquid foods will be back in Fiera Milano from 19th to 22nd November

Technological, international and across-the-board: several novelties will feature the 28th edition of Sime, leading international exhibition dedicated to wine and bottling technologies, that will be held in Fiera Milano Rho, from 19th to 22nd November. Over the years, the biennial event has established as the main networking event globally for the wine supply chain, recording every year significant numbers: 30 thousand professional operators from all over the world, over 500 high-profile exhibiting companies, more than 400 delegates from more than 90 countries. This demonstrates the needs of a continuously growing market: Italian exports - over 70% of the wine technologies present in wineries all over the world are Italian - constantly register a growth, confirmed also by the data from the first five months of 2019, when a 10% increase compared to 2018 and a turnover of around 900 million euros were recorded. At present, over 400 companies will exhibit at Sime, mostly from the wine sector, that is approximately 90%, and the remaining 10% from other sectors such as beer, oil, beverages, juices, water, vinegar, spirits and milk.



**Sime:** dal 19 al 22 novembre, a Fiera Milano, torna la kermesse di riferimento per il liquid food

Tecnologica, globale e trasversale: si preannuncia davvero ricca di novità la 28esima edizione di Sime, la più importante esposizione internazionale dedicata alle tecnologie per enologia e imbottigliamento, che quest'anno si terrà dal 19 al 22 novembre 2019 a Fiera Milano Rho. Nel corso degli anni la kermesse, che si svolge a cadenza biennale, si è affermata come il più grande evento di networking della filiera vitivinicola a livello mondiale, registrando in ogni edizione numeri importanti: 30mila operatori professionisti provenienti da tutto il mondo, oltre 500 imprese espositrici di altissimo profilo, più di 400 delegati da 90 Paesi. Valori in linea con le esigenze di un mercato in continua crescita: l'export italiano di settore - oltre il 70% delle tecnologie enologiche presenti nelle cantine di tutto il mondo è tricolore - registra costantemente un segno più, confermato anche dai dati dei primi cinque mesi del 2019 in cui è stato registrato un incremento del 10% rispetto al 2018, per un volume d'affari di circa 900 milioni di euro. Ad oggi, già più di 400 le aziende espositrici iscritte al prossimo Sime, con capofila il comparto vino (circa il 90% dei presenti), a cui si affiancano i mondi della birra, dell'olio, delle bevande, dei succhi, dell'acqua, dell'aceto, degli alcolici e del latte.

**Meat-Tech, save the date:**  
Milan, 4th-7th May 2021

The third edition of Meat-Tech will be held from 4th to 7th May 2021, in conjunction with Ipack-Ima. The next trade show dedicated to the processing and packaging of meat, fish and ready-to-eat foods will take place in Fiera Milano Rho. With the renovated collaboration with Assica (Italian trade association representing cold-cuts and meat producers), Assofoodtec (Italian association representing manufacturers of machines and equipment for food production, processing and preservation), and Ucima (Italian packaging machinery manufacturers association). They support the organisation of the event and contribute in defining contents and strengthening participation, also at an international level. The 2021 edition of Meat-Tech has a high-quality exhibition offering which is increasingly focused on innovation, traceability and safety of production processes, with special attention of sustainability. Two special areas are included: 'Meat+ Cold Chain Solution', with solutions designed for clean rooms and the cold chain, and 'Meat&More', a smart exhibition formula for companies that are taking part in the show for the very first time. Also recent consumption trends linked to the circular economy and new lifestyles will be under the spotlight: from organic packaging to free-from products, from skin pack solutions to single portions. Meat-Tech 2021 is boosting internationalisation, engaging players from abroad through a programme of initiatives leading up to the event, that reaffirms its role as a point of reference for the sector.

## Cama brings innovation in Dubai

Leader in designing secondary packaging systems, the Group will showcase at Gulfood Manufacturing Industry 4.0 ready solutions.



Also Cama Group is taking part in the 2019 edition of Gulfood Manufacturing, that will be held at the Dubai World trade centre from 29th to 31st October. Where they will showcase complete packaging lines for a wide number of applications: packing of biscuits, confectionery, cereals, yogurt, ready meals, ice creams, personal and home care products. International leader in the engineering and production of high technology secondary packaging systems, the Group continuously invests to design innovative, flexible and efficient solutions. Such as the IF series Monobloc, a combination of integrated packaging machines and robotic loading units, with a reduced carbon footprint, flexible size changing and high reliability. The functions of the main machine are operated by servomotors and various product grouping devices, determined according to product specifications. They are Industry 4.0 ready. Thus, they will fit into any smart-manufacturing environment. But the world of Industry 4.0 keeps evolving, that's why Cama Group always invests in R&D to continuously improve its solutions.

### Cama porta a Gulfood innovazione

Anche Cama Group parteciperà all'edizione 2019 di Gulfood Manufacturing, che avrà luogo al Dubai World trade centre dal 29 al 31 ottobre. Dove esporrà linee complete per il packaging dalle molteplici applicazioni: impacchettamento di biscotti, dolci, cereali, yogurt, cibi pronti, gelati e prodotti per la casa e la cura personale. Leader a livello internazionale nella progettazione e produzione di sistemi altamente tecnologici per il packaging secondario, il Gruppo investe costantemente per progettare soluzioni innovative, flessibili ed efficienti. Come il monoblocco della serie IF, una combinazione di macchine integrate per il packaging e di unità per il carico robotizzate, con un ridotto impatto ambientale, dal cambio formato flessibile e estremamente affidabili. Le funzioni della macchina principale sono attivate da un servomotore e da altri dispositivi per la divisione dei prodotti a seconda delle specifiche di ciascuno. Le macchine sono Industry 4.0 ready, quindi si inseriscono in ogni ambiente di lavoro smart. Ma quello di Industria 4.0 è un mondo in continua evoluzione, è per questo motivo che Cama Group investe sempre in ricerca e sviluppo per continuare a migliorare le proprie soluzioni.

### Meat-Tech: appuntamento a Milano dal 4 al 7 maggio 2021

Arriva la terza edizione di Meat-Tech. Che si terrà dal 4 al 7 maggio 2021, in concomitanza con Ipack-Ima. Appuntamento a Fiera Milano Rho. Il prossimo salone tematico dedicato alle tecnologie per la lavorazione, trasformazione e confezionamento di carni, ittico e piatti pronti vede confermata la collaborazione con l'Associazione industriali delle carni e dei salumi (Assica), l'Associazione dei costruttori di macchine, impianti, attrezzature per la produzione, la lavorazione e la conservazione alimentare (Assofoodtec) e Ucima, l'Unione dei costruttori italiani di macchine per il confezionamento e l'imballaggio. Che sostengono la manifestazione e contribuiscono alla definizione dei contenuti e all'ulteriore rafforzamento del richiamo, anche a livello internazionale. L'edizione 2021 di Meat Tech promette un'offerta completa e di qualità, orientata all'innovazione, tracciabilità e sicurezza dei processi produttivi, con particolare attenzione alla sostenibilità. Sono previste due aree speciali: 'Meat+ Cold Chain Solutions', che daranno spazio alle soluzioni studiate per la camera bianca e per la catena del freddo, e 'Meat&More', formula espositiva smart, pensata per le aziende che si avvicinano alla manifestazione. Riflettori accesi anche sui recenti trend di consumo legati all'economia circolare e ai nuovi stili di vita: dagli imballaggi bio al free-from, dalle soluzioni skin pack alle monoporzioni. Meat-Tech 2021 avrà un profilo più internazionale, con il coinvolgimento di player dall'estero attraverso le iniziative di avvicinamento all'evento, che si conferma punto di riferimento per il settore.

**Employment and robots:** the research of the Mit

The catastrophe announced by the New Yorker in 2017 won't occur. Not that soon. Robots won't take all our jobs. Rather, they will change it, with two consequences. As explained by the 'task force on the work of the future', made up of about twenty professors from the Mit of Boston, that, from spring 2018, is studying data and facts to understand how the increasing use of robots and machines impacted on unemployment. Surprisingly, according to the first results of the study, employment will increase in the next twenty years. But quality of jobs will suffer from it: many will earn very low wages, while the most competent in It will take higher salaries. In fact, automation won't necessarily replace human beings, on the contrary, in some cases, it will enable them to work better, in some others it will create new jobs. Moreover, according to the research, robots' advance is slower than expected and sometimes replacing human work is complex and not profitable enough. In few words, according to researchers, it is necessary to invest in education in order to make human work more convenient and important.

### Lavoro e robot: la ricerca del Mit di Boston

La catastrofe preannunciata dal settimanale New Yorker nel 2017 non avverrà. Non così presto. I robot non ruberanno tutto il lavoro. Piuttosto, lo cambieranno, con due effetti. Lo spiega la 'task force sul lavoro del futuro', composta da una ventina di professori del Mit di Boston, che, insediatisi nella primavera del 2018, sta studiando dati e fatti per comprendere il reale impatto sulla disoccupazione del crescente impiego di robot e macchine. Dai primi risultati della ricerca emerge, sorprendentemente, che il lavoro aumenterà nei prossimi vent'anni. Ne risentirà, però, la qualità: moltissimi avranno un salario più basso, mentre i più competenti in materia di digitale guadagneranno di più. Infatti, l'automazione non sostituirà necessariamente gli essere umani, anzi, in alcuni casi consentirà di lavorare meglio, in altri creerà nuovi mestieri. Inoltre, secondo la ricerca, l'avanzata dei robot è più lenta del previsto e la sostituzione del lavoro umano talvolta è complessa e non adeguatamente vantaggiosa. In poche parole, secondo i ricercatori è necessario investire in formazione, affinché il lavoro umano risulti più conveniente e importante.

**Antares Vision**  
acquired 100% of Ft System

Antares Vision, specialised in track and trace solutions, keeps expanding and diversifying its business by taking over 100% of Ft System, leader in the inspection and control of bottling and packaging lines. The acquisition price is equal to 67.7 million euros. The agreement also marks the beginning of a partnership with Arol Spa, former stakeholder owning 80% of the company. And the takeover of the companies controlled by Ft System in France and the United States and of the branches in Mexico, Brazil, the UK, Spain, China and India.



### Ceduto il 100% di Ft System ad Antares Vision

Antares Vision, specializzata nella produzione di sistemi di localizzazione e rilevamento, continua il processo di espansione e diversificazione del business con l'acquisizione del 100% di Ft System, leader nel controllo e ispezione dell'imballaggio. Il prezzo dell'acquisizione è di 67,7 milioni di euro. L'accordo segna anche l'inizio di una partnership con Arol Spa, precedentemente titolare di una quota pari all'80% della società. Oltre che l'assunzione del controllo delle società controllate da Ft System in Francia e Stati Uniti e del business delle divisioni operanti in Messico, Brasile, Regno Unito, Spagna, Cina e India.

**Emsur,**  
a new production plant in Spain

The second Emsur's production plant was inaugurated in Spain. Emsur is a branch of the Lantero Group, specialised in manufacturing flexible packaging solutions for the food industry. The new plant is located in Alcalá de Henares (Madrid) and covers 5 thousand square metres: it's the ninth facility of the Group. This operation is in line with the business strategic plans targeted at strengthening its position on the Spanish dairy market (where the company is already a leader with products such as jar tops and wrap-around labels), as well as in the fresh and processed foods sectors, broadening its range of flexible solutions. The new plant will significantly increase Emsur's production capacity, which will exceed 220 million square metres.



### Emsur, nuovo stabilimento produttivo in Spagna

Inaugurato il secondo stabilimento produttivo spagnolo di Emsur, divisione del Gruppo Lantero specializzata in soluzioni di imballaggio flessibile per l'industria alimentare. Si trova ad Alcalá de Henares (Madrid) e occupa una superficie di 5 mila metri quadrati: è la nona struttura del Gruppo. L'operazione è in linea con i piani strategici aziendali che mirano a rafforzare il posizionamento sul mercato spagnolo del lattiero-caseario (dove l'azienda è già tra i leader con prodotti come coperchi per contenitori ed etichette avvolgenti), come pure nel settore degli alimenti freschi e trasformati, ampliando la sua gamma di soluzioni flessibili. La struttura incrementerà in modo significativo la capacità produttiva di Emsur, che supererà i 220 milioni di metri quadrati.

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# LIFE IN (BIO)PLASTICS

In a world full of rubbish, features, pros and cons of a (nearly) green material. Which is more and more diffused. And which can actually help fighting waste pollution.

by Elisa Tonussi

**WHAT DOES IT MEAN?**  
**Bio-based.** Based on biological materials or processes.  
**Biodegradable.** Capable of being decomposed by bacteria or other living organisms and thereby avoiding pollution.  
Source: Oxford dictionaries online



About 335 million tonnes of plastic are produced annually in the world. And, over the same period, in Europe, around 25.8 million tonnes of plastic waste are generated. 150 thousand to 500 thousand tonnes of which enter the oceans. Equal to 66 thousand rubbish trucks. This phenomenon is exacerbated by the increasing amount of plastic waste generated each year, also fuelled by the growth of 'single-use' plastics. In addition, up to 300 thousand tonnes of microplastics, tiny fragments below 5 millimetres in size, are released into the environment. In the European Union, over 40% of plastic waste is recycled. Yet, pollution has become one of the most pressing environmental issues. As plastics production has exceeded the world's ability to dispose of it. Besides improving the quality and economics of plastics recycling, research on bioplastics has shown positive results in addressing the great environmental issue. There is a bioplastic alternative to almost every conventional plastic material, indeed. A flourishing market. Which is predicted to grow by 60% by 2023, compared to 2018.

**A large family of materials**  
Bioplastics are not just one single material. They comprise a number of materials, with different properties and applications. And they all meet at least one of two necessary requirements: they must be biodegradable or bio-based, or both. According to the definition given by European Bioplastics, an association representing all partners and stakeholders in the bioplastics market. That distinguishes three groups of bioplastics. The so-called 'drop-ins' (PE, PET or PP) and technical performance polymers (PTT or TPC-ET), which are bio-based or partially bio-based non-biodegradable plastics. Biodegradable materials based on fossil resources, like PBAT. Finally, plastics which are both bio-based and biodegradable, such as PLA, PHA or PBS. According to other more restrictive definitions, bioplastics are materials derived from fossil or renewable resources, which are necessarily biodegradable and compostable. In the opinion of Assobioplastiche, the Italian association representing bioplastics producers and users. Several applications are possible, just

like conventional plastics. There is especially a high demand for packaging. So much that 65% of bioplastics total production is destined to this segment to be used for wrapping organic food, as well as for premium and branded products with particular requirements. In fact, when it comes to food packaging for perishables, biodegradability is a sought-after feature, as bioplastics can prolong shelf life. This material may also have better preservation properties than conventional plastics. In addition to packaging and food, bioplastics offer promising applications in agriculture/horticulture, and in the manufacture of consumer electronics, automotive components, consumer goods and household appliances.

#### Several end-of-life options

Like their conventional counterparts, bioplastic wastes' disposal and recovery depends on the type of product and bioplastic material used, the inherent quantities and the recovery systems available. A broad range of end-of-life options are available. From reuse to mechanical or organic recycling, all the

way through energy recovery. Today, most of bioplastic wastes produced are recycled alongside fossil-derived plastics, when they have similar chemical structures. On the contrary, when bioplastics have completely new polymeric structure, each type must be assessed separately. So, bio-based plastics need to be recycled in separate streams for each material type. Otherwise, organic recycling is another end-of-life option, especially when plastic items are mixed with biowaste. This way, biowaste results in the creation of valuable compost. In order to be suitable for organic recycling, products and materials need to meet strict European criteria on industrial compostability.

#### Almost green

Many are the pros related to bioplastics. First of all, they offer several recovery options. And many of them (43.2%) are biodegradable and compostable, making their end-of-life carbon neutral. Obviously, labelling must be clear in order to properly inform consumers on how to dispose of them. Otherwise, incorrect recovery could aggravate

the existing pollution issue. In addition, when bio-based, they help saving fossil resourcing using biomass. When used for food packaging, bioplastics may also have better preservation properties and prolong shelf-life of perishable foods.

When it comes to bioplastics production, here, some issues crop up. Despite research has made giant leaps forward and production prices are gradually decreasing, they still cost more than conventional plastics, especially as oil prices are convenient. Most of all, taking into account the whole life cycle of materials, bioplastics are not necessarily less pollutant than traditional plastics. According to research carried out in 2010 by the university of Pittsburgh. In fact, crops production for bio-based bioplastics requires fertilizers and pesticides, besides an extensive land use for farming, and intense chemical processing to convert plants into plastics.

Given their recovery possibilities, bioplastics can actually help fighting plastic pollution. But to really be eco-friendly, bioplastics production should also be green. To researchers, the duty to discover how.

## FOCUS ON ... RESEARCH

The European Union finances a number of projects within the Horizon 2020 programme to boost research and innovation. Below, three projects on sustainable use of resources to keep an eye on.

### BIO-PLASTICS EUROPE October 2019 – September 2023

Developing sustainable strategies and solutions for bioplastic products, as well as circular methods for the whole system, which can be used to draw up new regulation, for innovation and technology transfer. It's the objective of 'Bio-plastics in Europe', a project started on October 1st, in Hamburg. The project will last four years. It involves ten Member States (Austria, Estonia, Finland, France, Germany, Italy, Lithuania, Poland, Sweden and Spain), besides Malaysia, as a non-European partner. They will be laboratories where biopolymers will be tested to study any possible risk related to the use of bioplastics for aquatic and terrestrial environments, besides the effects of contamination on the present recycling systems of plastics. Therefore, new possible solutions will be tested.

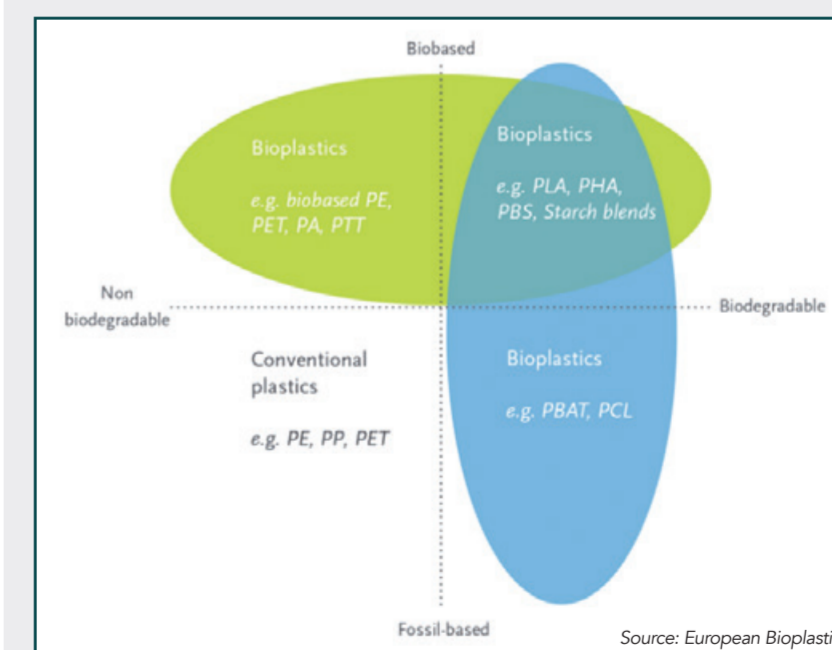
### REFUCOAT June 2017 – May 2020 - [www.refucoat.eu](http://www.refucoat.eu)

The project aims to develop fully-recyclable food packaging with enhanced gas barrier properties and new functionalities using high performance coatings. Which will be used in films and trays as an alternative to current metallised and modified atmospheric packaging (Map) to avoid the use of non-renewable materials in packaging that currently leads to complex and expensive recycling steps. 'RefuCoat' addresses scientific, techno-

logical, safety and regulatory challenges, as well as economic and environmental sustainability to ensure that both consumers and the environment benefit from this packaging. The main outcomes of the project include improved performance of food packaging, reduced landfill waste, enhanced preservation of fresh food produce, and improved cost and environmental effectiveness in processing.

### STEPS September 2016 – August 2020 - [www.sustainable-steps.se](http://www.sustainable-steps.se)

Guided by a vision of a future society in which plastics are sustainably produced, used, and recycled, 'Steps', a research project carried out in Sweden, wants to facilitate this transition by sharing innovation, knowledge, and research findings between academia and industry. The project's agenda is implemented by three academic partners and no less than 19 industry partners. 'Steps' searches sustainable solutions throughout the value chain from renewable feedstock, conversion, and design, to post-consumer plastic waste handling. The concept is to design sustainable plastics with desired material properties and life cycle by matching suitable carbon-neutral building blocks. The key focus is on polyesters, a key group of plastic materials found in vast quantities in a huge variety of applications, including packaging, textiles, coatings, and durable products. Researchers also aspire to assess potential transition pathways to develop research-based advice on policy and industrial strategies for sustainability in the longer term.



## BIOPLASTICS' CLASSIFICATION

According to European Bioplastics, a plastic material is defined as a bioplastic if it is either biobased, biodegradable, or features both properties. The family of bioplastics is divided into three main groups:

1. biobased or partly biobased, non-biodegradable plastics such as biobased PE, PP, or PET (so-called 'drop-ins') and biobased technical performance polymers such as PTT or TPC-ET;
2. plastics that are both biobased and biodegradable, such as PLA and PHA or PBS;
3. plastics that are based on fossil resources and are biodegradable, such as PBAT.

### Life in (bio)plastics

Caratteristiche, pro e contro di un materiale (quasi) green, che può aiutare a combattere il problema dell'inquinamento da rifiuti. Le bioplastiche, biodegradabili e compostabili, sono sempre più diffuse e oggetto di continua ricerca, grazie soprattutto ai finanziamenti dell'Unione europea nell'ambito di Horizon 2020.

# It's connectivity power!

Artificial intelligence, big data, cloud, cyber-physical systems. We are living the fourth industry revolution. Where new technologies meet and set up the smart factory.

by Eleonora Davi

Industry 4.0 is the new horizon of a more and more efficient, smart and fast production and distribution system. Thanks to a technological mix of automation, information, connection and programming, in fact, industry is increasingly becoming a new dimension of communication and business. From the introduction of the steam engine to the pervasive use of automation, from computerization to digitization, the transition to the fourth industrial revolution leads companies to a new dimension: the smart industry. These are some of the data that emerged from the presentation conducted by Glen Kirkpatrick, EMEA Solution Center Manager, and Giovanni Masciali, Italy Strategic Account Manager, during Cheese Pack Evolution, the event held at the Sealed Air Cryovac PackForum in Passirana (Milan), on the 25th of September 2019.

### Industry 4.0

The smart factory involves a complex process of cost optimization, which reduces waste and improves efficiency, and which cannot be separated from digitization due to the complexity of the scenarios and the speed of response required. The fu-

ture of automation is being redefined, both in physical transformation processes and in information processing. Increasing interaction is taking shape between humans, machines and equipment with sensors. Continuous, real-time connectivity makes big data available and require new reading and interpretation skills to understand the reality around us. All these elements contribute to the creation of a business production and management model based on the connection between physical and digital systems: the Industry 4.0 model.

### Connectivity and data management

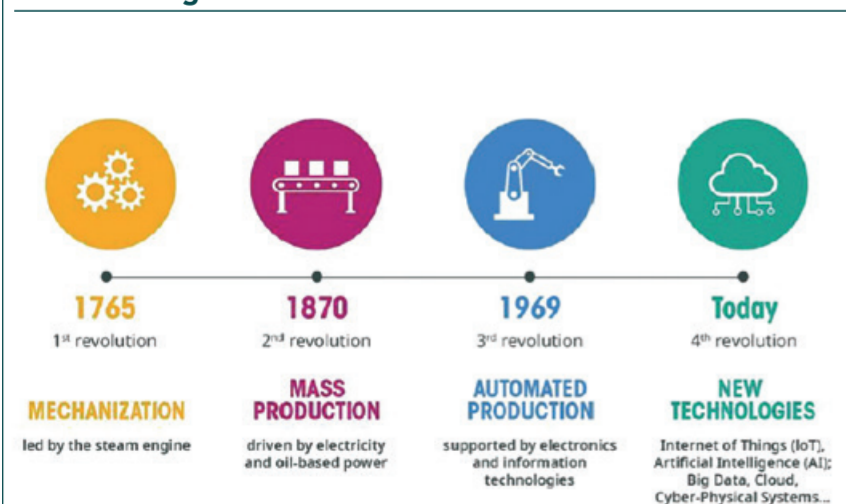
The new work systems improve the collection and analysis of big data to be transformed in useful and appropriate information. But how can traceability and a better control of product flow improve the structure cost? Companies also benefit from the availability of accurate data and measurements in terms of efficiency and cost optimization. The way to go is that of the reduction of traditionally managed waste, but also that of production flexibility programs through the implementation of fre-

### Solving customers' critical challenges using industrial IoT



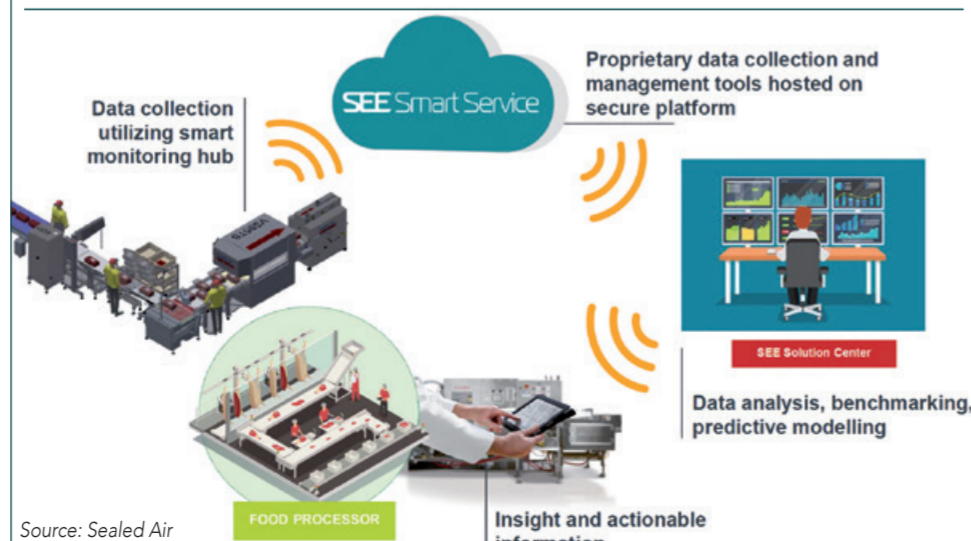
Source: Sealed Air - Campgemini America

### The four stages of the Industrial Revolution



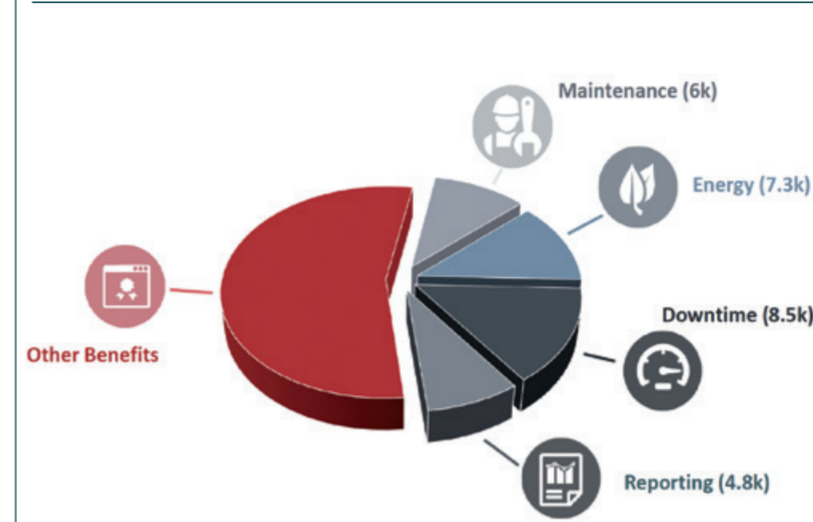
Source: Sealed Air

### Process



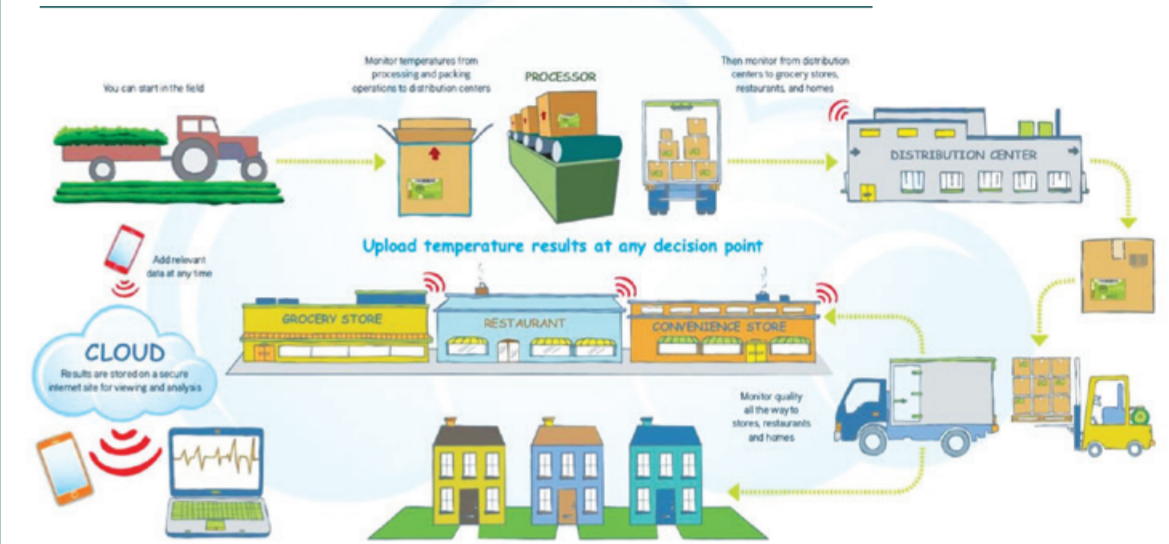
Source: Sealed Air

### Resulting benefits



Source: Sealed Air

### End-to-end coldchain management...



Source: Sealed Air

quent changes, the dynamic management of orders and suppliers and the continuous re-forecasting of transports. The practical consequences, from the operational point of view, are enormous: the reduction of time, costs, waste and therefore of resources. This is how the vicious circle that continually re-proposes the same emergencies can be interrupted. This is how the required resilience, flexibility and responsiveness of today's systems for Industry 4.0 are developed.

### Resulting benefits

There are several valuable interactions that machine data can trigger. For example, performance and usage data can be acquired from a resource and transmitted every few seconds. Data from many connected devices are aggregated, stored and analysed in real time to identify issues and opportunities. In this case, when data indicate issues, a case is created and a solution is selected.

The solution is recorded, marking which issues are fixed quickly and which are avoided. This is possible thanks to the intelligent monitoring system that uses the hub for data collection. Thanks to these tools for collecting and managing data hosted on a secure platform, the customer receives a warning and acts on the equipment using the data to guide his actions. The technical service is sent to perform maintenance (either on site or remotely). The equipment receives an out-of-condition alert and automatically adjusts the process to realign. The

solution centre detects long-term trends or problems and recommends actions to customers.

### Traceability improves the cost structure

Thanks to the assignment of production metrics to products with recording and tracking critical metrics against individual products, in fact, it is possible to create full supply chain transparency and link issues with root causes. Product flow, lone optimization, machines that automatically react to product flow save cost by reducing unnecessary wear and resulting downtimes. It is also possible to reduce the level of scrap and waste by collecting all possible quality metrics in the line to implement improvements and ensure that they stay at the same level. An ecosystem of machines that inform and mutually improve efficiency in an automated environment to reduce energy consumption and maintenance requirements.

### Customers' communication via packaging

It is possible to improve communication with customers via packaging by barcodes and production condition tracking. In fact, assigning production/transport metrics to a product database, customers can build applications using purchased data and they can also control the product condition tracking. This new technology enables further automation and easy auditing: barcodes and internet technologies are combined to seamlessly track the location and condition of products.

### Il potere della connettività!

Intelligenza artificiale, big data, cloud, sistemi cyber-fisici. Stiamo vivendo l'era della quarta rivoluzione industriale. Dove le nuove tecnologie si incontrano e creano la fabbrica intelligente.

INNOVATION IS OUR STRENGTH.



**FENCO**  
Food Machinery

FOOD. FUTURE. INNOVATION.

www.fenco.it

# Gulfood Manufacturing... and much more

The biggest trade show in Middle East for the food and beverage processing and packaging industry is back for three days. With a wider exhibition profile. And business-intensive events and features.

by Elisa Tonussi



Over 1,600 suppliers showcasing the latest innovations in the food and beverage sector. 36 thousand manufacturers, from more than 60 countries, coming to Dubai to discover the most innovative solutions available on the market. An agenda full of meeting programmes, features and attractions to synergise knowledge and foster industry learning.

This is Gulfood Manufacturing, the biggest trade show in the Middle East-South Asia region devoted to food and beverage technologies.

It will be held from 29th to 31st October at the Dubai World trade centre. Over the course of three days, manufacturers will showcase new solutions and innovations related to food ingredients, processing and packaging to produce faster, cheaper and more profitably. For the benefit of visitors from all the food and beverage sectors – from bakery to confectionery and snacks, from dairy to meat and poultry, from beverage to seafood –, they are food technologists and product developers, plant designers, researchers and other decision

makers, from factories and production plants, the Horeca and the mass distribution sectors.

#### Products and solutions

The 2019 edition of Gulfood Manufacturing is set to unveil a much wider exhibition profile than ever before. It will host solutions for the whole spectrum of food and beverage manufacturing, starting from the initial formulation of ingredients, to processing, packaging and automation, all the way through to supply chain and logistics when finished products reach end-consumers. All technologies and ingredients share some key concepts impacting the industry at present: automation, robotics, recyclability, digitalisation, smart solutions.

#### Gulfood Manufacturing ... e oltre

Torna la più grande fiera in medio Oriente dedicata alle tecnologie e al packaging per il food and beverage. Gulfood Manufacturing si terrà al World trade centre di Dubai, dal 29 al 31 ottobre. E vedrà la partecipazione di oltre 1.600 espositori, di cui più di 50 sono italiani, e 36mila visitatori. L'edizione 2019 ha un nuovo profilo espositivo e prevede una fitta agenda di eventi e conferenze. Nelle prossime pagine, in anteprima, i prodotti che alcune aziende del Bel Paese esporranno durante la fiera.

#### Features and attractions

Besides a wide offer of solutions and innovations, many events and initiatives will bring together regional and global players of the f&b manufacturing industry and international experts to share knowledge about market regulations and consumer trends, and discover where new opportunities lie.

At the Gulfood Manufacturing Foodtech Summit, the global f&b market developments and the latest solutions that will help the industry improve efficiency, productivity, and quality will be discussed during conferences and round tables. The second edition of the summit will look at the introduction of next-generation technologies into the industry (blockchain, AI, robotics...)

to transform f&b manufacturing facilities into smart factories and how that will potentially advance the industry. The programme will also explore how to secure food for the future and to what extent f&b industry can innovate and create alternative food supply and resources. Innovation won't only be a discussion topic, visitors will also have the chance to see the future first-hand through masterclasses, demonstrations and innovation tours. Which will take attendees on a journey that will show them real-life innovations at work inside some of the region's top, award-winning food factories. Finally, visitors and exhibitors will be able to meet thanks to the Gulfood Manufacturing 'Connexions meetings programme', the official one-to-one networking platform to arrange meetings during the show.

Gulfood Manufacturing seems to have all the ingredients to make the 2019 edition a great success. That over 50 Italian companies participating will benefit from. In the next pages, a preview of the new solutions and innovations that some of them will showcase in Dubai.

## AGRIFLEX

www.agriflex.it

### FLOUR COOLING SYSTEM



The system allows to control the dough's temperature. In fact, the cooling process of the flours allows to slow down the rising of the dough and adequately to adjust it to the times of each production line.

Fields of application  
Food industry (baked products)

#### Technical information

The Flour cooling system (patent nr. 1401347) offers several, significant advantages: high energy efficiency thanks to the direct exchange and consequently reduced operating costs; high effectiveness thanks to the considerable temperature reduction; complete system automation that, thanks to the reduced thermal inertia and the absence of accumulations, ensures the correct temperature of the dough, compensating the temperature variations of the other components and ambient temperature; ease of maintenance since all areas can be easily cleaned.

HALL: 6 - BOOTH: C6-22

## COMIZ

www.comiz.com

### MINI SM 40 P ELECTRIC VERSION

Manual clipping machine that helps the producer in the process of closing the bags with a plastic or aluminium clip band, in every clipping machine we can mount printers to apply date and lot number on the seal. The machine is simple to use and has a solid mechanical structure and a very strong closure system that allows to preserve the taste and consistency of the products inside the bag.



Fields of application  
Small or medium production units like pastry shops or bakeries

#### Technical information

Electrical mini clip:

- Electric operating (220-230v) clip closing head
- Clipband length: 40 mm
- Production: 35 p/pm
- Weight 35 kg

HALL: 5/8 - BOOTH: B6-37

## BREVETTI GASPARIN

www.gasparin.it



### AUTOMATIC LINE TO SLICE AND BAG

The automatic line for bagging allows to bag the products at high speed after the automatic slicing. Combining the bagging machine mod. lma-100 with an automatic slicer, you get a solution of slicing and bagging, where the sliced product in exit of the slicer is automatically transferred to the bagger machine and in this last inserted into the bag through a pushing arm. Installed in line on the bagger the head for the clip where the packed product is driven until the closing head of the clipping of the bags.

Fields of application  
Bakery

#### Technical information

- Speed up to 40 bags per minute
- Integrated closing head for clip
- Printer of date on the clip

HALL: 6 - BOOTH: 615

## COMI PAK ENGINEERING

www.comipak.com



### MANUAL CLIPPING MACHINE M408PL AND MANUAL TWIST-TIE M104TW

Clipping and twist-tie machines are an optimal solution to simplify the packing process, applying a closure which enable the end-user to open and re-close the bag, guaranteeing freshness and preservation of the content at once. Sturdy and compact, these machines can be used by small laboratories as well as industrial realities to pack different food products (sweets, bakery products, spices, dried fruit, pasta) and non-food (cables, etc.).

Fields of application  
Packaging of food and non-food products

#### Technical information

Available both in electric or pneumatic version, small and silent, the machines can apply up to 30 closures per minute. On the clipping machine it is possible to install a printer to print the expiry date or batch number on the clip closure.

HALL: 5 - BOOTH: A5-17

## CEPI

www.cepilos.com

FLOUR COOLING SYSTEM



Centralized cooling system to gradually reach the set temperature, based on the direct exchange of pre-cooled air through a fluidized bed. It has been improved to automatically take the flour to the temperature required for further processing. Flour can reach 12°C, with a difference between entry and exit temperature up to 20 °C, making it an accurate system that eliminates or radically reduces the need for

cooling agents. The system guarantees higher stability and precision, and homogeneity in the dough. It is highly versatile with various options for dimension and thermal capacity. It is a modular system based on the specific cooling needs and consumption rates of each installation, and is designed to ensure full hygiene and safety, in compliance with all relevant international standards including Atex legislation. Cepi cooling system is fully integrated with the storing, conveying and metering installation and provided with weighing in real time, integrated automation and full traceability.

Fields of application

Bakery and biscuits, confectionery, pasta and cereals

Technical information

Centralized system - No exchanger on the conveying lines: no clogging in the pipes and no loss of time and resources to pure and restore the lines - Variable dimension and thermal capacity - Feeding silos from the line - Air heat-exchanger - Fluidized bed - Air deuration filter - Weighing in real time, integrated automation and full traceability

HALL: 5 - BOOTH: B5-27

## DIMA

www.dima.it

STEAM COOKER, STRETCHER & MELTER MOD. DM18/150



Dima's steam cooking & stretching machine is specifically designed for cooking, kneading, melting and stretching any kind of pasta filata cheeses (such as mozzarella, pizza-cheese, shredded mozzarella, caciocavallo, string-cheese, kasar, provolone ...), similar cheese and food preparations.

Fields of application

Cheese processing

Technical information

Production capacity: 150 kg of cheese per batch, up to 600 kg of cheese per hour - Steam cooking-stretching - Two counter-rotating & independent augers - Automatic Plc control panel with touch screen - Pre-ranged for Cip cleaning - Automatic control of the temperature and temperature probe - Adjustable work time of each batch

HALL: 5 - BOOTH: 501

## FBF ITALIA

www.fbfitalia.it

HIGH PRESSURE HOMOGENIZERS, POSITIVE DISPLACEMENT PUMPS AND LABORATORY HOMOGENIZERS

The homogenizers are part of the Buffalo Series. They are used to give stability, uniformity, long life, better digestibility and refinement of the products being processed. The homogenizer allows to micronize and disperse the suspended particles in the fluid, giving the products extreme stability despite subsequent treatments and storage. The high pressure homogenizers and volumetric pumps, and the laboratory homogenizers adopt innovative technical solutions using cutting-edge materials.



Fields of application

Dairy industries, ice-cream industries, food processing, preserving and beverage industries, cosmetic, pharmaceutical chemical and petrol-chemical industries

Technical information

The Buffalo Series complies with CE (or 3A on request) standards and are available with hourly flow rates from 60 to 60.000 l/h for homogenization pressures adjustable up to 2.000 bar.

HALL: 6 - BOOTH: A7-18

## FRAU IMPIANTI

www.frauimpianti.com

FOOD AND BEVERAGE PROCESSING SOLUTIONS



We manufacture single machines and complete systems (including turkey plant), customized to meet all possible needs, from simple lines to completely automated and remote-assisted systems.

Fields of application

Dairy, juices and beverages, ice-cream mixes

Technical information

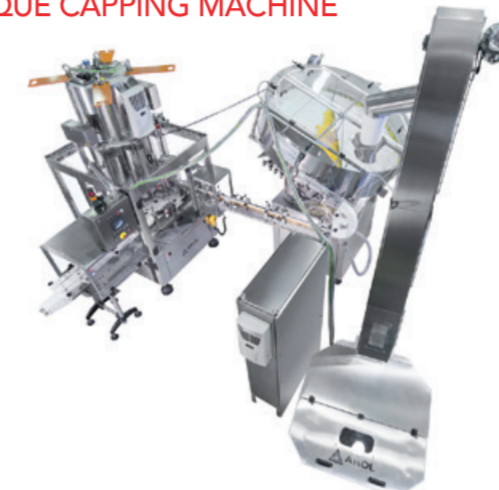
Frau Impianti's fluid processing technology is designed and engineered to meet strict international standards for hygiene, food safety and quality.

HALL: 6 - BOOTH: E6-15

## AROL

www.arol.com

EQUATORQUE CAPPING MACHINE



Versatile capping machine, suitable for the application of different cap formats and typologies like sport and flat caps.

Fields of application

Food and beverage

Technical information

The capping machine is equipped with brushless motors with rotary movement which, in addition to applying the cap, allow it to be oriented correctly. The data collected is recorded and stored in the Plc. Production speed up to 1.320 Bpm / 79.200 Bph. The stainless-steel version allows complete washing of the capper. Its advantages include the possibility of remote adjustment of the closing torque while the machine is in operation, the use of a reject signal useful for driving other on-line devices and the constant closing torque during the entire production cycle. Furthermore, the stop&go system ensures that production interruptions (if present) do not compromise the correct closure of the bottles already in the 'application phase'.

HALL: 5 - BOOTH: F6-13

## FT SYSTEM

www.ftsystem.com

LDS700-IOT LEAK DETECTION AND SEAL INTEGRITY



Lds700-IoT is the leak detection system developed by FT System for food products packed in Map. The Inspection System has the ability to perform non-destructive control on 100% of production, directly In Line, by ensuring food safety and quality of the final product.

Fields of application

Packaging: bags, flowpack, trays; fresh food packed in Map

Technical information

0.1 mm hole escaping CO2 detection - Configurable architecture - Hygienic design oriented - Expandible and upgradeable - Rejection system management - Industry 4.0 compliant - 15" Color touch screen - Real time monitoring of: production trend, results, detected values - Operation log database - Exportable results - Historical results database

HALL: 5 - BOOTH: F6-13

## UNIMAC-GHERRI

www.unimac-gherri.com

LINEAR PISTON FILLER MOD. PF-6L

Hygienic design and filling area reduced to the minimum to enable easy cleaning. The machine is easily accessible for maintenance and use. It is equipped with bottom filling for foamy products. Filling is controlled electronically.

Fields of application

Food and beverage

Technical information

The range includes models completely made of stainless steel with 4 to 6 filling heads - Product supply tank made

of Aisi 316 - Double piston/cylinder filling unit suitable for jars/bottles/cans with capacity from 20 to 1100 ml (single-dose containers) - Electronic filling control to improve filling accuracy, with touch screen control panel - Washing collection and recovery tanks integral with the machine structure - Bottom filling system and lifting controlled electronically - The product filling valve has pneumatic motion - Container feeding system electronically controlled - Easy and quick format change-over - Integrated electric control cabinet - Touch screen control panel



HALL: 5 - BOOTH: F6-13



## GB BERNUCCI

www.gbbernucci.com

### SLIMFRESH CARDBOARD



A new packaging for food presentation in the protein market with 70% less of plastic and 100% recyclable.

Fields of application  
Food Packaging

#### Technical information

Slimfresh utilizes Cryovac Darfresh films and technologies from Sealed Air, applied on GB Bernucci's cardboard to create an appealing vacuum skin pack. The pack provides an oxygen barrier and has a Cryovac Darfresh easy opening feature that allows total recycle of its components.

HALL: 1- BOOTH: D66

## ICA

www.icaspa.it

### PACKAGING MACHINES



Ica designs and manufactures a wide range of automatic packaging lines: vertical or horizontal ffs starting from reel of heat sealable laminates or kraft paper; premade bags machines; doy-pack machines; mandrel machines for high speed vacuum and modified atmosphere packaging and capsule/pods machines, with its patented drum system.

#### Fields of application

Foods, powders, granulars, capsules& pods products

HALL: 5 - BOOTH: C5-3

## ILPRA

www.ilpra.com

### ILPRA FILL SEAL 5000



Fill Seal 5000 is a filler/sealer produced and designed for medium/large productions. It is perfect for high precision packaging, sealing and checking up to 5.000 pieces per hour. The main movements are mechanically controlled, thus ensuring fast and precise packaging, high reliability over time and very few maintenance operations. This liquid filling machine is extremely easy to use thanks to its simple and intuitive operator interface. Fill Seal 5000 allows the packaging and sealing of products in pre-formed trays by means of sealing and vacuum/modified atmosphere packaging (Map) operations.

#### Fields of application

Dairy, cheese, jam, sauces, dressing, spread products, soups

#### Technical information

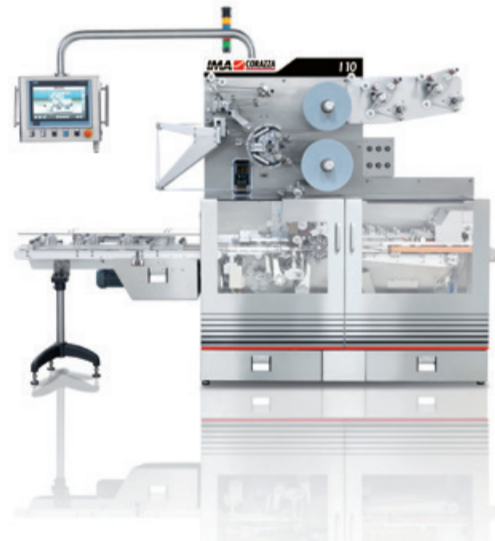
Machine weight (Kg): approx. 700 - Installed Power (Kw): 6 - Air consumption (bar - lt/cycle): 6 - approx. 7.5 - Max. diameter Containers (mm): 95 (2 x cycle) - Max. height Containers (mm): 130

HALL: 5 - BOOTH: A5-16

## IMA

www.ima.it/foodanddairy

I10



High-speed side-fold wrapping machine for pressed soup cubes and tablets. It's designed to offer extremely high efficiency and productivity.

Fields of application  
Packaging

#### Technical information

This fully electronic state-of-the-art machine stands out for flexibility in format changeover, compact footprint, plug-in design of the main groups and negligible operating costs. The new Hmi facilitates human-machine communication, providing performance data, statistic report and remote machine assistance. The I10 is able to reach a speed of up to 1.000 products per minute.

HALL: 5 - BOOTH: B5-28

## GORRERI

www.gorreri.com

### GORRERI TURBOMIXER WITH VERTIMIX TECHNOLOGY



Turbo emulsifier that combines the advantages of the continuous mixing with the performances of Vertimix Technology, the vertical head designed by Gorreri, able to obtain in just few minutes a perfectly emulsified final product, with an incredibly low and constant final density. The extremely high performance of Gorreri Turbomixer makes it possible to avoid stressing the dough, which therefore maintains its initial technological characteristics. Thanks to the Vertimix Technology, it is possible to mix in continuous batters for sponge cake, cakes, whipped creams, dairy or vegetable, mousses, creams, meringue.

#### Technical information

Gorreri Turbomixer range is available with different capabilities and vertical heads, designed to obtain the best results starting from different products. Each Turbomixer is made entirely of Aisi 304 steel with Cip washing systems and is highly customizable with cooling and heating systems, injection in relation to the product to be mixed. Turbomixer is also available in the tankless version to emulsify products directly from its storage box in the Gtm version, in the Gmg version with premixer on board and with premixer only.

TURBOMIXER TECHNOLOGY® AND VERTIMIX TECHNOLOGY® ARE REGISTERED TRADEMARKS OF GORRERI®

HALL: 2 - BOOTH: C 026

## LASER

www.laserbiscuit.it

### INDUSTRIAL PROCESS LINES FOR BISCUITS AND BAKERY PRODUCTS



New series of machines characterized by low maintenance, ease in the dry sanitation and with water and by the most advanced automation in the management of the installation to reduce the variability typical of the human operator.

Fields of application  
Food bakery industry

HALL: 6 - BOOTH: A 06-11

## TT ITALY

www.ttitaly.com

### TURBO MIXER



It is engineered to emulsify and aerate, through the injection of air or Nitrogen, cream or liquid batter by constantly controlling in a precise manner the desired density of the product. It guarantees assuring a fully automatic mixing process and continuous air injection directly in the turbo's head, with no need of operators. It combines innovative engineering features, such as the monoblock structure in stainless steel for sturdiness and hygiene, and the Double Cooling System of the aeration head. The latest innovation is the Volumetric Piston Depositor/Injector, which is directly connected to the Turbo Mixer and enables the dosing or the injection of the product by maintaining a constant feeding pressure.

Fields of application  
Bakery and pastry

#### Technical information

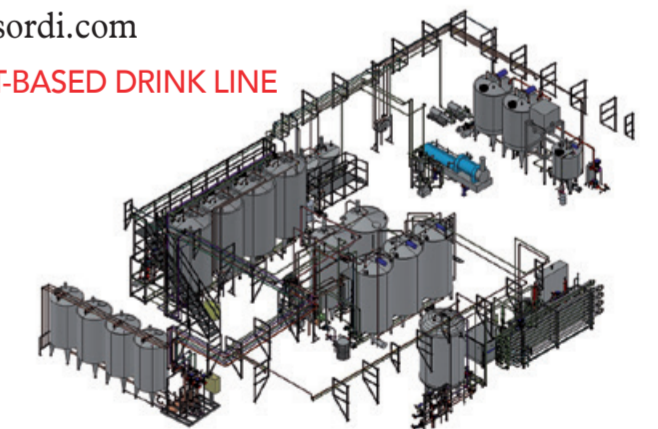
Entirely made in Aisi 304 stainless steel - Turbo geometry and mechanical seals of the turbo head are patented - Equipped with Plc able to save up to 150 production profiles, with configurable password protection - The machine comes Cip ready for easiness of cleaning and time saving

HALL 6 - BOOTH: A6-28

## SORDI IMPIANTI

www.sordi.com

### PLANT-BASED DRINK LINE



It is called 'Healthy menu' and it is the first line of vegetable drinks now available in Russia. Rich in nutrients, plant-based drinks are known as the best cow's milk alternative in the diet of adults and children. For some years now, they are widely distributed in Europe and throughout the West. Only recently these particular beverages, so rich in nutritional properties, have appeared in Russian supermarkets thanks to Sordi Impianti machinery and technology supply.

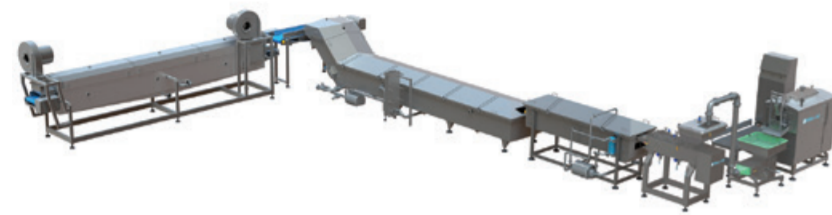
Fields of application  
Food and beverage

HALL: 6 - BOOTH: A6-16

## MILKYLAB SRL

www.milkylab.it

AUTOMATIC STRING CHEESE PRODUCTION LINE



MilkyLab automatic line for the production of string cheese consists of: steam cooker-stretcher, automatic moulding machine with special extruding system, cooling and cutting system, drying tunnel. The special extruding system allows to obtain separated parallel cords of cheese. Thanks to this special extruding system the structure of the product will have a perfect shape and predetermined weight, meanwhile the peelability and consistent texture will be guaranteed. The cooling system is composed by independent transportation channels for each string cheese. While the string cheese goes forward, the nozzles will spray cold/brine water on it. The water temperature will be controlled by plate heat exchanger. The cutting system has independent blades, one blade for each cord of cheese. Finally, the product passes in the drying tunnel and it's ready for the packaging.

Fields of application  
Cheese processing machines

Technical information  
The whole production line completely arranged for automatic Cip cleaning.

HALL: 5 - BOOTH: A5-35

## PACKINT

www.packint.com

CHOCOLATE MACHINES



Industrial process machines for the production of chocolate starting from cocoa liquor, cocoa butter, cocoa powder, milk powder, sugar with production capacity from 10 to 1200 kg/h. Supply of complete plants or single machines depending on the requirement. The classic process for chocolate production with two steps of refining and conching is integrated. Packint also makes additional machines for the preparation of ingredients and the storage of ready product. As well as small plants from bean to bar (from 5 kg/h to 150 kg/h) for high quality artisan chocolate production, starting directly from cocoa beans. For refining Packint uses the low speed ball mill technology, the best one for small-medium productions achieving a final fineness of 18-20 microns.

Fields of application  
Chocolate, ice-cream, bakery, confectionery, ingredients

HALL: 5 - BOOTH: A5-28

## MINERVA OMEGA GROUP

www.minervaomegagroup.com

CE/HF; HAMBURGER AND MEATBALL FORMING MACHINE



Machine for 3 different solutions: hamburger/patty production; hamburger stacking function (with interleaver device); meatball production. This machine can process meat, chicken and fish in combination with other ingredients such as eggs, spices, bread crumbs, vegetables, cheese, soy. It is ergonomic, easy to clean and safe. In few minutes, it is possible to change the configuration from hamburger to meatball production.

Fields of application  
Butchers, super and hypermarkets, food processors, fast food, canteens and catering centers

Technical information  
Stainless steel hopper, frontal door and lid - Machine on trolley with self-braking wheels - Stacking function (for hamburgers) - Automatic Scraper Device - Shaft assembly easily removable and changeable - Standard equipment: speed variators (for hamburgers and meatballs); paper interleaver device; oil feeder (for meatballs) - Hamburger max. dimensions: Ø 135 mm; max. thickness: 30 mm; max. production: approx. 3000 pcs/h - Meatballs dimensions: min. Ø 25 mm / max. Ø 39 mm; max. production: approx. 6000 pcs/h (double form)

HALL: 7 - BOOTH: C7-11

## SACCO

www.saccosystem.com

CRL 1505

Lactobacillus rhamnosus Crl1505 stimulates the innate and adaptive immune response in the gut and in the respiratory tract, promoting a protective effect. L. rhamnosus Crl1505 is perfect to be used in fermented milk, yoghurt and probiotic cheese. The probiotic originally isolated from goat milk is produced with hypoallergenic ingredients and with no added colorants. It enhances the flavour of dairy products without altering their acidification or texture. The product is natural way to reduce antibiotic intake in children, in fact it is an extensively researched probiotic that can improve the immune system of children and adults.

Fields of application  
Dairy

Technical information  
• Gastric acid resistance  
• Bile tolerance  
• Immunomodulatory in immunocompetent and immunocompromised host

HALL: 1 - BOOTH: S1-E65



## GRANDI

www.grandi.it

BANDROLLING MACHINES



High quality and reliable seal-banding machine. They can be adapted to all packaging formats and sizes, they are frequently used in the confectionery and general food industries.

Fields of application  
Cheese, candies, chocolates, tobacco

Technical information  
The seal-banding machine BC 120 can be connected to: boxes buffer system; calibrators; boxes stacking unit at the machine exit mod. ST 2007. The machine can work with both the paper and the self-adhesive type seal-band. Specifically designed to supply a complete packaging line.

HALL: 6 - BOOTH: B6-13

## TONELLI GROUP

www.tonelli.it

MULTICAKE LINE



The MultiCake Lines are totally automatized, from the mixing up of the ingredients to packaging. They are designed and made to ensure an excellent standardization and quality of the finished product. They are made of Aisi 304 stainless steel and are reliable over time. Each line is able to produce several kinds of products, simply changing settings:

layer and multi layers cakes, swiss and miniroll, cakes, cup cakes, chiffon cakes, "mamon", fig bar, chou or eclair.

Fields of application  
Food, bakery and confectionery industry

Technical information  
It can reach an approximate production from a minimum of 15.000 pcs/hour to a maximum of 250.000 pcs/hour for bars, with 400 kg/h up to 4000 kg/h of end product, of course depending on the oven length and the cooking time. A single line can host different stations for make up different products and in this way it is possible to reach high flexibility, because the processing bench can be equipped with a maximum of 7 liftable stations specific for each type of product for a total length of 25 mt max. It is also possible have solutions settled on two floors.

HALL: 6 - BOOTH: D6-28

## RE PIETRO

www.repietro.com

PRESSES FOR PUFFED CAKES AND NO FRIED SNACKS



Cereal food processing machine. Presses for puffed cakes RP Series transform simple cereals, cereal mixtures or blends of legumes and cereals, into crisp and tasty puffed cakes as well as healthy and crunchy no-fried snacks. The possibility to include into the cereal mixtures of legumes, allows to obtain high protein snacks.

Technical information  
Plc Siemens S7-1200 for the set-up of the production phases, and for monitoring the process failures thanks to an efficient diagnostic system - Colour Touch screen Siemens Ktp 700 da 6,7" - Hydraulic and pneumatic components by top level brands - Moulds made of hardened steel, coated with titanium nitride; heated by cartridge heaters controlled by Omron thermoregulators.  
• Compliance to the Machinery Directive 2006/42/EC, certified by TÜV and Imq  
• Compliance to the Moca specification as per Reg.No. 1935/2004/EC and No. 2023/2006/EC

HALL: 6 - BOOTH: 629

## SOTTORIVA

www.sottoriva.com

SUPER FLEX LINE



It is a heavy-duty industrial line with maximum production capacity of 15.000 pcs/h, weight range from 25 to 700 g.

Fields of application  
Industrial bakeries

Technical information  
The Super Flex Line is the most complete line of Sottoriva's manufacturing range for samouli, hamburger and stamped bread, finger rolls, baguette etc. It is composed of a divider rounder at 1-2-3-4-5-6 pockets, intermediate proofer, moulding station, stamping unit (seeding, wetting and cutting station optionals) and tray/rack loading device.

HALL: 6 - BOOTH: 615

## SACMI

www.sacmi.com

### SACMI ROLL-FED LABELLING MACHINE



It guarantees a simple and perfect labelling system at very high speeds. It can apply wrap-around labels to cylindrical and shaped containers, in Pet, glass or metal with reduced maintenance and very quick format changeover.

Fields of application  
Food, dairy, beverage

#### Technical information

A labeller working with Opp wrap-around labels offers the most cost effective solution in terms of efficiency, high volumes and production speed. The design specifications of the series are in line with the modern requirements of "green packaging", allowing you to label ultra-light containers using the thinnest labels available on the market.

Very high production standards (speed up to 60 thousand applications per hour); high performance with a wide range of materials (Opp, Pet, Pvc, Ops, paper).

The transfer of the label from the cutting drum to the bottle is guided by an aluminium drum through the vacuum system, without grippers. This makes the labelling process less critical. It can be equipped with an automatic roll splicing system that allows continuous work.

HALL: 5 - BOOTH: C5-28

## SELMI

www.selmi-group.com

### AUTOMATIC CHOCOLATE PRODUCTION LINE



Tuttuno Oneshot, cooling vertical tunnel Spider and Automatic Demoulding. The Tuttuno One Shot Depositor is designed to produce filled chocolates in a single operation. The machine automatically injects the chocolate and filling in the ratio required to create the chocolate outer shell with the filling inside at the same time. It can be connected to the Spider Vertical Cooling Tunnel which is extremely compact and can hold more than 110 moulds. Designed for laboratories that have a requirement for continuous cooling, it also enables the internal cooling temperature to be adjusted. The new Automatic Demoulding Attachment completes the line. It demoulds pralines or bars, operating on up to four moulds per minute and deposits the finished product onto a belt for feeding packing or flow wrap lines or on a rigid support that avoids manual intervention of the operator.

Fields of application  
Small-medium chocolate factories

#### Technical information

Oneshot Tuttuno: 400 V trifase - 50 Hz 3,5 Kw - 16 A - 5 poli  
Spider vertical cooling tunnel: 400 V trifase - 50 Hz 4 Kw - 16 A - 5 poli  
Automatic Demoulding: 230 V monofase - 50 Hz. 1,5 Kw - 16 A - 3 poli

HALL: 6 - BOOTH: C6-4

## UNIVERSAL PACK

www.universalpack.it

### ALFA FLEXI

Vertical machines for stick-packs. This state-of-the-art solution combines the possibility of dosing liquid, viscous, creamy, granular or powdery compounds with systems for packaging in modified atmosphere and ultraclean conditions, as well as Cip systems. The main features are: high flexibility, possibility of dosing different types of products with the same machine, fast format changeover with no extra tool. Furthermore, this model stands out for: its compact design; standard hygienic levels and ultraclean; suitability for working in 4.0 environments; production batch management in compliance with protocol Cfr 21 Part 11; possibility of integrating all the external electronic components used in the machine in

order to manage the operations from one and only access point.

Fields of application  
Food

#### Technical information

Stick-pack dimensions:  
• Width: from 16 to 90 mm  
• Length: from 40 to 230 mm  
• Dose: from 0,1 to 200 cm  
Reel:  
• Width: max 400 mm  
• External diameter: 450 mm  
• Reel core: 76/150mm



HALL: 6 - BOOTH: E6-28

# Agriflex, watchword: customisation

Since over 40 years, clients' needs are at the core of the business of the firm, specialists in creating custom-made solutions for the food industry all over the world.

by Elisa Tonussi

Headquartered in Forlì, Italy, Agriflex has always been specialist in designing, manufacturing and installing systems for the storage, conveying, dosing and automation control of raw materials for the food industry. Since 1975, Agriflex has made of customisation and flexibility its own hallmark, supporting clients from quotation all the way to the final tests on site. Given its constant growth trend and solidity, Agriflex is currently one of the leading Italian companies in this field, counting on thousands of installations all over the world. And it doesn't seem to stop growing. Thanks to the know-how and professionalism of its founder, Luciano Agri, who made it all possible.

#### Steady on top

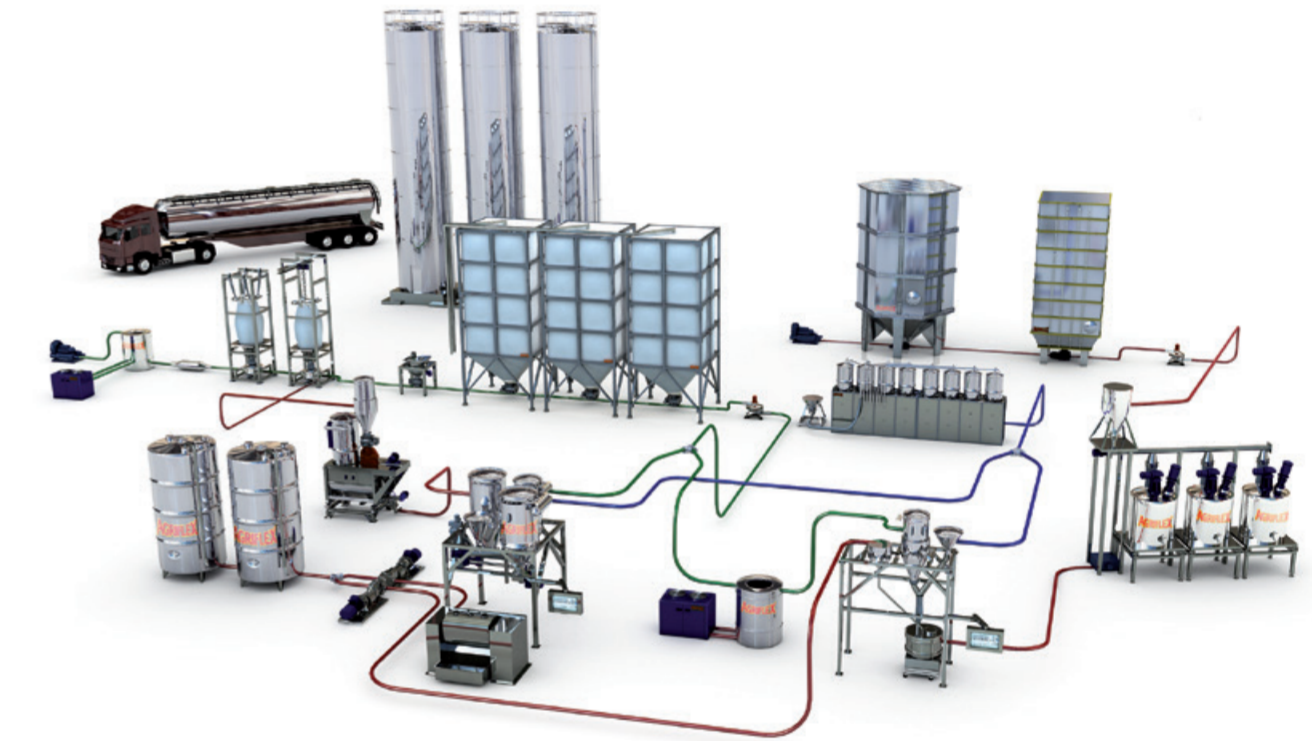
Following a very positive 2018, this year, Agriflex is ready to achieve another important goal. With further employees being hired, the company is getting more structured. And, thanks to an annual growth rate between 20% and 25%, its business is more and more solid and thriving, aiming at remaining steady on top also in 2020.

#### Customisation makes the difference

Agriflex has always adopted a customer-centred approach. Throughout the different stages - analysis, solution, production, automation, continuous control and after-sales services - the company is always ready to conceive, together with the customer, the most suitable solution for his needs. Every system is customised, according to each specific necessity. Agriflex handles directly in-house the overall coordination of the project: design, production, transportation, installation and commissioning.

#### Innovation and reliability

Agriflex has progressed considerably throughout the years at a te-



chnological point of view. All solutions conceived by Agriflex, in fact, have one feature in common: automation. To guarantee rapidity and accuracy, costs and time saving, traceability and less human errors.

Some products also boast invention patents, such as the flour cooling system, enabling to lower the flour temperature by over 20°C and keep it even. This patent has enabled many companies to reduce operating costs, by completely automating the system, and to be highly energy efficient and effective, given the considerable temperature reduction. Agriflex boasts another industrial innovation, too: the Esa Silos, storage systems manufactured using stainless steel panels coupled without internal tie rods and with external ribs, making the structure self-supporting. Other storage systems can be made of fabric, a cost-effective and user friendly solution. Finally, as for microingredients, Agriflex ensures extreme precision in dosing raw materials in order to avoid wastes.

Agriflex also stands out for its attention to cleanliness. For customers, having maintenance and clean-

ing programmes is more and more important. For this reason, Agriflex builds its solutions in order to make them accessible and easy and fast to clean, leaving enough space under the machine to allow inspections and cleansing in a complete safe way.

#### Agriflex all over the world

80% of Agriflex's turnover is generated on foreign markets. In fact, export is their core business, with thousands of installations all over the world. Mainly, in South America and the Gulf region, which are the most consolidated markets. While Asia and the Far East are currently developing.

This is why Agriflex always takes part at trade shows all over the world - on average 12 every year - where they can make new contacts and relations and strengthen the already existing ones, in addition to spread even further the brand acquiring awareness of new emerging contacts. In further details, over the last years, Agriflex took part in trade shows in Italy, Algeria, Brasil, France, Germany, South Africa, UK, Dubai, USA. But also in Mexico,

Thailand and Vietnam. To conclude 2019, Agriflex will exhibit, like every year, at the Gulfood Manufacturing in Dubai from October 29th to 31st and Andina Pack, in Colombia, from November 19th to 22nd. In addition, Agriflex has already registered at AB Tech Expo in Rimini, Interpack 2020, Cifa Rennes 2020, Prosweets 2020, Foodex 2020, Iba 2021, Ipack-Ima 2021 and Anuga Food Tec 2021.

COME TO MEET US AT  
GULFOOD  
Hall: 6 - Booth: C6-22

#### Agriflex, parola d'ordine: personalizzazione

Da oltre 40 anni, le esigenze del cliente sono al centro dell'attività di Agriflex, specialista nella creazione di soluzioni personalizzate per l'industria alimentare. A un tasso di crescita annuo del 20-25%, l'azienda Italiana è uno dei leader del settore con installazioni in tutto il mondo. Innovazione, affidabilità e pulizia contraddistinguono i prodotti dell'azienda, realizzati su misura per il cliente.

coming soon

## FI FOOD INGREDIENTS

“The world’s leading food and beverage ingredients platform”

Paris, 3rd to 5th December 2019

With its 60,000 square meters of exhibition space that host more than 27,000 visitors and 1,700 exhibitors, Fi Europe & Ni is the world’s leading food and beverage ingredients platform. Suppliers and specialists in research and development, production and marketing will meet in Paris to network with industry professionals, source innovative ingredients from around the world, and learn about the latest trends. The exposition will be held from December 3rd to 5th, in the Parc des Expositions, the Paris conference center located in Villepinte near the Paris-Charles de Gaulle airport, and will bring together the world’s leading to showcase the most diverse range of new and innovative products and services.

[www.figlobal.com/fieurope/](http://www.figlobal.com/fieurope/)



## PROSWEETS

“The international supplier fair for sweets and snacks industry”

Cologne, 2nd to 5th February 2020

ProSweets is the supplier fair for the sweets and snacks industry. The event is exclusively for trade visitors and presents the entire supplier range of the sweets and snacks industry: from diverse ingredients through innovative packing machines and packaging materials to optimize product technologies. ProSweets will take place in Cologne from 2nd to 5th February, 2020 parallel to Ism, the world’s leading trade fair for sweets and snacks. The duo showcases the entire value chain of the confectionery industry in which all parties are present: suppliers, manufacturers and retailers.

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



## CFIA

“A crossroads for the agro-food industry suppliers”

Rennes, 10th to 12th March 2020

CFIA is a leading fair focused on the food processing sector. Since 1997, it has been held every year in Rennes and brings together 22,000 global experts to discover and discuss the latest food processing machines, ingredients and packaging materials. The 2020 edition will take place in Rennes from 10th to 12th March 2020 at the Parc des Expositions. Here French and international producers will meet to present innovative solutions: ingredients and

processed foods; equipment and processes; packaging and conditioning. Visitors can freely explore exhibitor stands, receive demonstrations on the newest machines and network with experts and decision makers alike. In addition, conferences in French will be held on a variety of topics related to food processing. There will also be several events such as the Food Heroes award ceremony.

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

## AUTOMATIC CUTTING EQUIPMENT FOR EXACT WEIGHT WEDGES LPR\_08

Automatic equipment to cut exact weight wedges starting from round cheeses

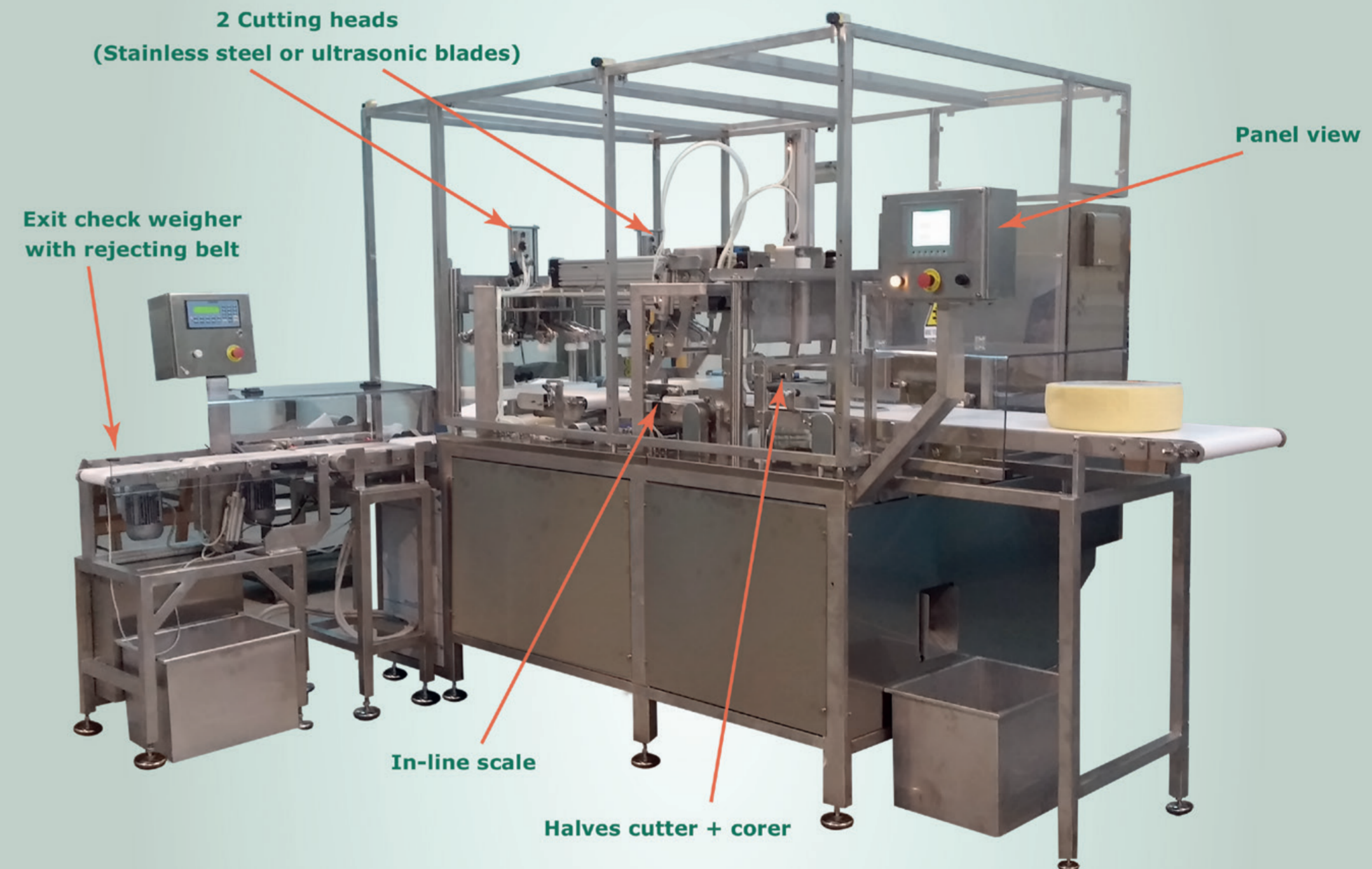
Cutting programs available: number of wedges \* exact weight ( Min. 50 Grs.)

Two cutting heads with stainless steel or ultrasonic blades

All stainless steel AISI 304/316 \* Plc Siemens \* Teleservice system

Max cheese dim. : diam.400xH140 mm.

Max cutting speed: till to 50 ppm



**FACCHINETTI**  
IMPIANTI CASEARI s.r.l.

ITALY Via Case Sparse, 14 - T.Q. 28100 Novara (NO)  
Phone: +39 0321 455192 - Fax: +39 0321 491651  
[www.facchinettinovara.it](http://www.facchinettinovara.it)

U.A.E. Ras Al-Khaimah P.O. Box 35728 RAK  
[rak@facchinettinovara.it](mailto:rak@facchinettinovara.it)



# AUTOMATIC CUTTING EQUIPMENT FOR EXACT WEIGHT PORTIONS TXF\_06

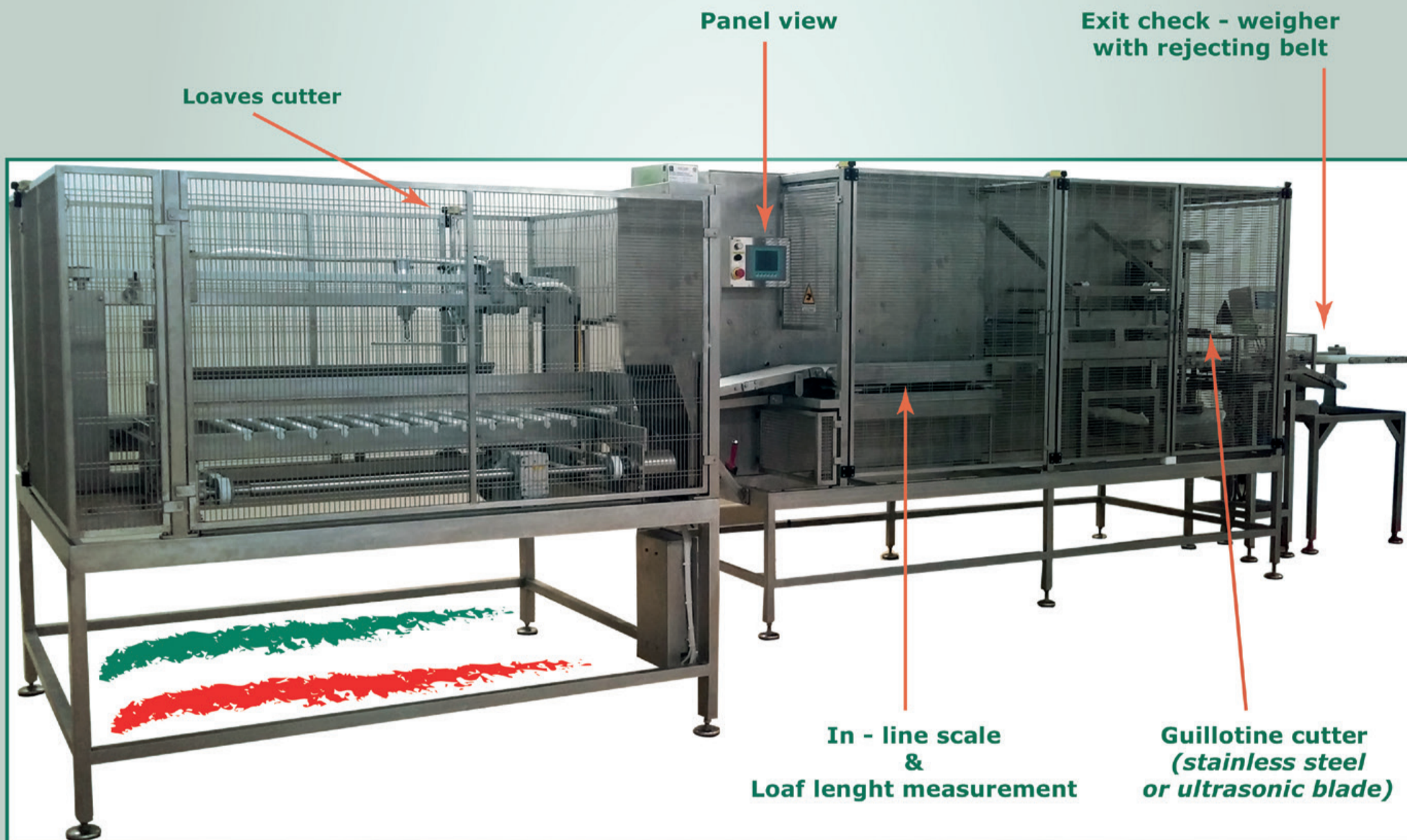
Automatic equipment to cut exact weight slices or portions starting from cheese blocks or provolone cheese

Cutting programs available: Thickness (Min. 2 mm) \* Exact weight ( Min. 50 Grs.)

All stainless steel AISI 304/316 \* Plc Siemens \* Teleservice system

Max block dim. : 800x600 X H. 200 mm.

Max cutting speed: till to 70 ppm



AFNOR CERTIFICATION  
ISO 9001:2015  
N° 2002/18793.5



N° 2002/18793.5

**FACCHINETTI** s.r.l.  
**IMPIANTI CASEARI**

ITALY Via Case Sparse, 14 - T.Q. 28100 Novara (NO)

Phone: +39 0321 455192 - Fax: +39 0321 491651

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

U.A.E. Ras Al-Khaimah P.O. Box 35728 RAK

[rak@facchinettinovara.it](mailto:rak@facchinettinovara.it)