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**BEVERAGE** | technology |

PROVIDING EQUIPMENT, PRODUCTS AND SERVICES TO THE FOOD AND BEVERAGE INDUSTRY



2022 edition  
catalogue



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



**MAGAZINES  
AND MORE**





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# Introduces its **table-top cutters**

**P**ND srl is a proudly Italian company, which for more than twenty years has been a market leader in the sector of industrial machines for fruit processing.

This company has made the "tailored" design capacity a real differential factor, recognized by the large customer base which is, to all intents and purposes, "all over the world": from Europe, to America, to Australia, to Africa.

PND, even in a difficult time such as the Covid-19 pandemic, which made functional and commercial movements difficult, has been able to respond flexibly and quickly to requests for assistance and support.

Innovation, research and development of new solutions are fundamental elements in the PND vision, elements that have led to the birth of two new machines within the family of cutters: these are the manual watermelon slicer mod. MWS and the manual pineapple slicer mod. MPS.

Table-top cutters, accessories to industrial machines that demonstrate the great versatility of PND and its ability to be smart and meet needs of the most varied markets. Small, compact and at the same time characterized by the quality of the PND materials, entirely in stainless steel, they both have the possibility to customize the slice thickness.

The MWS model could be used for cutting both products, watermelon and pineapple; the MPS model, only 43 cm long, is ideal for cutting pineapple only. The latest ones born at PND best express the company's expertise, which always starts from a basic model, of the highest quality but at the same time highly customizable according to customer requests. Versatility, ease of maintenance and tailoring: these are the values that guide PND and that project it into the future with great attention to the changes and needs of new markets. 

For more info, please visit our website: [www.pndsr.it](http://www.pndsr.it)



## Presenta le sue **taglierine da banco**

**L**a PND srl è un'azienda orgogliosamente italiana, che da più di vent'anni è leader di mercato nel settore delle macchine industriali per la lavorazione della frutta.

Questa azienda ha fatto della capacità progettuale "sartoriale" un vero e proprio fattore differenziale, riconosciuto dall'ampio parco clienti che è, a tutti gli effetti, "all over the world": dall'Europa, all'America, all'Australia, all'Africa.

PND, anche in un momento difficoltoso come la pandemia Covid-19, che ha messo il voto a spostamenti di tipo funzionale e commerciale, ha saputo rispondere con flessibilità e rapidità alle richieste di assistenza e supporto.

Innovazione, ricerca e sviluppo di nuove soluzioni sono elementi fondamentali nella vision di PND, elementi che hanno portato alla nascita di due nuove macchine all'interno della famiglia delle taglierine: si tratta delle taglierine manuali per anguria e per ananas, rispettivamente identificate come MWS e MPS.

Taglierine da banco, accessori alle macchine industriali che dimostrano la grande versatilità della PND e la capacità di essere smart e di incontrare le esigenze dei mercati più vari. Piccole, compatte e allo stesso tempo caratterizzate dalla qualità dei materiali PND, interamente in acciaio inox, hanno entrambe la possibilità di personalizzare lo spessore della fetta.

Il modello MWS è utilizzabile per il taglio di entrambi i prodotti, anguria e ananas; il modello MPS, lungo solo 43 cm, è invece ideale per il solo taglio dell'ananas. Le ultime nate in casa PND esprimono al meglio l'expertise dell'azienda, che parte sempre da un modello base, di altissima qualità ma allo stesso tempo altamente personalizzabile in base alle richieste del cliente. Versatilità, praticità della manutenzione e sartorialità, questi i valori che guidano PND e che la proiettano nel futuro con grande attenzione ai cambiamenti e alle esigenze dei nuovi mercati. 

Visita il nostro sito per maggiori info e dettagli:  
[www.pndsr.it](http://www.pndsr.it)

# TAILORED TECHNOLOGIES

**NEW**

MANUAL WATERMELON SLICER **MOD. MWS**



**NEW**

MANUAL PINEAPPLE SLICER **MOD. MPS**



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

# COLUSSI ERMES,

## industrial washing systems

Colussi Ermes is global leader in the design and production of washing machines for the food industry, having realized over 6000 machines worldwide. Experience, research and know-how have all contributed to ensuring that the company, over the years, has become specialized not only in the meat, dairy, confectionery, fruit & vegetables, poultry and fishery sectors but also in more complex fields such as the pharmaceutical, hospital, logistics and automotive sectors. A modern and dynamic brand, showing an exceptional capability of addressing a constantly changing market. Values such as innovation and organization to guarantee competitiveness, flexibility and quality for absolute environmental protection. Colussi Ermes has always been a synonym of excellence – excellence in industrial washing. Innovative design, rounded shapes, accurate details, high efficiency and ongoing research for perfection in order to achieve the absolute hygiene.

Colussi Ermes' challenge in the last years has been another opportunity to make the world a safer place. Two new plants have been built comprising the new Colussi Research Centre site. This is an actual innovation space, a lab where experts can study new improved systems for industrial washing, sanitization and drying that guarantee energy savings and that aim to ensure higher quality, safety, performance and efficiency levels. The new site, which are completely covered with solar panels, qualify Colussi Ermes as a model of sustainable excellence.

Colussi Ermes exports all over the world, extensively in many countries. Europe, North America and Australia are the main markets where the most important sales targets are constantly reached. Furthermore, with the aim of strengthening the efficiency in the American market, Colussi Aws Inc. has been established in California, together with an all-American brand. Below you can find a brief description of some types of plants.



### **Washing machine for pans placed on racks**

The rack washing systems have been carefully engineered to wash racks carrying different kinds of equipment. By means of specific frames or special trolleys, it is possible to wash pans, crates, pallets, bins, meat-trucks, containers or isotainers fully respecting the highest washing and sanitizing hygiene standards. The washing capacity is very flexible: from a minimum of 20 to a maximum of 120 racks/hour.

### **Industrial mixing bowl washers**

The industrial mixing bowl washing systems are equipped with fully automated advanced technology and ensure impeccable washing and drying results. Thanks to special monitoring, connected to HACCP systems (Hazard Analysis and Critical Control Points) they guarantee impeccable results in terms of hygiene. Washing capacity up to 20 industrial mixing bowls/hour.

### **Spin Drying Systems**

Thanks to the continuous evolution that has taken place over the last 15 years, Colussi Ermes has become the absolute leader in spin-drying systems especially with the development of the first "super compact" spin-drying unit: this machine can dry a high number of crates with a minimum footprint. High capacities – up to 4200 crates/hour with the double-rotor spin-dryer and up to 2100 crates/hour with the single-rotor spin-dryer – speed and perfect drying result are the key features that set apart this new generation of Colussi Ermes spin-dryers along with the possibility to dry different type of crates, foldable or rigid.

In just a few seconds the Colussi Ermes spin-dryer can achieve excellent drying with low electrical energy consumption, making this both an efficient and cost-effective solution. 

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



  
**COLUSSI ERMES**  
Advanced Washing Systems

# THE SMARTEST SPIN DRYING SYSTEM YOU CAN HAVE!



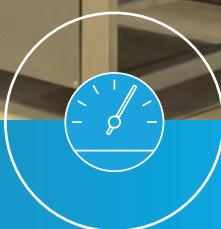
**WATER  
RECOVERY**



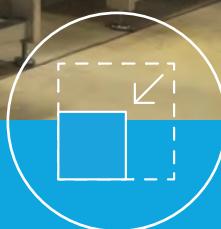
**HIGH SPEED**



**CRATE TYPE  
AND DIMENSION  
FLEXIBILITY**



**ENERGY SAVING**



**COMPACT  
DIMENSIONS**



## SINGLE ROTOR

from 1200 rigid crates per hour  
to 3200 foldable crates per hour

## DOUBLE ROTOR

from 2200 rigid crates per hour  
to 6400 foldable crates per hour



Over the last 15 years Colussi Ermes has become the absolute leader in spin-drying systems especially with the development of the first "super compact" spin-drying unit. This machine can dry a high number of crates, up to 6400 crates/hour with the double-rotor spin-dryer and up to 3200 crates/hour with the single-rotor. High Speed and compact dimensions are the key features that set apart this new generation of Colussi Ermes spin-dryers along with the possibility to dry different type of crates, foldable or rigid. In just a few seconds the Colussi Ermes spin-dryer can achieve a perfect drying result with low electrical energy consumption, making this both an efficient and cost-effective solution.



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<https://www.colussiaws.com>

# ALLEGRI,

## flexible hoses for the food industry

### W.PHARMA

PTFE liner hose smoothbore inside, convoluted outside white (GP) or black anti-static (AS), with 316 Stainless steel wire helically wound into convolutions. 316 stainless steel braid covered with a white silicone rubber cover "Platinum Cured" marked in accordance with EN16643.

W. PHARMA hose is designed for use in high purity Pharmaceutical, Biotech, Chemical and Foodstuffs,

where easy of cleaning the hose is required, both internally and externally.

The same is also versatile for other types of industrial applications, in particular where they have passages of fluids and gases at high temperatures. Hose conforms to FDA norm 

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



# ALLEGRI,

## tubi flessibili per l'industria alimentare

### W.PHARMA

Tubo a parete liscia interna corrugata esterna in PTFE bianco (GP) o nero antistatico (AS), con filo in acciaio Inox 316 avolto ad elica nel profilo esterno.

Rivestito da una treccia in acciaio inox 316 ricoperta da una guaina esterna liscia in silicone bianco "Platinum Cured" marcata in accordo con norma EN16643.

Il tubo W.Pharma è stato progettato per usi ad alta igienicità farmacologica, biotecnologica, chimica e alimentare, in tutte quelle applicazioni dove la FACILE

PULIZIA sia interna che esterna è necessaria, diversamente dai tubi in gomma è possibile STERILIZZARLI A Vapore OGNI QUAL VOLTA SI VOGLIA, senza degradazione del tubo stesso.

È inoltre idoneo per altri tipi di impieghi industriali, in particolare dove si hanno passaggi di fluidi e gas ad elevate temperature e nei quali ci possono essere rischi di ustioni al contatto; per esempio tubi per il trasferimento di olio caldo o vapore. Tubazione conforme alle norme FDA 

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## Tubi in PTFE per l'Industria Alimentare e Farmaceutica.

- Design Unico e Brevettato
- Sottostrato Non Igroscopico
- Alta Igienicità
- Massima Flessibilità
- Copertura Silicone "Platinum Cured"
- Resistenti Agenti Chimici e Alte Temperature
- Certificati FDA
- Prodotti Secondo Norma EN 16643.

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Since 1951.

**Allegri Cesare S.p.A.**

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Scarica dal nostro sito il nuovo  
Catalogo Tubi Flessibili in PTFE!



# TECNINOX di A. Namaziano Srl , machines for the food and beverage industry

Tecninox has been building machines for the food and beverage industry, as well as the pasteuriser for beer, and is willing to examine any customer's enquiry and request of supply. Tecninox plants and pasteurisers for beer are built according to the latest manufacturing technologies and are used for the beer heating processing and the pasteurisation lines in full bottles or cans. The strength of Tecninox is in heat treatment. Tecninox builds single machines and complete lines. The Tecninox machines are built entirely of stainless steel and are made to the customers' requirements. At the basis of the Tecninox work is the great production flexibility, combined with a high degree of professionalism in order to offer the most advanced technology in realising pasteurisers for beer.

**Information:** main production range: Machines for food and beverage industry. Additional production range:

- machineries for tomato processing;

- machines for fruit processing;
- machines for jam processing;
- machine to process vegetables, mushrooms, vegetables with oil or vinegar pickle;
- pasteurisers for beer cooling tunnels for any type of container and product;
- pasteurisers tunnel coolers for beer and beverage;
- static sterilizers for any type of container and product;
- batch evaporators;
- cooking vessels;
- autoclaves; cutters;
- cooker for snails and other food products, autoclaves, linear filling stations, linear filling stations by water rain, circular and volumetric fillers;
- electrical and gas roasters for vegetables;
- steamy and electrical concentration boule;
- oil immersion deep fryers;
- bratt pans. 

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



# TECNINOX di A. Namaziano srl , macchine su misura per l'industria alimentare e delle bevande

Tecninox costruisce macchine per l'industria alimentare e delle bevande, ed è disponibile a esaminare le necessità del cliente per preventivi ed eventuali forniture. La forza di Tecninox è nel trattamento termico.

Tecninox produce singole macchine e anche linee complete per la trasformazione della frutta e dei prodotti agricoli.

Le macchine di Tecninox sono completamente costruite in acciaio inox e vengono realizzate a seconda delle esigenze del cliente. Alla base del lavoro di Tecninox c'è senz'altro la grande flessibilità della produzione unita ad un alto grado di professionalità.

Gli impianti di Tecninox sono realizzati con l'utilizzo delle più moderne tecnologie di produzione e possono essere impiegati per le seguenti lavorazioni:

- macchinari per la lavorazione del pomodoro;
- per la lavorazione della frutta;

- per la produzione di marmellate;
- per la lavorazione di verdure, funghi, sottolio, sottaceto;
- pastorizzatori - raffreddatori a tunnel per ogni tipo di contenitore e prodotto;
- pastorizzatori - raffreddatori birra e bevande;
- sterilizzatori statici per qualsiasi tipo di contenitore e prodotto;
- evaporatori a batch;
- bacinelle di cottura;
- autoclavi;
- cutter;
- pentola di cottura lumache e altri prodotti alimentari;
- bolla di concentrazione a vapore e elettriche;
- arrostitori elettrici e a gas per verdure;
- friggitrici ad olio in immersione;
- brasiere. 

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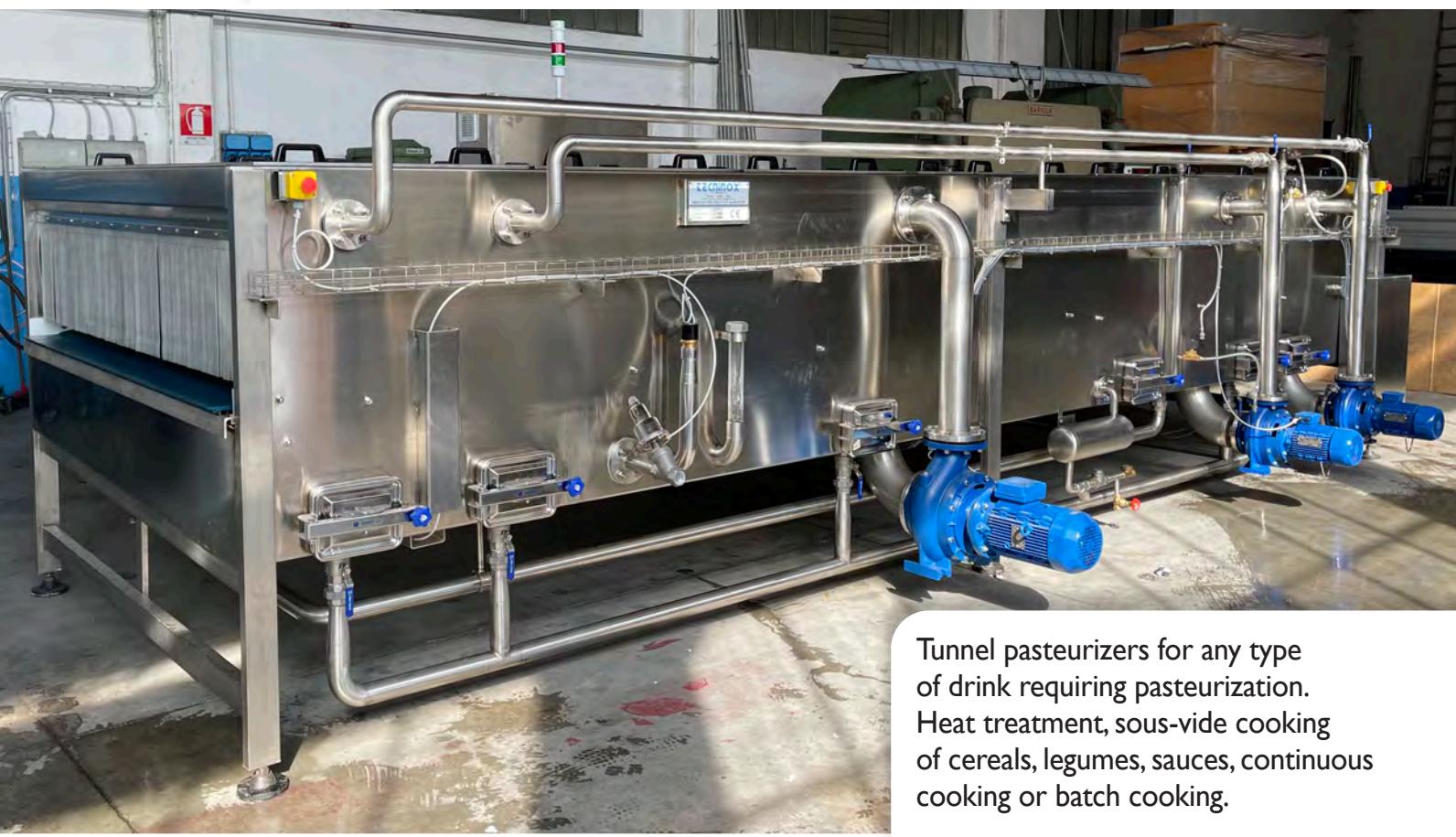
**TECNINOX®**

macchine per l'industria alimentare

di A. Namaziano s.r.l.



**GREAT FLEXIBILITY,  
HIGH PROFESSIONALISM**



Tunnel pasteurizers for any type of drink requiring pasteurization. Heat treatment, sous-vide cooking of cereals, legumes, sauces, continuous cooking or batch cooking.

**TECNINOX®**

**DI A.NAMAZIANO S.R.L.**

Via Costa ,27 - 43035 Felino, Parma - Italy - Tel: +39 0521804286 - +39 0521 831911

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# GEA: homogenization technology

**G**EA is the technological leader for dynamic high pressure homogenizers and plungers pump in several different industries and applications. Homogenization is a key well known process in dairy, food & beverage industries, nevertheless new markets are growing thanks to continuous innovation and research.

New products such as cellulose and carbon nanotubes arouse more and more interest as well in this scenario. Higher stability on products is one of the most important effects achievable through this process.

The stable emulsion which is delivered as outcome, is a viscous final product characterized by enhanced organoleptic properties, taste, glossy colour and shelf-life.

The passage through the homogenizing valve enable to avoid separation phenomena on particles, increase the digestibleness of processed products and the assimilation of the nutritional principles, especially for infancy and functional food industry.

## Wide range of homogenizers

GEA can offer a complete range of high pressure homogenizers, from laboratory up to industrial scale, providing more than 300 options to satisfy market's and customers needs. All the machines meet the most stringent hygienic requirements and quality control systems. All homogenizers are CIP and SIP'able and are available with cGMP documentation.

## The new GEA XStream Lab Homogenizer: the XStended version of innovation

GEA XStream Lab Homogenizer is table top unit designed to carry out tests in laboratory and be prepared to scale up to the industrial production the consistent results that NiSoX-Valve provides for many and different applications. The ergonomic design of this machine conceived for a perfect fit on standard lab desks ensures smart and easy operating conditions. The most innovative advantages of this homogenizer are the intuitive PLC configuration and the self adjusting pressure feature, which provide optimized high quality efficiency with 100% trials repeatability thanks to automation.<sup>1</sup> The GEA XStream Lab Homogenizer it's a safe, smart and simple homogenizer with high level of automation.

## The new GEA Homogenizer Compression Block NiSo-CLEAN 2.0

If hygenic design and excellent high pressure performanc-



es are what you're looking for. Ariete Series homogenizers configured with the improved compression block NiSoCLEAN 2.0 are the right solutions

to meet your requirements. This optimized configuration has been conceived in order to satisfy the increasing food & beverage market's demand and improve cleanability procedures, optimizing easy maintenace of the machine and always ensuring reliability.

## Industrial homogenizers

Ariete Series homogenizers are the state-of-the-art technology for powerful, reliability and customized solutions and they are suitable for several industries. These are ideal to process dairy, food, beverage, pharma, biotech and chemical products.

The homogenizing pressure can reach 1500 bar depending on specific liquid end design and configuration. The homogenizers from the One Series combine convenience and absolute quality to deliver unmatched benefits. These 3-piston homogenizers are manufactured to ensure easy maintenance and simple installation into small-medium productions of dairy products, beverages and soft chemicals.

## Laboratory homogenizers

Pilot plant homogenizers are designed for continuous operation up to 1500 bar and limited productions easy plug & play installation, simple operation and quick maintenance. Table-top homogenizers are compact machines ideal for the treatment of nanoparticles, nanodispersions and nano-emulsions up to 1000 bar.

## Customer collaboration

The close collaboration with important customers R&D centers, and continuous improvements on production technologies, allow the company to invest in close collaboration with customers which lead to the continuous implementation of innovative and tailor-made solutions.

The recently refurbished Process Technology Center is a unique resource to test homogenization technology, refine receipts, develop high efficiency homogenizing valves and evaluate the performance of installed machines. We are glad to be able to offer to customers more comfortable meeting rooms and cutting edge instruments. Highly qualified staff can support customers in the development of new products, to test maximum process efficiency conditions and product scalability to industrial production processes.

Discover more on [gea.com/homogenizers](http://gea.com/homogenizers)



## Boost up the taste of nature

Discover GEA homogenizers.  
The highly customized process solutions  
that ensure excellence in food products.

- Improved organoleptic properties
- Longer shelf-life
- Reduced use of addivites or stabilizers
- Reduced oxidation and alteration processes
- Improved viscosity, mouth feeling and taste
- Aseptic execution available



# NTE Process, research, innovation and customer care: the key to the success of nte process

**N**TE Process is a Single Source Provider that can drive its customers in all phases of design, supply and innovation of industrial plants thanks to patented proprietary technologies and international partners. The NTE Process Research and Innovation Centre in Pessano con Bornago (Milan) is equipped with a 1:1 Pilot Plant to test the technologies in first person, perform both scientific tests (basic fluidity, aeration, consolidation, etc.) and full scale tests with customers' products (atomization, drying, solid-liquid mixing, parallel processing, pneumatic conveying, etc.) to best simulate the performance of the different technologies in real conditions and to have a predictive analysis of performance, energy consumption and all the details necessary for the correct design of industrial plants and complex technologies necessary for the development of increasingly high performance and customized raw materials and finished products.

"Customer caring is at the heart of our work: the process and design of each plant are defined and calibrated according to the specific needs of each customer." - explains

Emanuele Fratto, Corporate Sales Manager NTE Process

- We perform tests in the presence of our customers, we share videos and streaming, we provide detailed reports for performance analysis and preliminary plant design. But putting the customer at the center means more: we are particularly proud of our Customer Care service that assists our customers in the best management and maintenance of the plant". One of the flagships solution of NTE Process - which has developed over 10 patents in recent years - is the dense phase pneumatic conveying system with Air Assist® technology: a latest generation solution that allows to optimize the control and speed of the products thanks to the use of Artificial Intelligence Air Assist® M533, strategically positioned along the conveying pipe. A choice that allows continuous monitoring of line pressure and flow: a reduction in air consumption (up to 70%\*); an increase of system efficiency (+40%\*); no product deterioration or segregation; self-diagnosis and self-learning systems. 

\* Results achieved on specific plant configurations.



# NTE Process, ricerca, innovazione, cura del cliente: le chiavi del successo di nte process

**N**TE Process si presenta sul mercato come Single Source Provider per accompagnare i propri clienti nella progettazione, fornitura e innovazione di impianti industriali grazie a tecnologie brevettate proprietarie e partner internazionali. Presso il Centro Ricerca e Innovazione NTE Process (Milano) - dotato di un Impianto Pilota in scala 1:1 - è possibile testare in prima persona le tecnologie, eseguire sia test scientifici (fluidità di base, aerazione, consolidamento, ecc.) che test full scale con i prodotti dei clienti (atomizzazione, essiccazione, miscelazione solido-liquido, parallel processing, trasporto pneumatico, ecc.) per simulare la resa delle diverse tecnologie in condizioni reali ed avere un'analisi predittiva delle performance, dei consumi energetici e di tutti i dettagli necessari alla corretta progettazione degli impianti industriali.

"L'attenzione al cliente è al centro del nostro lavoro: il processo ed il design di ogni impianto vengono definiti e calibrati sulla base delle specifiche necessità di ogni cliente. - spiega Emanuele Fratto, Corporate Sales Manager NTE Process - Eseguiamo test in presenza dei

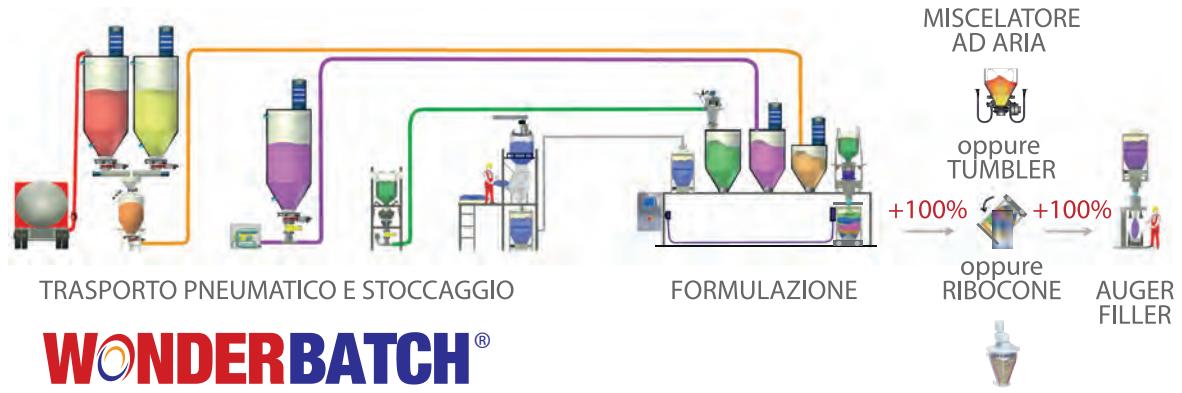
nostri clienti, rendiamo disponibili video e streaming, forniamo report dettagliati per l'analisi delle prestazioni e la progettazione preliminare dell'impianto. Ma mettere il cliente al centro non significa solo questo: siamo particolarmente orgogliosi del nostro servizio di Customer Care che assiste i nostri clienti nella gestione e manutenzione ottimale dell'impianto". Uno dei fiori all'occhiello di NTE Process - che solo negli ultimi anni ha sviluppato oltre 10 brevetti - è il sistema di trasporto pneumatico in fase densa con tecnologia Air Assist®: una soluzione di ultima generazione che permette di ottimizzare il controllo e la velocità del prodotto trasportato grazie all'uso degli Artificial Intelligence Air Assist® M533, posizionati strategicamente lungo la tubazione di trasporto. Una scelta che consente un monitoraggio continuo della pressione e del flusso di linea; una riduzione del consumo d'aria (fino al 70%\*); un aumento dell'efficienza del sistema (+40%\*); nessun deterioramento né segregazione del prodotto; auto diagnosi del sistema e self-learning. 

\* Risultati raggiunti su specifiche configurazioni di impianti.

## SOLUZIONI DI PROCESSO PER L'INDUSTRIA ALIMENTARE

### PARALLEL PROCESSING

- Manipolazione flessibile e agile delle polveri mediante IBC
- Preparazione di ricette disaccoppiata dalla miscelazione
- Rapido cambio delle ricette
- Batching automatico
- Tracciabilità Batch e Sicurezza - Nessun Errore
- Assemblamento in Fabbrica & Pre-Cablaggio



# MACHINES AND EQUIPMENT for food processing and production hygiene

**N**OWICKI SRL puts a particular emphasis on providing top quality products and the most advanced technological solutions. We are flexible in supplying custom-made systems, reliable in quality and service. Our main goal is to satisfy the customer's needs at the highest level.

## Machines for meeting your needs The highest quality for you

The crucial aim of the NOWICKI's activity is to satisfy the customer's needs at the highest level.

NOWICKI SRL is a distributor for Italy of approximately 20 series of types comprising almost 150 models of machines for meat and food processing as well as complete, technological lines for individual applications.

We can offer highly advanced technologies of cutting, machining, plastic forming as well as on repeatable assembly operations. All of them are carried out with

professional, digitally operated machines which are supervised by the computer quality control system: for example machines for water cutting ("Water Jet"), for plasma cutting, laser cutting, machines with numerical control: turning lathes, CNC millers, advanced semi-automatic welding machines and assembly stations. Every step of production process of the machines we sell is subject to quality control which begins with raw materials delivery (testing of hardness, testing of conformity of material composition and dimensions), include all manufacturing operations and it is finished with final quality control of ready machines in operation. All the quality control system is supervised by a computer system which eliminates defective materials, components and semi-finished products so that the highest quality elements are directed to the assembly lines. 

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



# MACCHINARI E ATTREZZATURE per la preparazione alimentare e l'igiene nella produzione

**N**OWICKI srl è in grado di offrire macchinari e attrezzature di grande affidabilità per la preparazione alimentare e fornisce efficaci soluzioni integrate per qualsiasi processo di lavorazione.

NOWICKI srl si pone come obiettivo principale la fornitura di prodotti e macchinari di alta qualità fornendo soluzioni tecnologiche fra le più avanzate. Siamo flessibili nella fornitura di sistemi su misura estremamente affidabili in termini di qualità e servizio. Il nostro obiettivo principale è soddisfare al meglio le esigenze del cliente.

L'azienda è in grado di offrire circa 20 serie di tipologie di macchinari che comprendono quasi 150 modelli progettati e costruiti per la lavorazione di carne e alimenti, oltre a linee tecnologiche complete per applicazioni mirate, una gamma di macchinari basata su tecnologie all'avanguardia e altamente avanzate di taglio, lavorazione e confezionamento.

Ogni fase del processo di produzione dei macchinari che trattiamo è soggetta al controllo della qualità

che inizia con il controllo delle materie prime (test di robustezza, test di conformità della composizione e delle dimensioni

del materiale), e finisce con il controllo finale della qualità dei macchinari svolto tramite test funzionali. Tutto il processo di controllo della qualità è supervisionato da un sistema informatico che elimina materiali e componenti difettosi, oltre a prodotti non lavorati a regola d'arte in modo che solo gli elementi che raggiungono gli standard di massima qualità siano diretti alle linee di assemblaggio e costruzione.

NOWICKI srl è concentrata verso la qualità e l'affidabilità dei macchinari che offre nel suo catalogo, l'Azienda è sempre alla ricerca di nuove soluzioni volte a offrire la maggiore affidabilità possibile, ad offrire il miglior servizio ai propri clienti e riuscire a prevedere le future esigenze del mercato per soddisfare ogni richiesta. 

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



# MACHINES AND EQUIPMENT

FOR FOOD PROCESSING AND PRODUCTION HYGIENE

## HIGH-SPEED ROTATION CUTTERS



**BRINE INJECTORS**

## AUTOMATIC ANGLE GRINDERS



**BRINE MIXERS DUAL BRINE  
PREPARATION SYSTEM**

## TILTED VACUUM TUMBLERS



**CONTAINER WASHERS**

**NOWICKI srl**

# ALTEC, automation for food industry

**W**as established by technicians with over 20 years experience in the field of automatic machines for packaging and food, chemist and mechanic industry, sharing the same passion for technology and automation, with the goal of get custom-made solutions and provide a constant service of skilled technical assistance. Analysis, planning and designing by technicians and coworkers of ALTEC, thanks to their extensive know how and an advanced technical study, are focused on the development of dedicated projects, as well as turnkey lines, which concerns the production of new specifically dedicated plants and systems, with support assistance to the customer from feasibility studies to technical assistance and supply of spare parts, taking care of all those operations about checking the right operation of the plant; Altec is involved also in the recovery of old but still working plants, by the revision in order to get renewed machines with favorable prices. A wide range of second-hand machines, which can be reintroduced in production processes after specific upgrading intervention, represents an important activity of ALTEC. All systems ALTEC is able to supply can be applied

to existing productions lines and customizable according to customer requirements, thanks to the wide experience in different competence areas of the ALTEC team.

## ALTEC offers the following for BEVERFOOD and PACKAGING:

Automatic cardboard box forming and case-packing lines: systems for cardboard box forming and automatic filling of any kind of packaging, in reduced space and at high speed, with closing systems by PVC tape and hot melt glue. Filling lines and automatic dosing systems with brushless technology, for several types of products (liquid, half-liquid, pasty) and packaging, showing high precision and speed, avoiding wasting by errors and assuring great savings. Sealing and labelling systems, like industrial print systems, application units, Print and Apply units. Transport and handling lines: conveyor belts on more levels, PVC belts, modular belts. Robotized units which can be customized; Control panels and electric plant installed on the machine. 

**[www.altec-srl.com](http://www.altec-srl.com)**

# ALTEC, automazione per l'industria alimentare

**A**ltec nasce dall'esperienza di tecnici che da oltre 20 anni operano nel settore delle macchine automatiche per il packaging nell'industria alimentare, chimica e meccanica. Il team è accomunato dalla passione e dall'entusiasmo per la tecnologia e l'automazione, con l'ambizione di realizzare soluzioni su misura e fornendo un servizio costante di assistenza specializzata. Questo grazie all'aiuto di tecnologie innovative e nuovi processi produttivi come la stampa 3D, che permettono lo sviluppo verso nuove direzioni che prima erano precluse.

Uno studio tecnico all'avanguardia, composto da tecnici e collaboratori aventi un vasto know how, si occupa di analisi, studio e progettazione di linee chiavi in mano, costruzione di nuovi impianti, sistemi specificamente dedicati e soluzioni su misura garantendo un servizio di supporto al cliente che lo accompagna dagli studi di fattibilità al rifornimento di ricambi. Altec si occupa anche del recupero di impianti superati ma ancora funzionanti, attraverso la revisione della compagnia tecnologica, al fine di ottenere una macchina rinnovata a un costo vantaggioso.

Una parte dell'attività dell'azienda è rappresentata da una vasta gamma di impianti usati, ma reinseribili nei processi produttivi, a seguito di specifici interventi di ammodernamento. Tutti i sistemi che ALTEC è in grado di fornire, sono

applicabili a linee produttive già esistenti, e personalizzabili sulla base della richiesta del cliente, grazie al bagaglio di esperienza nelle diverse aree di competenza di coloro che compongono il team della Altec.

## Le proposte di ALTEC per BEVERFOOD e PACKAGING:

Linee incartatrici e inscatolatrici: sistemi di formatura cartone e riempimento automatico di confezioni di qualunque tipo, in poco spazio e ad alta velocità, con sistemi di chiusura a nastro PVC e colla hot melt; Linee di riempimento e sistemi di dosatura e formatura automatici con tecnologia brushless, per diversi tipi di prodotti (liquidi- semiliquidi - pastosi) e confezioni, dotati di alta precisione e velocità, che annullano gli sprechi da errore assicurando un notevole risparmio; Linee di trasporto e movimentazione: nastri trasportatori su più livelli, nastri in tappeto PVC, nastri modulari; Isole robotizzate personalizzabili;

Quadri ed impianti elettrici a bordo macchina.

Linee per pane, pizze, piadine, tortillas: dall'impasto al confezionamento. Progettazione di impianti su misura con capacità produttiva a richiesta: estrusione, pesatura, taglio, posizionamento, scoperchiamento teglie, arrotolatura, laminatoi, trasporto, cottura e confezionamento. 

**[www.altec-srl.com](http://www.altec-srl.com)**

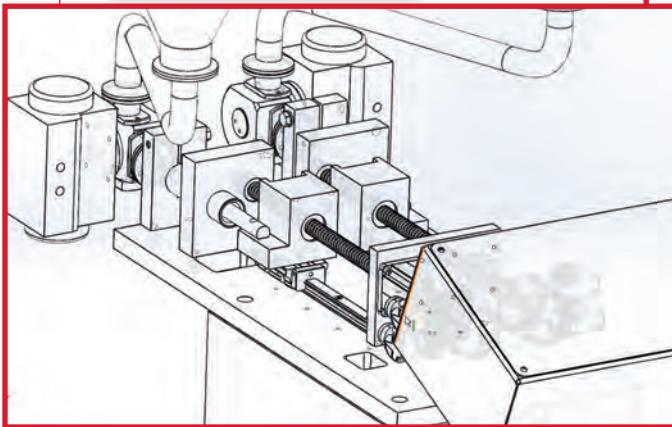
# RELIABILITY, ACCURACY AND QUICKNESS



ASSEMBLY OF AUTOMATIC MACHINES FOR THIRD PARTIES - ALL THE KNOW-HOW IT TAKES TO MANAGE ANY ORDER AND TO DESIGN PLANTS



BUILDING OF AUTOMATIC MACHINES FOR THIRD PARTIES AND FINAL USERS  
DESIGNING SYSTEMS ACCORDING TO CLIENT'S SPECIFIC REQUIREMENTS



MAINTENANCE, REVISIONS, SYSTEM MODIFICATIONS - USED PLANTS AND MACHINERY FOR THE FOOD AND BEVERAGE INDUSTRY

## ALTEC S.R.L.

Head office: Piazza Mazzini 3 Granarolo F.no (Ravenna)

Manufacturing office: Via Galileo Galilei, 4/6 Cotignola (Ravenna)

uff. 0545 992256 fax. 0545 41918 - [www.altec-srl.com](http://www.altec-srl.com) - info@altec-srl.com

# ZANICHELLI MECCANICA SPA:

## food & beverage plants

**Z**ACMI is a designer, fabricator and installer of tailor-made filling, closing, seaming and processing lines for the international food and beverage industry. The company supplies a comprehensive range of filling & closing solutions, for both glass and plastic containers, to leading multi-national companies, setting the pace with its customer-, technology- and service-led approach. Its Piston Filler is used to fill highly viscous products and sauces with or without large inclusions. Although a common machine type, ZACMI has developed a patented Vertical Valve Piston Filler, which offers exceptionally high filling accuracy, making it suitable for a huge range of products. Its seaming system – controlled by a desmodromic cam – is available in 3, 4, 6, 8, 10 or 12 multi-head configurations, delivering a maximum output of 1,600 cans per minute. The company's Double Seam Monitoring (DSM) solution checks the cans' seaming performance in real time using special sensors. Its output can also be used for machine-settings regulation, ultimately helping to extend the

service life of chucks and rolls. ZACMI offers comprehensive global support too, comprising either technician access or remote interactions backed by its Parma-based support team, which can travel to where local on-site support is unavailable or additional support is required. The support team can help with installation, training, spares and upgrades, too. Thanks to advanced automation hardware and on-machine digitalisation, ZACMI offers its Remote Access Service (RAS) programme. Using a secure communication network, engineers from ZACMI can connect to machines – anywhere in the world – to deliver a range of value-added services, including monitoring and troubleshooting; start-up & process streamlining; uptime optimisation; and software patching, updating & enhancement.

The programme also offers Augmented Reality (AR) capabilities. Using a smartphone, tablet or smart glasses, end users can interact virtually with ZACMI's support team in real time or via photo and video messages. 

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



# ZANICHELLI MECCANICA SPA: macchinari per il settore alimentare e delle bevande

**Z**ACMI è una realtà che progetta, fabbrica e installa, su scala internazionale, macchinari fatti su misura per il riempimento e la chiusura nell'industria del food e del beverage. L'azienda fornisce una gamma completa di soluzioni di riempimento e chiusura a società multinazionali leader di mercato, in grado di trattare sia contenitori in vetro che in plastica, stabilendo così un approccio orientato al cliente, alla tecnologia e al servizio. La Piston Filler viene utilizzata per riempire prodotti e salse altamente viscose, con o senza pezzi. Sebbene sia un tipo di macchina comune, ZACMI ha sviluppato una riempitrice a pistone a valvola verticale brevettata, che offre un'elevata precisione di riempimento, rendendola così adatta a una vasta gamma di prodotti. Il sistema di aggraffatura ZACMI, controllato da una camma desmodromica, è disponibile in configurazioni a 3, 4, 6, 8, 10 o 12 multi-testa, per una produzione massima di 1,600 lattine al minuto. Inoltre la soluzione Double Seam Monitoring (D.S.M.) dell'azienda controlla le prestazioni di aggraffatura delle lattine in tempo reale utilizzando sensori speciali. Gli output di questo sistema possono essere utilizzati anche per la regolazione delle impostazioni della macchina, contribuendo in de-

finitiva a prolungare la durata del servizio dei mandrini e delle rolline. ZACMI offre anche un servizio di supporto globale, in cui è compresa l'assistenza da parte dei tecnici, che possono interagire con i macchinari installati anche da remoto, un team con sede a Parma disponibile a viaggiare e spostarsi per dare anche supporto locale. Tra i servizi previsti vi è l'installazione dei macchinari, la formazione, gli aggiornamenti e infine anche il supporto e la vendita di ricambi. Grazie all'automazione e alla digitalizzazione a bordo macchina, ZACMI offre il programma Remote Access Service (RAS). Utilizzando una rete di comunicazione sicura, gli ingegneri di ZACMI possono connettersi alle macchine, in qualsiasi parte del mondo, per fornire servizi e assistenza, tra cui il monitoraggio e la risoluzione dei problemi; avviamento e razionalizzazione dei processi; ottimizzazione dei tempi di attività; aggiornamenti e miglioramento del software. Nel programma di assistenza vi è anche la realtà aumentata (AR). Utilizzando smartphone, tablet o smart glass, gli utenti finali possono interagire virtualmente con il team di supporto ZACMI, in tempo reale o tramite messaggi, foto e video. 

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



**Machines  
and complete plants  
for Food and  
Beverage Industry**

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

**M**odularity, flexibility and practicality are key concepts in a company whose strong point is technological innovation and development. This is what the market wants and this is what customers get from the Italian based Makro Labelling, international standard setter for industrial labellers in the beverages, food, detergent and pharmaceutical sectors.

The thirty years' experience of its founders, a team of 130 people, a dense and wellorganised 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, 8 and 9 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.



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.

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.

In common with the entire Makro range with the Vision Control system to verify the quality and correctness of the packaging and manage rejects: two new inspection systems - RAPTOR (Rapide to Orientate) and ALICE (Advanced Label Inspection and Control Environment), which guarantee high performance, less production rejects and the highest finished product quality.

## CLeap (Concept Leap)

Makro In 2017 created and presented a new concept of labelling machine using longstator linear motor technology, setting a new and revolutionary standard.

Cleep's concept has led to the creation of the new Inline, which, in addition to high precision and labelling speed, also offers the advantage of no format changeover: in just a few minutes the operator is ready to start production again.

Its versatility and production flexibility make it ideal thanks to its small footprint.

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

# Labelling the Future

## MODULARITY, FLEXIBILITY, PRACTICALITY.

Labelling in the Beverage, Food, Detergent and Pharmaceutical industries has always been our passion and our core business. Innovative technologies, an international sales and after-sales service network and operational flexibility are our strengths. Satisfying every labelling requirement from 1,500 to 50,000 bph is our result, appreciated by companies of all sizes. The more than one thousand one hundred systems now present all over the world is our greatest confirmation.



MAK machine configuration with HS SLIM adhesive units



Cold glue stations



Roll-Feed stations



Example of configuration with Roll-Feed stations



Hot-melt stations



Adhesive stations (SLIM)



Example of configuration with cold glue stations

# PNEUMAX: actuators, valves, manipulation, air units, fittings, vacuum technology

**F**ounded in 1976, Pneumax is one of the leading players in the industrial automation sector, providing high-quality solutions ranging from pneumatic technology (actuators, valves, manipulation, air units, fittings, vacuum technology) to electric drive actuators and fluid control components. True to its international vocation, Pneumax leads a group made of 25 companies, located in the main national and international markets, with over 730 employees worldwide and branches in Europe, USA, Brazil, India, China and Singapore, supported by a large network of distributors in more than 50 countries. The company's headquarters and production centre are located in Lurano, in the province of Bergamo, on an area of 116,000 square metres, where seven operating units manufacture the entire range of Pneumax products. Flexible and efficient production is ensured thanks to the company's CNC machinery and assembly departments that work together in a logic of 'Total Quality Management'. Pneumax has always been committed to creating

high-quality products for its customers as a true partner. It has been developing components and solutions for specific applications in the industrial automation sector, including Packaging, Food & Beverage, Wood, Automotive and Oil & Gas. Experience, expertise and cutting-edge technologies enable Pneumax to design and manufacture customised products and systems with the utmost efficiency, integrating mechanics and electronics, and using different materials such as stainless steel, aluminium, brass and technopolymers, in compliance with international standards. Constant investments in R&D allow Pneumax to keep expanding its product range with new models whose development is driven by concepts including integrated electronics, energy saving, optimization, size reduction, innovative materials and 'Safety Automation' that guarantees both maximum operator safety and plant security. 

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



# PNEUMAX: attuatori, valvole, manipolazione, FRL, raccordi, vuoto

**N**ata nel 1976, Pneumax è uno dei maggiori player internazionali nel campo dell'automazione industriale, in grado di fornire soluzioni ad alto valore aggiunto spaziando dalla tecnologia pneumatica (attuatori, valvole, manipolazione, FRL, raccordi, vuoto) all'attuazione elettrica, sino a componenti e sistemi per il controllo dei fluidi. Pneumax, fedele alla sua vocazione internazionale, è capofila del gruppo omonimo, che si articola in 25 società commerciali e produttive dislocate nei principali mercati nazionali e internazionali, con oltre 730 collaboratori nel mondo e filiali in Europa, USA, Basile, India, Cina e Singapore, affiancate da una vasta rete di distributori che garantiscono la presenza in più di 50 Paesi. L'headquarter e cuore produttivo dell'azienda si trova a Lurano, in provincia di Bergamo, su una superficie di oltre 116.000 m<sup>2</sup>, dove sette unità operative realizzano tutti i prodotti della gamma Pneumax grazie ad un parco macchine CNC e reparti di assemblaggio gestiti secondo le logiche del 'Total Quality Management', che assicurano una produzione flessibile ed efficiente. La volontà di contribuire alla creazione di valore aggiunto per i propri clienti come un vero e proprio partner ha porta-

to l'azienda a sviluppare componenti e soluzioni dedicate a specifiche applicazioni nel settore dell'automazione industriale, dal Packaging al Food & Beverage, dal Legno sino a settori come l'Automotive e l'Oil & Gas. La combinazione di esperienza, competenza e tecnologie all'avanguardia permette di progettare e realizzare con la massima efficienza prodotti e sistemi customizzati che integrano meccanica ed elettronica, utilizzando materiali differenti, dall'acciaio Inox all'alluminio, dall'ottone sino ai tecnopoliimeri, con una particolare attenzione al rispetto delle normative internazionali. Continui investimenti in R&D consentono a Pneumax di arricchire costantemente la gamma proposta con nuovi prodotti il cui sviluppo è guidato da drivers come l'integrazione di tecnologie digitali per la trasmissione dei dati, la riduzione dei consumi, l'ottimizzazione di ingombri e pesi utilizzando anche nuovi materiali e la sicurezza, nell'accezione di una 'Safety Automation' che stabilisca la massima sicurezza dell'operatore e la salvaguardia degli impianti dove egli opera. 

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



PNEUMAX



## Food & Beverage solutions

Technology and Competence to add value in your application

In Pneumax we manufacture components and systems for automation in the food and packaging sector by combining pneumatic technology, electric actuation and fluid control.

A wide range of components in stainless steel, aluminum and technopolymer allows us to offer the best solution for each application, as unique and special as our customers.



Italian Excellence



### FCM Fittings Food Contact Material

Compliant with MOCA and NSF/ANSI 169 standards



# SEALED AIR : protezione e sostenibilità

**S**ealed Air opera nel mercato per offrire protezione, risolvere sfide cruciali nell'ambito del packaging e lasciare il mondo migliore di come è oggi.

L'ampia gamma di prodotti include i migliori materiali di imballaggio del settore, sistemi di packaging automatizzati e servizi personalizzati per creare una supply chain globale più veloce, più sicura e più smart, non solo per proteggere i prodotti dai danni o gli alimenti dal deterioramento, ma anche per preservarli da agenti patogeni e da malattie di origine alimentare.

Sealed Air tutela i marchi dal rischio reputazionale, le attività dei suoi clienti da spreco e da costi inutili, inoltre crea prodotti, processi e partnership che aiutano a proteggere il pianeta.

Sealed Air lavora fianco a fianco con i propri partner e clienti per risolvere complesse sfide di confezionamento fornendo il prodotto migliore, al prezzo giusto e rendendolo sostenibile.

Le soluzioni proposte offrono un valore tangibile nelle aree che sono più importanti per i clienti:

- Integrità dei prodotti
- Efficienza operativa

- Ottimizzazione del packaging
- Esperienza del brand
- Garanzia di sicurezza, autenticità e qualità dei prodotti in tutta la supply chain e l'esperienza dei consumatori.
- Possibilità di miglioramenti della produttività e alleviamento dagli oneri causati dall'aumento dei costi e dalla carenza di manodopera.
- Ottimizzazione delle dimensioni e delle prestazioni di ogni confezione per la massima sostenibilità, redditività e resa, con il minimo spreco.
- Miglioramento dell'esperienza del marchio e garanzia della fedeltà dei consumatori presso il retail e durante l'esperienza di unboxing a casa.

## Inarrestabile innovazione

Sulla base di una solida tradizione di innovazione dei materiali, Sealed Air continua a investire con ambizioni in nuove tecnologie e modelli innovativi che rendono le operazioni di imballaggio più semplici, efficienti e sostenibili dal punto di vista ambientale. 

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



# SEALED AIR : protection and sustainability

**S**ealed Air is in business to protect, to solve critical packaging challenges, and to leave the world better than it is today.

Sealed Air brings together best-in-class packaging materials, automated packaging equipment, and customized services to create a better, faster, safer, and smarter global supply chain. It doesn't just protect products from damage or food from spoilage, it protects against pathogens and foodborne illness and brands from reputational risk.

Sealed Air protect customers' operations from waste and unnecessary cost and creates products, processes and partnerships that help protect the planet. Sealed Air works side-by-side with its partners and customers to solve complex packaging challenges by providing the best product, at the right price, and making it sustainable. The offered solutions deliver tangible value in the areas that matter most to customers:

- Product Integrity
- Operational Efficiency

- Package Optimization
- Brand Experience
- Ensuring product safety, authenticity, and quality throughout the supply chain and consumer experience.
- Unlocking sustained productivity improvements and providing relief from the burdens of rising costs and labor shortages.
- Optimizing the size and performance of every package for maximum sustainability, profitability, and yield - with minimal waste.

## Relentless Innovation

Building on its strong legacy of materials innovation, Sealed Air is a company that stays curious, ambitiously investing in new technology and breakthrough models that make packaging operations easier, more efficient, and more environmentally sustainable. 

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

# CRYOVAC® BDF®

## film termoretraibile ultra sottile

Un packaging responsabile

# 60%

di plastica  
in meno

verso i laminati  
standard\*



Visitate **sealedair.com/bdf** per vedere come il film CRYOVAC® BDF® può aiutare a ridurre la plastica e lo spreco alimentare.

\*Basato sui risultati raggiunti da Sealed Air.

Le strutture ed i sistemi sono diversi tra loro, di conseguenza i risultati possono variare.



**CRYOVAC®**  
BRAND FOOD PACKAGING

# COVAL, the vacuum where it's needed when it's needed

**B**ased in Montélier, South of France, COVAL conceives, manufactures and commercializes worldwide high performance components and vacuum systems for the industrial applications in all the sectors. ISO 9001 V2008 certified company, COVAL innovates worldwide in the domain of vacuum handling by optimized vacuum components while integrating reliable and intelligent functions. They are adaptable to all industrial contexts with a principal objective to improve the productivity in total security. COVAL references can be found in all principal industrial sectors (packaging, automobile, plastics, aeronautic, printing...) where the vacuum handling is significant for the efficiency and productivity. COVAL commercializes its products and services all over the world thanks to its subsidiaries and its authorized distribution network.

COVAL's mission is to provide our clients and users with vacuum handling solutions that meet their goals in terms of profitability, productivity, quality, safety, and environmental conservation. To achieve this, COVAL is rallying its efforts to predict, plan, innovate, and manufacture with one aim in mind: offering the right products

and services at the right time. In practical terms, this is what it takes:

- Impeccable knowledge of various industrial sectors.
- Being attentive and available to our clients' teams and users.
- The ability to adapt quickly to evolving needs.
- A rigorous approach to all of COVAL's efforts and endeavors.

To meet our commitments every day, at COVAL we have been developing an organization and a culture geared towards constant innovation, quality, and service for more than 30 years:

- Teams specialized by industry: food processing, aeronautics, robotics, plastic processing, packaging and more.
- Strong in-house capacity for research and innovation complemented with external resources through public and private partnerships.
- Strong presence thanks to our sales team, foreign subsidiaries, and authorized dealers. 

**www.coval.com**



## COVAL, il vuoto come, quando e dove ti serve

**C**on sede a Montélier, nel sud della Francia, COVAL progetta, produce e commercializza nel mondo intero componenti e sistemi di vuoto ad elevate prestazioni, per applicazioni industriali, in tutti i settori produttivi. Azienda con certificazione ISO 9001 V2015 COVAL, leader a livello mondiale in materia di manipolazione con il vuoto, mette a punto componenti ottimizzati e integra funzionalità intelligenti e affidabili. Adattabili a qualsiasi contesto industriale, le soluzioni proposte si prefiggono l'obiettivo di migliorare la produttività in completa sicurezza. Le referenze di COVAL appartengono ai principali settori industriali (packaging, automotive, lavorazione delle materie plastiche, aerospace, etc.), dove la manipolazione con il vuoto è determinante per l'efficienza e la produttività. COVAL commercializza i suoi prodotti e fornisce i suoi servizi in tutto il mondo tramite la sede, le cinque filiali ufficiali e la rete di distributori autorizzati. La missione di COVAL è di proporre soluzioni di manipolazione tramite vuoto che soddisfino gli obiettivi di rendimento, di produttività, di qualità, di sicurezza e di preservazione dell'ambiente dei propri clienti. A tal fine, COVAL concentra i propri sforzi per anticipare, proporre, innovare e produrre con l'ambizione

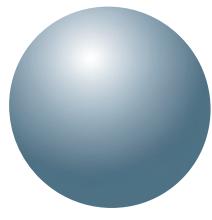
di offrire il prodotto ed il servizio giusto, al momento giusto. Concretamente, ciò implica:

- La perfetta conoscenza dei diversi settori industriali
- La presenza e la disponibilità nei confronti dei clienti e utenti e dei loro team
- L'adattamento rapido all'evoluzione di ciascun bisogno
- Il rigore in ogni proposta e azione intrapresa da COVAL.

Per rispondere quotidianamente agli impegni assunti, COVAL ha sviluppato da oltre trent'anni un'organizzazione e una cultura costantemente improntate sull'innovazione, sulla qualità e sul servizio:

- Squadre specializzate in un settore di attività specifici: agro-alimentare, aeronautica, robotica, lavorazione delle materie plastiche, packaging, automotive e altri.
- Elevata capacità di ricerca e di innovazione interna, completata da risorse esterne presso partner pubblici e privati.
- Forte presenza sul territorio, grazie al team commerciale, alle cinque filiali estere ufficiali (Italia, Spagna, Germania, USA, Cina) e ai distributori autorizzati. 

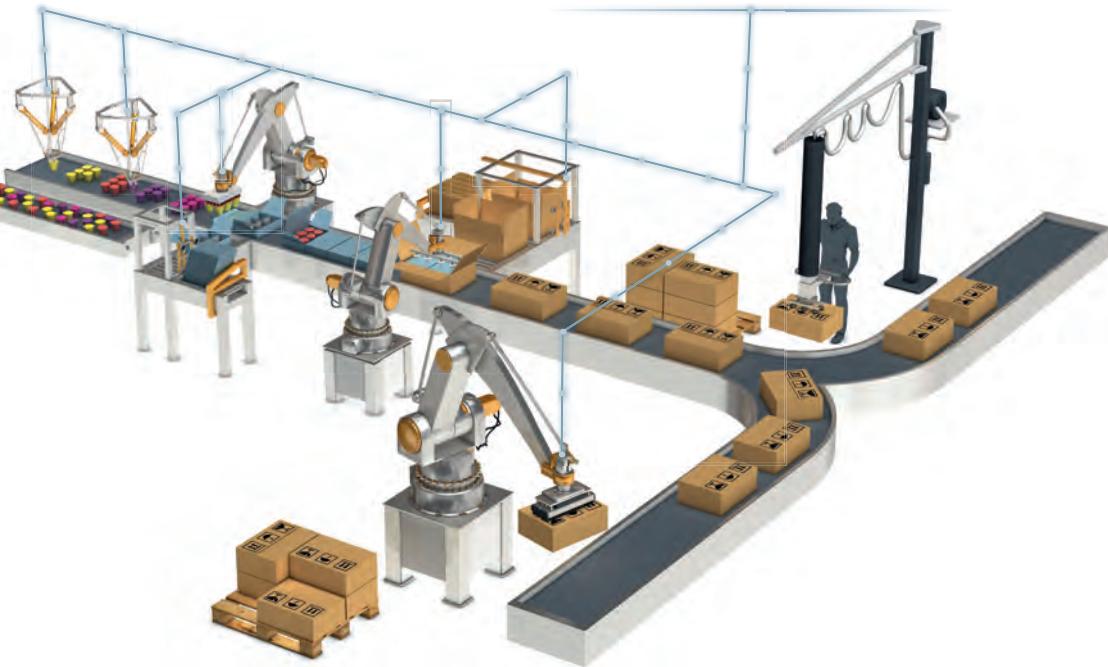
**www.coval-italia.com**



# COVAL

vacuum managers

## COVAL SULL'INTERA LINEA PRODUTTIVA



### SERVIZI COVAL



Assistenza tecnica



Tempi di consegna  
ridotti



Progettazione e  
produzione in Francia



Qualità COVAL

### GENERATORI DI VUOTO



### VENTOSE



### SISTEMI DI PRESA



# Advanced Vacuum Solutions

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

COVAL ITALIA S.r.l.

Via Ferrero, 112  
10098 - Rivoli (TO) - Italia

Tel: +39 011 958 8660

# INNOVO's MES solutions for the collection of production data and traceability

**I**NNOVO's proposal, from an INDUSTRY 4.0 perspective, for the management of production in the food sector is SPHERA® LINE: ideal solution for companies that perform repetitive processes and need to verify in real time the adherence of production to the planned plan and to the expected times, order progress, traceability, logistics and automatic predispositions.

## SPHERA® LINE allows:

- join of the information system with production departments, communication with ERP
- interconnection of machines and lines; automatic predispositions of PLC, printers and label applicators, signal and event acquisition, detection of energy consumption and materials/pollutants
- system supervision with configurable interfaces: synoptic, progress control, consumption analysis, stops, waste, efficiency and yield indices, WIP calculation....
- analysis of OEE, OLE, TEEP
- centralization and distribution of productive information or connection to Content Management
- launch in production, calculation of expiration dates
- traceability, registration or

verification of batch correctness, research for any recalls

- quality controls, reporting parameters out of tolerance and defects, ...
- maintenance management, ordinary and extraordinary, recording and final balance of activities, suspended management, detection of production times or quantities produced and alarms to exceed maintenance thresholds
- integration with attendance systems, balancing final and paid times, management of personal overlaps
- manual scheduling, Job Sequencer drag & drop mode
- K.P.I. visualization, events, states, alarm situations, intervention requests

By descending into the information system without overlapping, improving efficiency and quality by responding to the different production and supervision needs, a **SPHERA®** system is amortized in a few months.

**INNOVO** also, through its B.U. Penthars supplies a wide range of equipment: panel PC, IIOT terminals, manual or fixed readers, RFID antennas, label printers, giant monitors... **INNOVO, 30** years of experience at your service. 

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



## Le soluzioni **MES di INNOVO** per la raccolta dei dati di produzione e tracciabilità

**L**a proposta di INNOVO, in ottica INDUSTRIA 4.0, per la gestione della produzione nel settore alimentare è SPHERA® LINE: la soluzione ideale per le aziende che eseguono lavorazioni ripetitive e hanno necessità di verificare in tempo reale l'aderenza della produzione al piano previsto e ai tempi attesi, l'avanzamento ordini, la tracciabilità, la logistica e le predisposizioni automatiche.

**SPHERA® LINE consente:**

- integrazione sistema informativo a reparti produttivi, comunicazione con ERP
- interconnessione macchine e linee; predisposizioni automatiche di PLC, stampanti e applicatori etichette, acquisizione segnali ed eventi, rilevazione consumi energetici e materiali/inquinanti
- supervisione impianti con interfacce configurabili: sinottici, controllo avanzamento, analisi consumi, fermi, scarti, indici efficienza e rendimenti, calcolo WIP....
- analisi di OEE, OLE, TEEP
- centralizzazione e distribuzione di informazioni produttive o aggancio a Content Management
- lancio in produzione, calcolo date scadenza
- tracciabilità, registrazione o verifica correttezza

lotti, ricerca per eventuali richiami

- controlli qualità, segnalazione parametri fuori tolleranza e difetti, ...
- gestione manutenzione, ordinaria e straordinaria, registrazione e consuntivazione attività, gestione sospesi, rilevazione tempi produttivi o quantità prodotte e allarmi per superamento soglie di manutenzione
- integrazione con sistemi presenze, quadratura tempi consuntivati e retribuiti, gestione sovrapposizioni personale
- schedulazione manuale, Job Sequencer modalità drag & drop
- visualizzazione K.P.I., eventi, stati, situazioni allarme, richieste intervento.

Calandosi nel sistema informativo senza sovrapposizioni, migliorando efficienza e qualità rispondendo alle diverse esigenze produttive e di supervisione, un sistema SPHERA® si ammortizza in pochi mesi.

**INNOVO** inoltre, tramite la sua B.U. Penthars fornisce una vasta gamma di apparecchiature: panel PC, terminali IIOT, lettori manuali o fissi, antenne RFID, stampanti di etichette, monitor giganti... **INNOVO, 30** anni di esperienza al Vostro servizio. 

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

SISTEMA M.E.S. PER FOOD & BEVERAGE

L'INDUSTRIA 4.0 IN UNA PAROLA:

# SPHERA®



COGLI IL FRUTTO DELL'INNOVAZIONE

ADOTTA SPHERA® MANUFACTURING 4.0

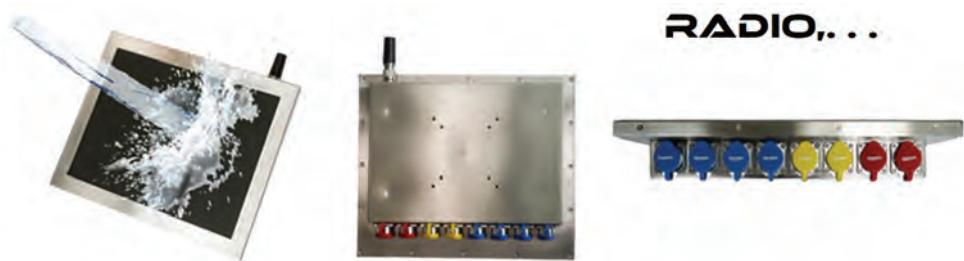
IL TUO PROSSIMO MANUFACTURING EXECUTION  
SYSTEM PER LA PREDISPOSIZIONE E IL CONTROLLO DEL  
PROCESSO DI CONFEZIONAMENTO, L'ETICHETTATURA,  
LA TRACCIABILITÀ...

E CON



HARDWARE SPECIALIZZATO PER LE  
VOSTRE APPLICAZIONI IMPORTANTI

PANEL PC INDUSTRIALI IN ACCIAIO INOX, BOX-PC, MONITOR DA TAVOLO, PER MONTAGGIO A PANNELLO, MONITOR GIGANTI, TABLET E PORTATILI, APPARECCHIATURE IOT CABLATE E RADIO,...



INNOV

30 ANNI DI ESPERIENZA AL TUO SERVIZIO

e-mail [info@innovotech.it](mailto:info@innovotech.it) phone +39 010 462101  
[www.innovotech.it](http://www.innovotech.it) [www.penthars.com](http://www.penthars.com)

# BMB: we think and develop solutions to allow your ideas to become reality

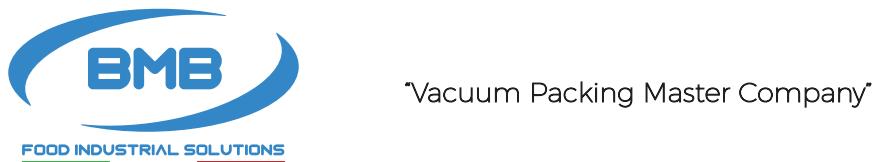
**E**xperience, competence, undisputed professionalism, high dynamics, make of BMB a very well reputed company not only in the food industry. We are not just a producer and seller of vacuum packing machines but we are researchers of solutions to make your ideas come true, to improve and simplify your production and packaging processes. All our products are the result of long experience in this sector.

Thanks to the continuous research and the most modern design technologies we can realize technologically advanced solutions with high reliable standard and user friendly.

Our machines are 100% Made in Italy, manufactured using top quality materials.

On request the machine can be equipped with optional to control always and from anywhere the status of the machine, or receive a constant update of the machine performances directly on your mobile. A additional service to our customer is the technical assistance plan. We agree directly with the customer dates and frequency of maintenance interventions. Thank to this, the customer does not need to take care of maintenance or fear unexpected machine downtime, as the machine is regularly monitored directly by BMB technicians. Believe in our experience, we have a good solution for your vacuum and MAP packaging, cut and portions lines for food products, systems for conveying and handling products and solutions as per your request. 

[www.bmb-bmb.com](http://www.bmb-bmb.com)



## BMB: ricerchiamo soluzioni che permettano alle vostre idee di diventare realtà

**E**sperienza, volontà, professionalità e dinamicità fanno della BMB una realtà molto apprezzata ed in forte espansione, che, nel settore alimentare e non, sta riscontrando sempre maggiori consensi. Ciò che ci distingue è il fatto che non siamo semplici costruttori e venditori di macchine, ma siamo ricercatori di soluzioni che permettono alle vostre idee di diventare realtà per migliorare e semplificare il vostro ciclo produttivo e di confezionamento. Tutti i nostri prodotti sono frutto delle numerosissime esperienze vissute sul campo, che, grazie ad approfonditi studi ed alle più moderne tecnologie progettuali, permettono la realizzazione di soluzioni tecnologicamente avanzate, di alta qualità, affidabili ed allo stesso tempo semplici nell'uso e nella gestione.

Le nostre macchine sono 100% Made in Italy, costruite con materiali di prima qualità.

Dove richiesto le macchine possono essere attrezzate con le più moderne tecnologie, che permettono

di monitorare via modem lo stato della macchina in qualsiasi parte del mondo ed in qualsiasi momento, oppure ricevere direttamente sul proprio telefono messaggi informativi sulle condizioni operative della macchina. Un ulteriore servizio che possiamo fornire alla nostra clientela è il servizio di manutenzione programmata, grazie al quale, di comune accordo con il cliente, possiamo stabilire le date e la frequenza degli interventi di manutenzione. In questo modo il cliente viene sollevato dal pensiero della manutenzione e dal rischio di fermi macchina improvvisi, poiché le macchine vengono periodicamente monitorate direttamente dai tecnici della BMB. Abbiate fiducia nella nostra esperienza, saremo in grado di offrirvi soluzioni complete e funzionali per le vostre esigenze di confezionamento e conservazione sottovuoto ed in atmosfera modificata, linee di taglio e porzionamento di prodotti alimentari, sistemi di convogliamento e movimentazione prodotti e soluzioni speciali su vostra richiesta. 

[www.bmb-bmb.com](http://www.bmb-bmb.com)

# Vacuum Packing Master Company

"We think and develop solutions to allow your ideas to become reality"



Via del Lavoro, 48  
36034 Molina di Malo (Vicenza)  
Tel. +39 0445.510207  
Fax +39 0445.639274  
[info@bmb-bmb.com](mailto:info@bmb-bmb.com)

# OROGRAF, Self-adhesive Labels and Sleeves

Orograf S.r.l. has been in the **SELF-ADHESIVE LABEL and SLEEVE** business for 50 years and We are a well-established firm, both in Italy and internationally, hold ISO 9001:2015 certificate.

We offer a high-quality and highly flexible all-round service, **from graphic design through to final printing.**

Our production facilities are highly innovative and use the most advanced manufacturing technologies.

We have a wide range of printing systems (letterpress, screen, HD flexo, digital, offset, hot relief, dry relief, perforation, glitter effect and on-foil pantone overprinting), and **we can print on all types of material, adhesive and non-adhesive** (laid, embossed, metallized paper, synthetic films, twin and booklet labels, reels and sheets), for any kind of end product.

But what really distinguishes Orograf S.r.l. is that **we can combine multiple printing systems on the same production line** and therefore offer our customers unique and customized final products tailored to their specific needs.

## FOOD Labels

Regardless of whether they are applied on packaging or directly on products and fresh foods, labels for foodstuffs must be produced respecting a series of precautions dictated by the particular products on which they are to be applied. Above all they must be produced in compliance with **consumer health protection laws**. OROGRAF uses top-quality certified and guaranteed materials that meet these legal requirements and guarantee consumer protection.

In addition to informing the consumer about the product, food labels can be used as warranty seals or open-and-close labels; they can also carry advertising, recipes, warnings, information about competitions, discounts, and so on.

As well as being customized with logos, colours and ingredients, food labels also need to carry



**traceability** information, such as barcodes, progressive numbers, production and best before dates, batch codes and other **variable data**.

Orograf offers a wide range of plasticized materials, white and transparent, as well as standard finishes such as lamination and protective anti-UV coatings, hot foil printing and relief embossing.

## SLEEVES

Our sleeves (produced in PET, PVC or PLA) can be printed in **multiple colours, including metallized ones**.

An important characteristic is the option of providing every sleeve with a **"tear off" system**. This is essential for products that consumers need to be able to open easily after purchase: this system also allows the sleeve to be removed from the container for recycling, once the product has been consumed.

## MULTIPAGE, TWIN LABEL and PEEL-OFF

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

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

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

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

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

We can  
**combine multiple  
printing systems**  
**on the same production line**  
and therefore offer our customers  
unique and customized  
final products.

#### Ennoblements

- Hot/Cold foil
- Embossing/Debossing
- Glitter effect

#### Ennoblements

- On-foil Pantone overprinting
- Relief and sensory varnish
- Die-cutting

#### PRINT

- Letterpress
- Offset

#### PRINT

- Screen · Digital
- Full Hd Flexo

#### LABELS

- Sleeves · Multipage
- Twin labels · No-Label Look
- Anti-Counterfeit
- Warranty seal

#### LABELS

- Electrostatic · Resin
- Variable Data · Promotional
- Scratch & Sniff labels
- Woven



Orograf srl

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

# ALTECH, Advanced Labelling Technologies

**A**LTECH is a leading European manufacturer of self-adhesive labelling systems for decorating, codifying and identifying products and materials in general. Founded in 1991, the company is now becoming a benchmark among the world's manufacturers of labelling machines.

The labelling machines built by ALTECH are used in all industrial sectors for labelling food, cosmetic, pharmaceutical, and chemical products. Today the company's systems are sold directly throughout Italy, while in 50 countries in Europe and overseas they are distributed via a network of 80 qualified distributors and 3 subsidiaries in the UK, USA and South America.

## Its range encompasses the following products:

**ALstep** - low-cost self-adhesive label applicator, designed to be added to existing packaging lines without affecting productivity, thanks to its modular and flexible design. It has reels of labels with a diameter of 300 mm and label width of 100 and 200 mm, respectively for the S and M version. Thanks to a powerful microprocessor-controlled stepper motor, it can reach a speed of 30 m/min (20 m/min in the M version) and can hold label reels up to 300 mm diameter for longer run times.

**ALritma** - label applicator of particularly high performance (depending upon the version). Thanks to its innovative design it can be easily added to packaging lines where high productivity and reliability are indispensable prerequisites. It has reels of labels with a diameter of up to 300 mm and, depending upon the model, labels with a maximum width of 300 mm. The maximum labeling speed ranges from 50 m/min for the standard version, to 90 m/min for the **Xtra** version (which among other things accepts reels up to 400 mm in diameter). It can also come with an **ALritma T** version heat transfer print unit, for print/apply applications.

**ALbelt** - simplified linear system which is open, compact, and particularly economical. It can be configured for wraparound, c-wrap, top, bottom, top and bottom, top and side labeling of various products, cylindrical or flat. It's ideal for labeling cases, boxes, trays, jars and cans. Its simple and solid



main structure houses a conveyor and one or more labeling heads (choice of ALstep, ALritma or ALcode model).

**ALline** - linear systems that can apply pressure sensitive labels on products of various shapes. It is made with the most reliable materials and components on the market, ensuring all important performance and production. Its modular design, completely renovated, comes with ALstep and/or ALritma heads, and can be configured on the basis of the customer's needs, so that the label can be applied to products of any shape and size for front/back, wrap-around and seal labelling, on food, cosmetics, chemical and pharmaceutical products.

**ALcode** - print and apply system can satisfy the widest variety of demands in self-adhesive print & apply labels. Thanks to its modular design and the particular expertise of the print module (SATO or compatible), the unit can print in thermal-transfer texts and barcodes on labels, and apply them soon in real time. A specific version, **ALcode P**, represents the latest evolution by ALTECH of pallet labelling machines. The system is able to print and apply A5 format SSCC labels onto two adjacent faces of a pallet (normally front and side) in accordance with the EAN 128 standard (also on three sides if required), providing high reliability, print and apply quality, operations up to 120 pallets/h.

**ALmatic** - Ideal for semi-automatic labelling, the system can apply labels up to 200 mm in width onto bottles, phials and pots, flat or elliptical (**ALmatic E**), or cylindrical products (**ALmatic C**) of variable diameter from a minimum of 12 mm to a maximum of 110 mm. Thanks to the ergonomics of the system and the presence of the sliding ball guides, it permits precision labelling, that significantly facilitates manual product positioning operations. ALmatic range is optionally equipped with a labelling head of ALstep or ALritma series. Furthermore, the same head can also be used for future integration on faster automatic systems. Thanks to its modular construction, the ALmatic system can also be equipped with a thermal transfer printer for printing variable data and barcodes. 

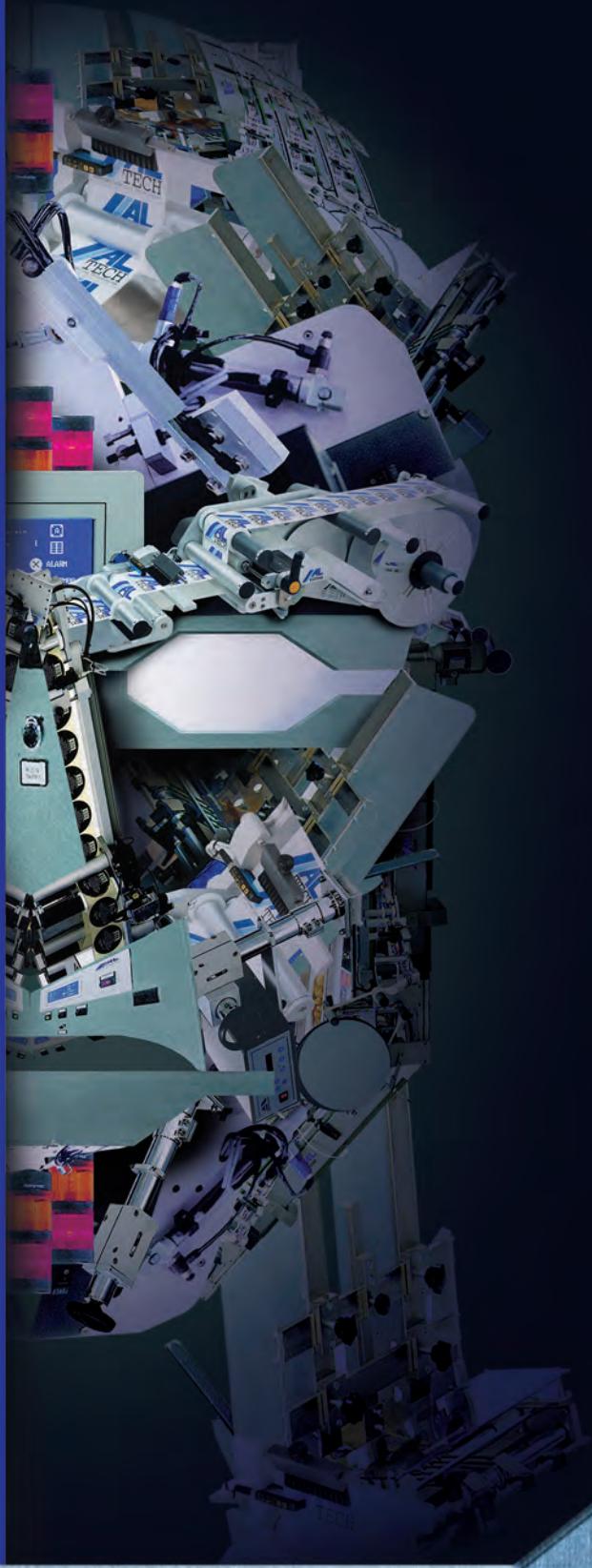
**For further information:**  
[www.altech.it](http://www.altech.it) – [info@altech.it](mailto:info@altech.it)



# INDUSTRIAL LABELLING MACHINERY MADE IN ITALY



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Viale De Gasperi, 70  
20008 Bareggio (MI)  
Tel. +390290363464  
[info@altech.it](mailto:info@altech.it)  
[www.altech.it](http://www.altech.it)



# BONDANI, machines for food industry

**B**ondani srl - Packing Systems, was founded in 1994 by its sole director, Bruno Bondani. His experience and technical expertise, acquired in decades of manufacturing of machines for the agro-food sector, combining with his son Alessio, general manager of the Company, have enabled to hit remarkable targets in terms of food handling and and-of-line process.

High quality combining with absolute project customization and competitive prices, have made Bondani s.r.l. a sound partner for producers of the food industries.

Its presence in domestic marketplace evidences how a small sized family-run company, can outstandingly compete with bigger realities without ever compromise after-sales-service and the quality of products.

Reliability of the projects, realization of new solutions in order to optimize efficiency and cheapness according to quality standard, are the principles who support new ideas or customer enquiries. 

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



# BONDANI, macchine per l'industria alimentare

**B**ondani srl-Packing Systems, è stata fondata nel 1994 dall'attuale amministratore unico, Bruno Bondani. La sua esperienza e competenza tecnica, acquisita in decenni di attività nel comparto della costruzione di macchine per l'industria agroalimentare, unita a quella del figlio, Alessio, direttore generale dell'azienda, hanno permesso di raggiungere nuovi traguardi nel settore della movimentazione e del fine linea degli alimenti.

L'elevata qualità, legata alla massima personalizzazione dei progetti il tutto unito a prezzi competitivi, fanno di Bondani un valido partner per

le industrie produttive nell'industria alimentare. La presenza sul mercato nazionale, testimonia come un'azienda familiare, di piccole dimensioni, può egregiamente competere con realtà più strutturate, senza mai mettere in secondo piano l'assistenza post-vendita e la qualità dei prodotti.

Flessibilità nella progettazione, elaborazione di nuove soluzioni tese ad ottimizzare il rapporto efficienza ed economicità, all'interno di rigidi standard qualitativi, sono i criteri che sostengono ogni nuova idea o richiesta del cliente. 

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

**Non stupitevi se da 25 anni siamo  
gli specialisti del packing!**

*Do not be surprised, if we have been  
your packing specialists for 25 years!*

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Sistemi su misura  
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for packing,  
handling and  
palletizing*

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PACKING SYSTEMS

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Via Romanina, 3  
43015 Noceto (PR) - Italy  
Tel. +39.0521.621100 - Fax  
+39.0521.621101

**info@bondani.it - bondani.it**

# Piccoli Plast, blow-moulded containers and technical articles

**P**iccoli Plast has been operating in the packaging industry for the manufacturing of blow-moulded containers and technical articles for over thirty years. The production is intended for various sectors such as food, cosmetics, pharmaceuticals, chemical / detergents and coating.

Piccoli Plast is also a leading company specialized in the production of liners in PELD used for standard and open head 117 and 217 lt drums.

In addition to the standard products, we have a technical and design office and a workshop equipped for requests for customized items, for the study of the feasibility and construction of the mold.

In line with the new trends of the green economy, the Company offers innovative solutions to promote the transition towards a circular economy of plastic. On request, there is the possibility to have containers made with materials from renewable sources (sugar cane), containers in "post-consumer recycled" PCR-HDPE and R-PET.

The company has invested many resources by replacing obsolete production facilities with new less noisy and electric machines and through a photovoltaic system for the self-production of clean electricity.

For some products the company offers a "Just in time" service, keeping the items available in stock for small quantities.

The articles included in the "Just in time" service are the PET bottles of the Kristal and Cosmea Pet series in natural and white color, the Aurora, Cremona, Maleo 100 ml and 80 ml in natural HDPE.

Upon on the customer request, there is the possibility of purchasing starting from a box up to big quantities.

Since 2004, the Company has adopted a UNI EN ISO 9001:2015 certified quality management system.

The strengths of the company are punctuality, flexibility, dynamism and respect for the environment. 

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



# Piccoli Plast, contenitori soffiati ed articoli tecnici

**P**iccoli Plast opera da oltre trent'anni nel settore del packaging per contenitori soffiati ed articoli tecnici.

La produzione è destinata a diversi settori quali alimentare, cosmetico, farmaceutico, chimico/detergenza e coating.

L'azienda è inoltre specializzata nella produzione di camicie/liner standard, allungate e rastremate per fusti da 117 e 217 lt.

In aggiunta ai prodotti standard è disponibile un ufficio tecnico e di design, un'officina attrezzata per richieste di articoli personalizzati, per lo studio della fattibilità e della realizzazione dello stampo.

Piccoli Plast, in linea con le nuove tendenze della green economy, propone soluzioni e modelli innovativi per promuovere la transizione verso un'economia circolare della plastica offrendo la possibilità, su richiesta, di avere contenitori realizzati con materiali provenienti da fonti rinnovabili (canna da zucchero), contenitori in "post-consumer recycled" PCR-HDPE e

R-PET certificati consorzio seconda vita.

Molte risorse sono destinate al rinnovo ed alla sostituzione degli impianti di produzione con nuovi macchinari elettrici a basso consumo ed impatto acustico ed attraverso un impianto fotovoltaico per l'autoproduzione di energia elettrica pulita.

Per alcuni prodotti l'azienda offre inoltre un servizio "Just in time" tenendo gli articoli sempre disponibili a stock per le piccole quantità.

Gli articoli che rientrano nel servizio Just in time sono i flaconi in PET della Serie Kristal e Cosmea Pet in colore neutro e bianco, i flaconi Aurora, Cremona, Maleo 100 ml e 80 ml in HDPE neutro.

A seconda delle varie esigenze vi è quindi la possibilità di acquisti a partire da una scatola fino a grandi quantitativi.

L'azienda dal 2004 ha adottato un sistema di gestione qualità certificato UNI EN ISO 9001:2015

Piccoli Plast è la risposta giusta per chi cerca puntualità, flessibilità, dinamicità e rispetto per l'ambiente. 

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



**Green**  
is the  
new black.

And we believe  
in the future.

Nuovi formati  
500 ml e 750 ml



**PICCOLI PLAST**  
blow moulded packaging

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

# OPEM SPA , has almost half a century of experience in product packaging for the food&beverage sector

**N**ew production systems that reduce our impact on the environment

In spite of the insurgence of the pandemic, values such as environmental sustainability and reducing our impact on the Planet have burst onto the economic stage, with growing numbers of people showing increased sensitivity towards these themes. Commitments by companies also play a fundamental role in this area. Opem Spa is among one of the most sensitive companies in terms of the health of the planet and has played an active role for some time.

## RESEARCH AGAINST PLASTIC

Opem Spa, a leading company in the packaging for granular and dry products sector with almost half a century of experience, has for some time been competing for customers with larger competitors thanks to its avant-garde machinery and technologies. Opem Spa designs and builds packaging machinery for food and beverages (with a particular focus on coffee, the company's core business), and for some time it has been trying to reduce the use of plastics preferring alternative materials. Just like in other sectors, the coffee sector is promoting the use of less plastic.

For this reason, the internal Opem Spa R&D department has been making considerable investments to research alternative materials, especially biodegradable, recyclable or completely compostable materials. In view of this, Opem Spa developed a project which was submitted to the European Commission for validation. The goal of the project was to create a capsule machine and production line that not only use less energy but can also handle recyclable (such as aluminum) and compostable materials.

## The company submitted a project to the EU for a machine that subsequently received an award.

### INNOVATION

The project submitted to the European Commission (and for which Opem Spa also received an award), shows how much the company cares about putting forward technologies that provide high production levels with the lowest possible use of materials and energy. The machines designed and manufactured by Opem Spa employ highly energy efficient electric and electronic components as well as Artificial



Intelligence control systems combined with top performing mechanical components with minimum weights and clearances. This means each packaged product can be manufactured at an extremely advantageous cost. However, Opem Spa is not just about economic savings, it is also very interested in using more sustainable materials. In fact, the company makes large

use of electronics to make sure its entire machine fleet functions perfectly and without using excess energy. Mechanics also play an important role in company procedures. Opem Spa production lines are not confined to just production: the company ensures they are maintained in top condition to drive down costs and waste (as concerns materials and energy) and, whenever a line reaches the end of its life, it is dismantled in a way that reduces its impact on the environment. Therefore, energy efficiency plays a fundamental role in terms of economic performance for Opem Spa systems.

However, all this should not be seen as a mere utilitarian calculation but a virtuous tool for developing a business that conjugates profit with sustainability.

### The "smart" version of packaging

Artificial Intelligence has now permeated many companies improving performance and making machines more efficient. Opem Spa has certainly not lagged behind in this area. In fact, by adopting key words such as packaging integration, productivity and flexibility, the company has played a prominent role in the development of its technological innovation projects. Some Opem Spa machines are already equipped with Artificial Intelligence to make sure the company reaches its goals to reduce its environmental impact and manufacture impeccable products.

### Increased care for the Planet

Over the past few years, other food and beverage packaging companies have also shifted towards a greener economy, adopting more sustainable policies, which mainly aim to reduce their carbon footprint and make the entire packaging portfolio more reusable, recyclable and compostable. All this to cut the quantity of materials used, employ low impact resources and improve the end of life of packaging through reuse. 

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



**OPEM.**  
**INNOVATION AND ENVIRONMENTAL RESPONSIBILITY:**  
**THE CHOICES THAT MAKE THE DIFFERENCE AND LEAVE A SIGN.**

OPEM is a company that develops highly specialized and customized packaging solutions, relying on a complex industrial production. For OPEM, the decision to be a "green company" means gearing its entire production activity – from the design stage to the single processes, and from in-house manufacturing to its choice of machinery – towards drastically reducing energy consumption and having a tangible positive impact on the surrounding territory.



**DMS "is a digital monitoring system"**

Specific controls on production operations and machine functioning. A system that includes machines or components fitted with sensors that collect and transmit data and then analyze it and store it in a database, which then provides points of comparison for events as they occur. The system eliminates unnecessary maintenance, and makes faults less likely.



**LIVE REMOTE ASSISTANCE**

Remote assistance transmits what the technician can see providing multimedia instructions (photos, videos, directions, manuals etc ...).

Opem S.p.A.

Via Della Cooperazione, 2/A (Area Ind. Spip) – 43122 Parma (Italy) – Phone: +39 0521 607501  
[www.opem.it](http://www.opem.it) – [www.leaveasign.it](http://www.leaveasign.it)

# Omag, technology and flexibility in single dose

**O**mag is an Italian company that has been designing and manufacturing packaging machines for powdery, granular, liquid and pasty products in 3 and 4 side sealed sachets, stick-packs and doy-packs for over 45 years. Omag was founded in 1973 and today counts over 120 employees and its export business accounts for 70% of the turnover.

The company has three production plants: one entirely dedicated to the production of components (about 65% is produced internally) and the new headquarters of over 6000 square meters where mechanical and electronic design, machinery assembly and testing take place.

International sales network and, thanks to agents and distributors, a global presence, which is also supported by two foreign sales offices in Russia and Ukraine, directly managed by founding partners.

## Our products

All Omag sachet and stick packaging machines can be manufactured on a variable number of rows, equipped with different dosing systems, combined with robotic counting units and cartoning machines and can be completed with different options such as batch number and expiry date printing, check weighers, etc.

Our main characteristics are certainly quality, sturdiness, design and reliability and they can be found in all our packaging machines, but the key attribute that set us apart is the **flexibility**.

In our business there are no machines built in series: each machine is designed ad hoc, tailor-made according to customer's objectives and requests.

At the base there are highly technological machines able to meet our customers' needs, also through robotized systems and each machine is different from the other.

This is flexibility as we understand it, which combined with passion and the desire to push ourselves higher and higher, has allowed us to get where we are today.



## Customer centricity

We do what we do best: we design and build high quality, high-tech machines with an essential design to ensure easy operation.

We pay great attention to our customers' needs, in fact it is fundamental for us to fully satisfy them not only during the sale phase but especially after the installation of the packaging machine. A well-structured after-sales office allows a **prompt assistance** to the customer also through on-site and remote interventions, training and training activities. We offer customer service and create a relationship of mutual trust that brings value to both. We also support our customers in the pharmaceutical sector with the drafting of highly professional GAMP5 documentation packages that simplify the validation process of our machines.

## Innovation and Industry 4.0

From a technological point of view, in recent years we have focused on issues related to the opportunities offered by **industry 4.0 and energy saving**. In fact, all our models are now offered in a fully electronic version, guaranteeing flexibility and energy saving. As far as industry 4.0 technologies are concerned, we use a series of software implemented on our packaging machines to comply with regulations in terms of traceability, safety, quality and interconnection with company information systems. In addition, thanks to remote control, our customers can request additional services that allow us to monitor and interact with packaging machines installed worldwide with real-time access to a series of functional data to diagnose their status and provide targeted assistance in case of anomalies. With the aim of ensuring increasingly timely service, we are developing artificial intelligence algorithms for **predictive maintenance**, i.e. the prevention of potential faults before they occur in order to avoid unexpected production downtime. We have also integrated augmented reality systems so that the customer, by framing the packaging machine with a smart device, can have immediate access to a series of data, user and maintenance manuals and analyse the status of the machine in complete autonomy. 

[www.omag-pack.com](http://www.omag-pack.com)

Vertical intermittent motion packaging machine with pump dosing system for **liquid and pasty products in single dose format.**

Possibility to equip with different dosing system to pack **granular** and **powdery** products.



## CS Stick-pack machine for liquid and pasty products

stick-pack and sachet packaging machines

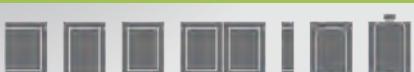
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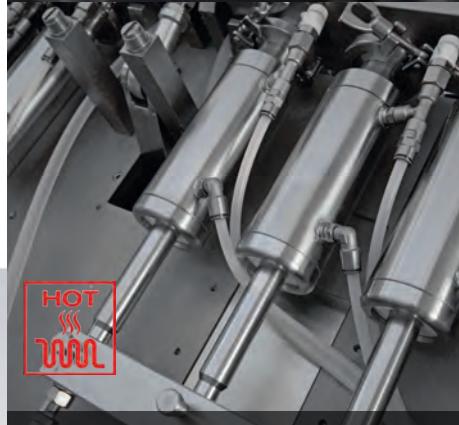
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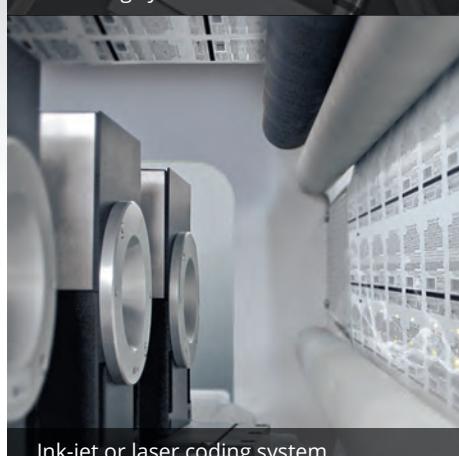
Auger dosing system for powders



Volumetric dosing system for granules



Hot filling system for hot sauces



Ink-jet or laser coding system

# MACA is greensleeves!

**D**ress your labels in green: Maca provides the ideal solution to be "green" even with sleeves.

## Let's talk about stretch sleeves:

Made of polyethylene, a fully recyclable material • Cost savings of up to 50% compared to shrink systems and ROSO systems • Up to 30% less in use of materials compared to the shrink materials (smaller layout, lower environmental impact in terms of carbon footprint), therefore a substantial reduction in the weight of the packaging • 360 ° visibility • Bright graphics and intense colours • Perfect fitting to the shape of the container even with shaped profiles • Possibility to apply stretch labels also on containers with a petaloid bottom • There is no need for glue or the use of heat, with a drastic reduction in the use of energy • Full compatibility in terms of recycling, easy separation of the label from the container • Excellent resistance to chemical agents • Resistance to UV exposures • Formats from 0.20 lt bottles to drums, crates and large kegs

There is a solution and Maca is ready to offer their skills to provide solutions that protect public health and the environment. How often have we heard the words "environmental friendly"? How many times does the customer make requests for spe-

cial materials, for applications that facilitate the removal of the sleeve from the container and recycling according to the regulations in force? It is a constant request, especially in all those parts of the globe that have been taking action for at least a decade to raise awareness among producers and consumers for conscious use and disposal of packaging.

Maca - consisting of two divisions: labels (shrink sleeves, stretch sleeves and roll-fed) and flexible packaging - and the subsidiary Comag - specialized in the engineering and production of sleeving machines and packaging lines - availing of qualified personnel and innovative technologies, pay the utmost attention to eco-sustainability, offering themselves to customers as ideal partners for solutions that improve hygiene, performance and product safety, with a continuous search for solutions with a low environmental impact. For this reason, they continue to invest in R&D for environmental preservation and process improvement: training, solvent free production, self-sufficient clean and renewable energy, compostable or fully recyclable products, reduction of waste, and minimum impact on the environment through a circular responsible organization. 

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



...discover us  
at [www.macasrl.it](http://www.macasrl.it)

# MACA è greensleeves!

**V**esti di verde le tue etichette: Maca ti dà la soluzione ideale per essere green anche nelle sleeves.

## Parliamo di stretch sleeve:

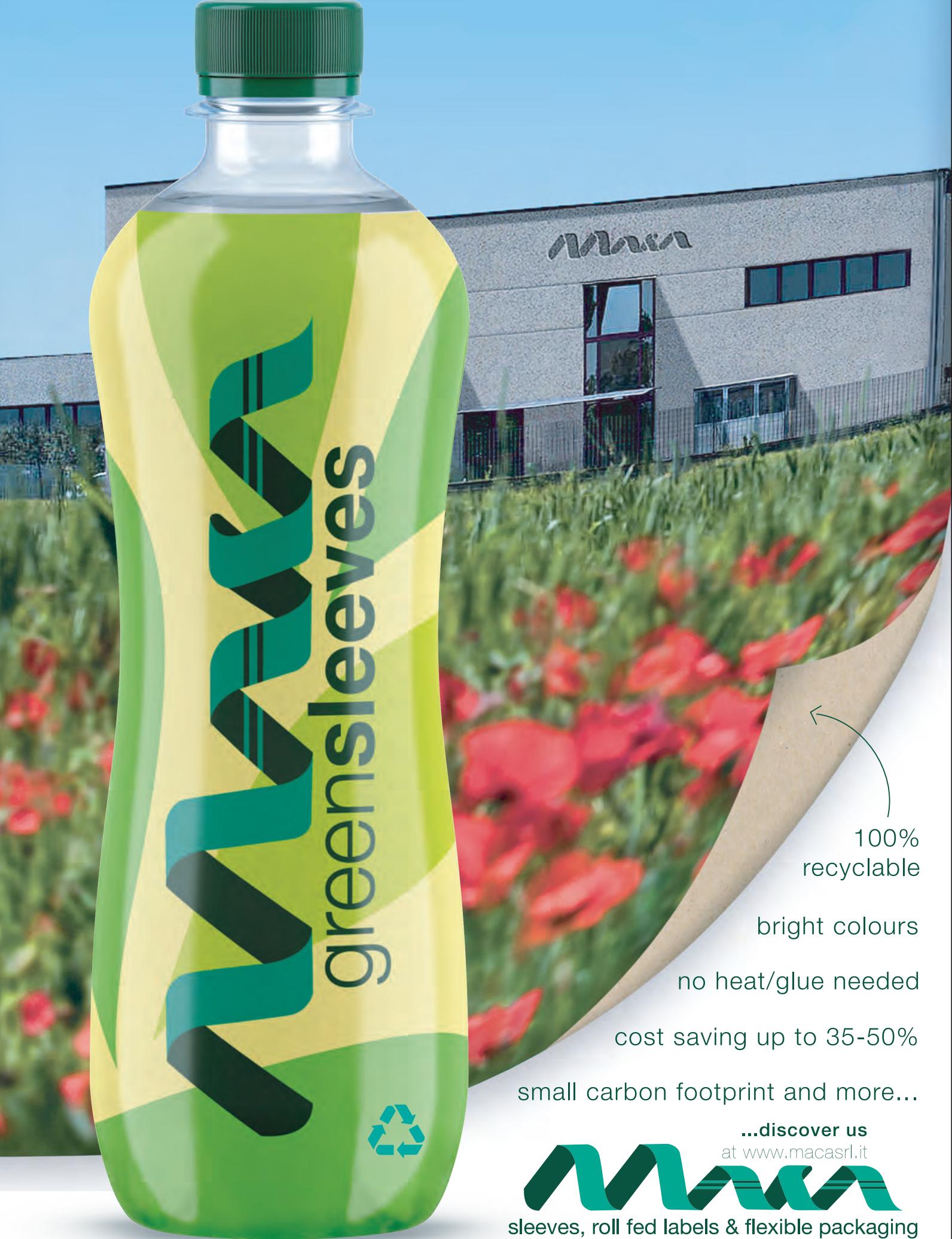
Realizzate in polietilene, materiale completamente riciclabile • Risparmio dei costi fino al 50% rispetto ai sistemi shrink e sistemi ROSO • Minor impiego di materiali fino al 30% rispetto all'utilizzo di materiali shrink (layout più piccolo, minor impatto ambientale in termini di carbon footprint), quindi una sostanziale riduzione del peso dell'imballaggio • Visibilità a 360° • Grafica brillante e colori intensi • Adattamento perfetto alla forma del contenitore anche con profili sagomati • Possibilità di applicare etichette stretch anche su contenitori con fondo petaloide • Non c'è necessità di colla o impiego di calore, con drastica riduzione di impiego di energia • Piena compatibilità in termini di riciclaggio, facile separazione dell'etichetta dal contenitore • Ottima resistenza agli agenti chimici • Resistenza alle esposizioni UV • Formati di bottiglie da 0.20 lt a bidoni, casse e keg di grandi dimensioni.

La soluzione c'è e Maca è pronta a mettere a disposizione le proprie competenze per soluzioni che tutelino la salute pubblica e l'ambiente. Quante volte abbiamo sentito le parole "environmental friendly"? Quante volte il cliente avanza

richieste di materiali speciali, di applicazioni che facilitino la rimozione della sleeve dal contenitore ed il riciclo secondo le disposizioni vigenti? E' una costante specialmente in tutte quelle parti del globo che si sono attivate da almeno un decennio a sensibilizzare i produttori e consumatori ad un uso e smaltimento consapevoli del packaging.

Maca-costituita da due divisioni: etichette (shrink sleeve, stretch sleeve e roll-fed),packaging flessibile- e la controllata Comag-specializzata nell'ingegnerizzazione e produzione di macchine sleeveratrici e linee per packaging-, awaldendosi di personale qualificato e di tecnologie innovative, prestano la massima attenzione all'ecosostenibilità, proponendosi ai Clienti come partner ideali per soluzioni che migliorino la igiene, performance e sicurezza dei prodotti, con una continua ricerca di soluzioni a basso impatto ambientale. Per tale ragione continuano ad investire in R&D per la preservazione ambientale e il miglioramento dei processi: formazione, produzione solvent free, autosufficienza energetica pulita e rinnovabile, prodotti compostabili o completamente riciclabili, riduzione degli sprechi, minimo impatto sull'ambiente attraverso un'organizzazione circolare responsabile. 

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



100%  
recyclable

bright colours

no heat/glue needed

cost saving up to 35-50%

small carbon footprint and more...

...discover us

at [www.macasrl.it](http://www.macasrl.it)



sleeves, roll fed labels & flexible packaging

# FINLOGIC SPA: 360° automatic identification solutions

**F**inlogic SpA is a company listed on Aim Italia and active in the Information Technology sector. It has been operating in label production and distribution of solutions for the coding and automatic identification of products since 2003, through the use of barcodes and of RFID technology, in addition to the internal production of customized labelling systems based on needs. In particular, Finlogic is a manufacturer of blank and printed labels of all types, which can be supplied in sheets or in reels and for any sector: logistics, food, chemical, pharmaceutical, health, cosmetics and retail. It has a converting solution for the production of anti-theft labels and RFid tags for any type of request and ranges from the production of labels for scales, to printed labels of primary decoration for all shelf products. With the introduction of a top-line digital printer in production, Finlogic is able to respond to any request for customized printed labels on reels, ranging from a few hundred to thousands of labels per single reference. Importantly, the

labels produced with this solution may be suitable for direct contact. The listed company is a partner of the main international brands for the distribution of thermal transfer printers, readers and terminals for automatic identification, digital color printers in reels, consumables such as ribbon and cartridges, with a wide and complete range of solutions, for every type of labelling requirement. Specifically, Finlogic is the Italian distributor of brands such as Sato, Toshiba, Citizen, Zebra, Intermec, Microscan, Honeywell, Opticon, Motorola, Datalogic, Primera, OKI, Epson and Vipcolor. Finlogic has over 60 production lines divided into three factory premises, one in Acquaviva delle Fonti (BA), one in Bollate (MI) and Rottofreno (PC), with numerous technical / commercial offices in cities such as Rome, Turin, Florence and Monza Brianza, thus guaranteeing widespread coverage of the territory, with pre- and post-sales assistance. 

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



## FINLOGIC SPA: soluzioni di identificazione automatica a 360°

**F**inlogic S.p.A. società quotata su Aim Italia e attiva nel settore dell'Information Technology, dal 2003 opera nel settore della produzione di etichette e distribuzione di soluzioni per la codifica e l'identificazione automatica dei prodotti, attraverso l'utilizzo di codici a barre e della tecnologia Rfid, oltre la produzione interna di sistemi di etichettatura personalizzati in base alle esigenze. In particolare Finlogic è produttore di etichette grafiche e neutre, di tutti i tipi, che possono essere fornite in foglio o in bobina e per qualsiasi settore: logistica, alimentare, chimico, farmaceutico, sanitario, cosmetico e Retail. Dispone di una soluzione di converting per la produzione di etichette antitaccheggio e di tag RFid per qualsiasi tipo di esigenza e spazia dalla produzione di etichette per bilance, ad etichette stampate di decoro primario per tutti i prodotti da scaffale. Grazie alla recente introduzione di una stampante digitale in produzione, Finlogic è in grado di soddisfare qualsiasi richiesta di etichette stampate personalizzate in bobina, anche per piccole tirature, come le poche

centinaia o migliaia di etichette per singola referenza. Perseguendo il valore della sostenibilità, lo scorso anno ha ottenuto la certificazione FSC per molti materiali, e propone supporti per etichette compostabili e biodegradabili. Il Gruppo quotato in borsa è partner dei principali brand internazionali per la distribuzione di stampanti a trasferimento termico, lettori e terminali per identificazione automatica, stampanti digitali a colori in bobina, consumabili come ribbon e cartucce, con una gamma di soluzioni ampia e completa, per ogni tipo di esigenza di etichettatura. Nello specifico Finlogic è distributore per l'Italia di: Sato, Toshiba, Citizen, Zebra, Intermec, Microscan, Honeywell, Opticon, Motorola, Datalogic, Primera, OKI, Epson e Vipcolor. Finlogic ha oltre 60 linee di produzione divise su tre stabilimenti: Acquaviva delle Fonti (BA), Bollate (MI) e Rottofreno (PC), ognuno con annessi uffici tecnico commerciali, oltre le sedi di Milano, Torino, Firenze, Roma e Monza Brianza, garantendo così una copertura capillare del territorio, con assistenza pre e post vendita. 

# SOLUZIONI DI ETICHETTATURA E TRACCIABILITÀ DEGLI ALIMENTI

Il Gruppo Finlogic, offre le migliori tecnologie per l'identificazione automatica, la raccolta dei dati e l'etichettatura, al fine di supportare le esigenze di tracciabilità, sicurezza alimentare e conformità richieste dalle aziende di trasformazione, distribuzione e vendita di alimenti.



Con ben **tre stabilimenti di produzione** e nove sedi commerciali in tutta Italia, Finlogic è tra i primi produttori di etichette in Italia, per il settore alimentare, ortofrutta, vini e bevande, oltre che per tutta la GDO e il settore Retail.

Milioni di **etichette adesive neutre, stampate, per bilance pesa prezzo, in fogli A4 ed etichette e cartellini RFID** vengono prodotti ogni giorno in Finlogic.

Grazie ad un team di esperti, siamo in grado di proporre **soluzioni a 360°** per soddisfare le esigenze di sicurezza alimentare e conformità, oltre alla necessità di ottimizzare l'efficienza produttiva e l'efficacia del design delle etichette, ai fini delle vendite.

Per questo FINLOGIC è **il partner ideale per le aziende del comparto alimentare.**

## Le soluzioni Finlogic per il settore alimentare

- ❖ Sicurezza ed etichettatura degli alimenti    ❖ Software per la Logistica
- ❖ Gestione del magazzino e della distribuzione    ❖ Raccolta dati
- ❖ Efficienza di produzione

Brand distribuiti:



**TOSHIBA**

**CITIZEN**



**OPTICON**

**Honeywell**



**EPSON**  
EXCEED YOUR VISION

**swiftpcolor™**

**OKI**



**Gruppo Finlogic S.p.A.: 9 sedi in tutta Italia**

Per saperne di più visita il sito [www.finlogic.it](http://www.finlogic.it) oppure richiedi informazioni a [info@finlogic.it](mailto:info@finlogic.it)

Tel. +39 06 23267570 | +39 080 3050511 | +39 02 96741014

# Inox Meccanica:

## excellence in technology and technical solutions for food industry

**R**esearch, development, and technology are at the core of our projects, aiming to strengthen and preserve our region's traditions and history!

Inox Meccanica's dream has become reality thanks to a life dedicated to an ongoing pursuit of simplicity, quality and constructive efficiency. That's a fruitful marriage increasing speed in production processes. Here they are the driving forces shaping our industrial automation concept.

As global market leaders since 1975, we design and manufacture machinery for meat processing and packaging, focusing on sausage products.

Thanks to the experience developed over the years, we jumped into a diametrically and complementary field: we fully immersed into the world dedicated to washing and sanitation of all sorts of production tools and containers, finding the sector cleverly cross-cutting.

1968 is the year of our first patent: a date opening the door to a pride that has persisted for almost fifty years. With the desire to satisfy our customers' most peculiar and diversified requests, we have achieved around 50 commercial partnerships which allow us today to cover almost 60 countries all over the world.

We manufacture more than eighty machines for industrial plants each year, entirely handmade in Italy, in a workplace covering more than ten thousand square meters. However, the beating heart of our headquarter consists of our almost 100 employees



**INOX MECCANICA**

TECHNOLOGY FOR THE FOOD PROCESSING INDUSTRY

divided between production, warehouse, technical/electrical department, administration and sales. Staff to whom we provide an on-going training to ensure a highly competent workforce.

So far, our meticulousness has assured the attribute "quality" to Inox Meccanica branded products which, together with a selected dealer network and strategic business partnerships, have ranked the company at the peak of the national and international market.

The distinctive quality note associated with the Italianness of our AISI 304 stainless steel products, coupled with our after-sales service, make our global expansion visible, reaching all the way to the Americas and Australia.

The sales procedure is inclusive, on request, of tests, if the customer feels the need to put our machines to a trial with specific needs and their own food recipes.

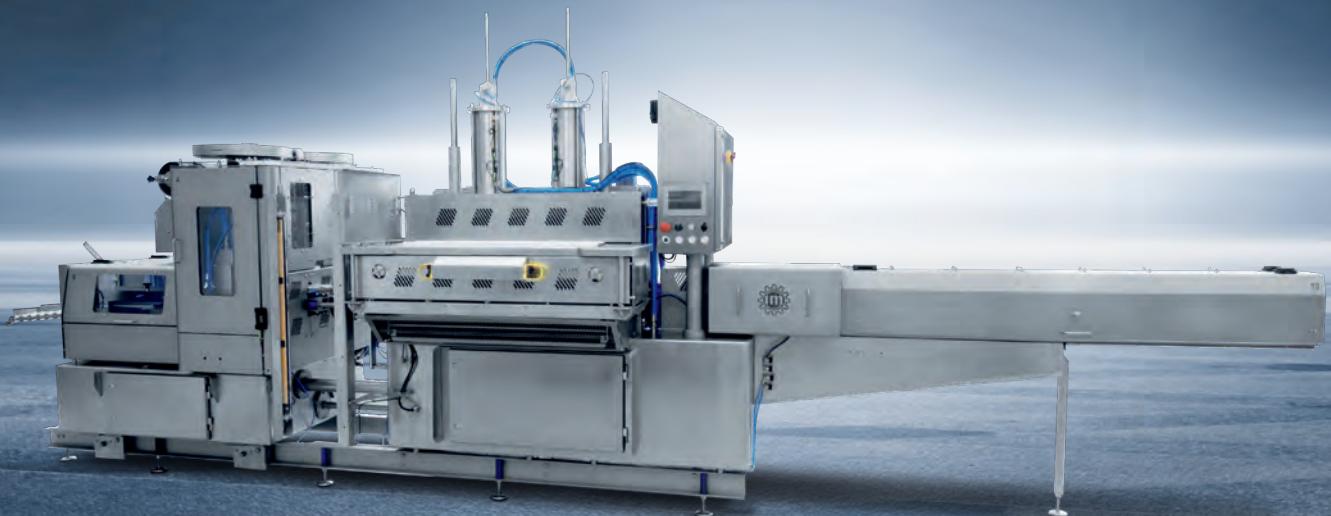
Thanks to an exclusive Pilot Plant we can test industrial production, both for the development of new products and for the optimisation of traditional production processes.

However, our testing does not just end with the packaging procedure.

After that, the food can also be evaluated from a microbiological aspect in the new laboratory, and from an organoleptic and taste angle in a modern, purpose-equipped tasting room. 

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

# NEW PIC 99 DRW



## NEW STUFFING SYSTEM IN CASING AND NET WITH AUTOMATIC TUBES ROTATION AND PRODUCT PREPARATION SYSTEM

**PIC 99 DRW** (1100 mould) is equipped with a product preparation system conceived to fill casings with meat pieces or injected muscles. It allows the positioning and the assembly of several muscles inside a volume reproducing the forming mould.

The inserted parts' overall weight can be monitored through a weight control system featuring a high-precision loading cells and a display viewer.

This allows to obtain bagged bars of constant length.

INOX MECCANICA S.R.L.

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# TERRANOVA® SRL, we do process instrumentation precisely

Since almost 50 years Terranova® has been designing and manufacturing measuring and control instruments for industrial processes for process variables, including pressure, level, temperature, differential pressure, specific weight and liquid presence. In recent years, the foreign turnover has achieved the Italian turnover.

Close to this strong customer-care prospective, the company has made considerable investment efforts towards inner quality intended as process (ISO 9001:2015) and external product quality, that today enables to offer, for the whole product range, intrinsic safety and explosion proof executions (ATEX and IEC-EX directive), for applications in areas with explosion danger, PED compliant devices, and SIL2 level of integrity safety. Flexibility, quality production concept, production cost optimization and respect for delivery times: these qualities in many applications make Terranova® the most appropriate solution for the customer.

Terranova® instruments includes food grade clamps, but for specific measurement positions, flanged and threaded versions are available as well, with TFE coating and HC, tantalum, titanium diaphragms and other materials on demand are available. Measured fluids regard in particular beverage control, such as milk, juices, mineral waters, wines, spirits and aperitifs in general. The measurement tools that are more in demand for this field regard pressure and level transmitters of the T7 and 27 ranges, as well as level switches of the ASL range to detect alarm thresholds.

The T7 transmitters (Figure 1) include a full range of transmitters with 4-20mA output and



HART® digital communication protocol, with built-in or remote electronics.

The stainless steel construction of the IP68 casing makes the T7N range particularly suitable for installations in environments with aggressive atmosphere and they can be manufactured complete with fluid separators in Aisi316 stainless steel, special or Golden alloys for applications on corrosive fluids. They are SMART electronic transmitters, with a SS AISI 316 casing enabling a considerable sturdiness and they feature a micro controller that enables to adjust zero and span by means of push buttons and display or hand-held. The tool, in standard cases, can achieve a 0.25% accuracy and, if required, a precision lower than 0.075%.

The 27 transmitters (Figure 2) feature a 4-20mA output, they have a total measurement accuracy of +/-25% in the -40-85°C temperature field and they are wholly made from stainless steel. The casing can be matched with different types of electric connections, including DIN 43650 connectors, M12 with straight way, MIL connectors, direct cable output.

ASL level switch features an ultra-sound technology and is designed for liquid detection, pump control, water ingress alarm systems, for high and low alarm level, overfilling protection on liquids with or without foam. ASL works on the principle of distributed acoustic waves in a metal rod. If the rod is not covered by the liquid the sound waves are dispersed freely without any interference.

[www.terranova-instruments.com](http://www.terranova-instruments.com)

# THIS IS OUR ADV FOR T7 PRESSURE TRANSMITTERS, **TO BE MORE PRECISE.**



**TERRANOVA®**

WE DO PROCESS INSTRUMENTATION PRECISELY



**SPRIANO**



**valcom**



**MEC-RELA**

[www.terranova-instruments.com](http://www.terranova-instruments.com)

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**@** [terranovainstruments](#)

# CONTRINEX, sensors for factory automation

**C**ontrinex is a leading manufacturer of sensors for factory automation. The Swiss company, headquartered in Corminbeuf near Fribourg (CH), has a unique and innovative range of products whose features far surpass those of standard sensors. Since its foundation in 1972 by Peter Heimlicher, Dipl Ing ETH, Contrinex has grown from a one-man operation to a multinational group with over 500 employees worldwide. More than 15 subsidiaries cover the core markets in Europe, Asia, North and South America. Contrinex manufactures its own sensors, safety and RFID systems in 4 production locations: Switzerland (since 1972), Hungary (since 1995), China (since 2003) and Brazil (since 2009).

## At a glance

- Technology leading manufacturer of inductive and photoelectric sensors as well as safety and RFID systems
- World market leader for miniature sensors, sensors with long operating distances and devices for particularly demanding operating conditions (allmetal, high-pressure and high-temperature resistant sensors)

- Represented in over 60 countries worldwide, headquarters in Switzerland
- 8000 products

## Intelligent Sensors for the 4th Industrial Revolution: Industry 4.0

### Fit for the future with IO-Link

Intelligent sensors are the fundamental building blocks of modern smart factories. They enable sensor-supported production resources (machines, robots, etc.) to configure, control, manage and optimize themselves. Precise, reliable sensor data is now more essential than ever.

Sensors from Contrinex, the leader in intelligent sensor technology, ensure excellent data quality. To communicate that data, all Contrinex inductive and photoelectric ASIC sensors will be equipped with IO-Link as standard. Customers use either the sensor's binary PNP output or its intelligent IO-Link interface. Both are available in one and the same device. 

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



# CONTRINEX, sensori per l'automazione industriale

**C**ontrinex occupa un posto di primo piano tra le aziende produttrici di sensori per l'automazione industriale. Questa azienda svizzera, con sede principale a Corminbeuf, vicino a Friburgo (CH), può contare su un catalogo prodotti unico e innovativo, le cui caratteristiche superano ampiamente quelle dei sensori standard. Dal 1972, anno della sua fondazione da parte dell'ingegnere Peter Heimlicher, laureato al politecnico di Zurigo, Contrinex si è trasformata da ditta individuale a multinazionale, con più di 500 dipendenti nel mondo. Più di 15 filiali coprono i mercati principali di Europa, Asia, Nord e Sud America. Contrinex produce i sensori e sistemi di sicurezza e RFID in quattro stabilimenti: Svizzera (dal 1972), Ungheria (dal 1995), Cina (dal 2003) e Brasile (dal 2009).

## Panoramica

- Azienda leader nel settore dei sensori induttivi e fotoelettrici, nonché nei sistemi di sicurezza e RFID
- Leader mondiale nel campo dei sensori miniaturizzati, dei sensori con distanza di intervento elevata e dei dispositivi per condizioni di esercizio particolarmente complesse (sensori tutto-metallo, resistenti

alle alte pressioni e alle alte temperature)

- Rappresentanze in oltre 60 paesi in tutto il mondo, casa madre in Svizzera
- 8000 prodotti

## Sensori intelligenti per la 4° rivoluzione industriale: Industria 4.0

### Pronti per il futuro con IO-Link

I sensori intelligenti sono i mattoni fondamentali delle moderne fabbriche intelligenti. Essi sono un valido supporto alla produzione (macchine, robot, ecc) per configu are, controllare, gestire e ottimizza re gli stessi. Avere informazioni precise e sicure dai sensori è oggi più che mai essenziale.

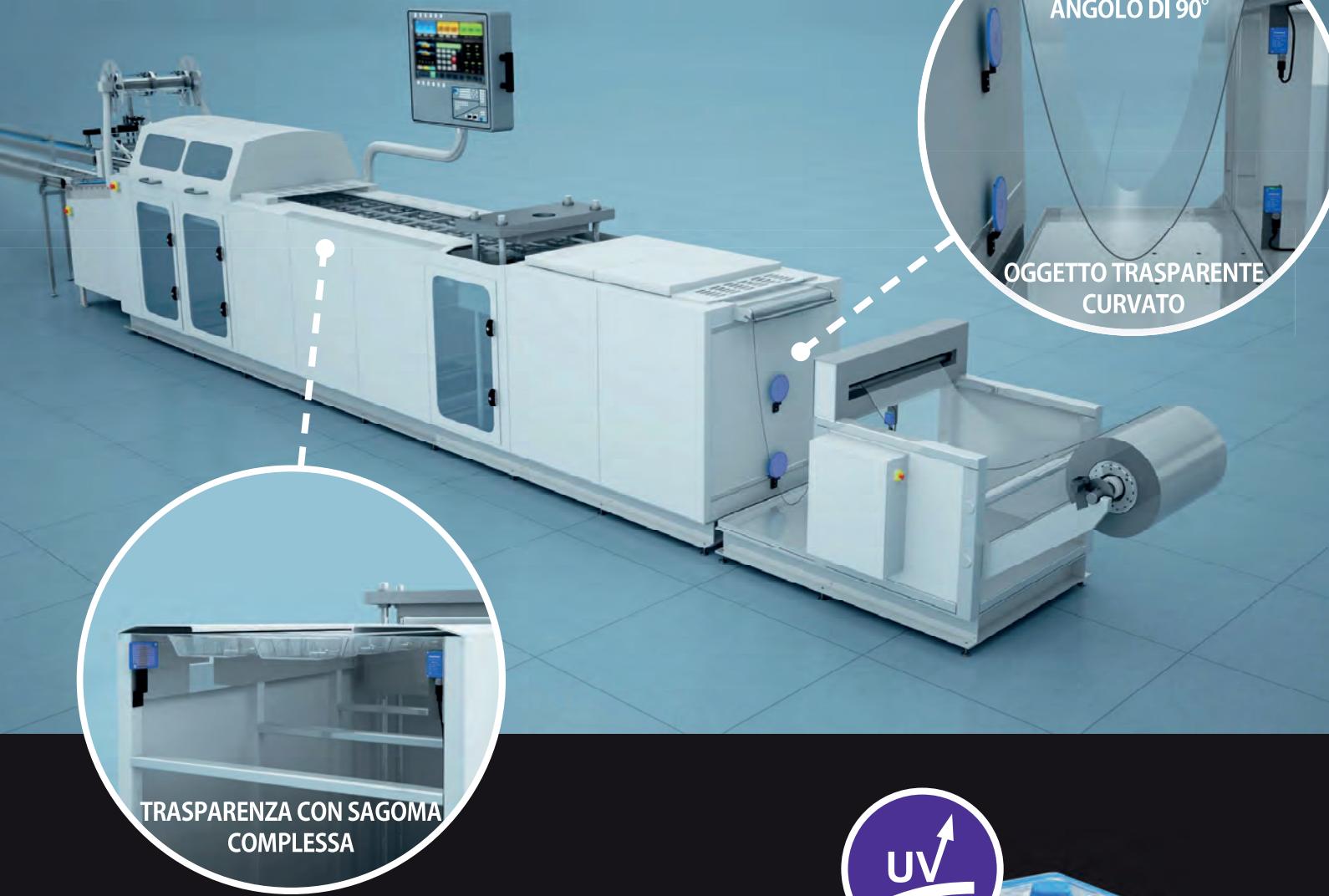
I sensori della Contrinex, leader nella tecnologia dei sensori intelligenti, assicurano eccellenti qualità di dati. Per trasmettere i dati, tutti i sensori Contrinex induttivi e optoelettronici ASIC saranno equipaggia ti con IO-Link di serie. I clienti possono utilizzare l'usita PNP del sensore o la sua interfaccia intelligente IO-Link. 

[www.contrinex.com](http://www.contrinex.com) - [info@contrinexitalia.it](mailto:info@contrinexitalia.it)



# TERMOFORMATURA

RILEVAMENTO AFFIDABILE AL 100% DI OGGETTI TRASPARENTE



## TECNOLOGIA UV

Insensibile alla distorsione della luce,  
indipendentemente dalla trasparenza,  
spessore, forma o velocità dell'oggetto



# A very young and **dynamic company**

**C**M Software Solutions S.r.l. is a very young and dynamic company born from the passion for software development. Thanks to the experience of its founder gained in over more than 15 years of activities in many IT contest, it proposes itself as a company capable of creating software that can satisfy any need. The most important feature of CM Software Solutions products is the ability to interconnect with any type of device and/or management system in order to automate the execution and data collection of the most complex production processes, minimizing the procedural and infrastructural impact.

The long experience in the food sector has allowed the company to create its own flagship product "XSystem": an integrated ERP & MES software that implements a series of features useful for the complete automation and planning of the production process:

Traceability and Performance guaranteed throughout all the supply chain.

We asked the founder Eng. Cristian Melli why this software is better than the others:

"It's the best because we are concrete people that before sitting behind the desk to write software we got our hands dirty in the production environments by bumping into each other first person with real problems. And we continue to do it every day.

XSystem leads to concrete results, clear and well understandable data.

It allows you to easily understand what needs to be done within the process to optimize performance and therefore minimize costs by increasing margins".

It is also the best because it is strongly focused on ergonomics of use, which expresses its highest need in the production environment.

Aware of this we have made it easily and extremely customizable, allowing our customers to minimize, if not delete, the costs related to staff training." 

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



## Una **azienda** molto giovane e **dinamica**

**C**M Software Solutions S.r.l. è una azienda molto giovane e dinamica nata dalla passione per lo sviluppo di software. Grazie all'esperienza del suo fondatore maturata in più di 15 anni di attività in vari settori IT, si propone come azienda capace di creare software che possano soddisfare qualsiasi esigenza.

Componente fondamentale dei prodotti CM Software Solutions è la possibilità di interconnettersi con qualsiasi tipo di dispositivo e/o sistema gestionale allo scopo di automatizzare l'esecuzione e la raccolta dati dei più complessi processi produttivi minimizzando l'impatto procedurale e infrastrutturale. Ancor prima che fosse coniata la definizione di "Industria 4.0" i prodotti Cm Software Solutions ne soddisfacevano già i requisiti.

La lunga esperienza nel settore alimentare ha permesso all'azienda di dar vita ad un proprio prodotto di punta "XSystem":

un software ERP&MES integrato che implementa una serie di funzionalità utili alla pianificazione e alla completa automazione del processo produttivo.

Tracciabilità e Performance garantite lungo tutta la filiera. Abbiamo chiesto all'Ing. Cristian Melli perchè questo software è migliore degli altri:

"E' il migliore perchè siamo persone concrete che prima di sedersi dietro alla scrivania per scrivere software ci siamo sporcati le mani negli ambienti produttivi scontrandoci in prima persona con i reali problemi. E continuiamo a farlo tutti i giorni.

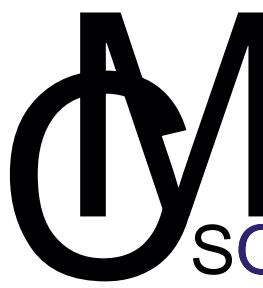
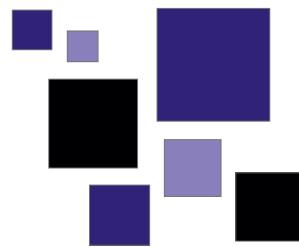
XSystem porta a risultati concreti, a dati chiari e ben comprensibili.

Permette di capire facilmente cosa sia necessario fare all'interno del processo per ottimizzare le performance e quindi minimizzare i costi aumentando i margini"

È il migliore anche perchè è fortemente incentrato sull'ergonomicità d'uso, che esprime la sua massima esigenza proprio nell'ambiente produttivo.

Consci di questo lo abbiamo reso facilmente ed estremamente personalizzabile, permettendo ai nostri clienti di minimizzare, se non azzerare, i costi relativi alla formazione del personale." 

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



**CM**  
SOFTWARE  
SOLUTIONS

**ITALIAN CERTIFIED QUALITY SOFTWARE**

TRACEABILITY

INVENTORY

I4.0

AUTOMATIONS

ERP

HACCP

MES

MONITORING

PLANNINGS

**XSYSTEM**

**THE PRODUCTION MANAGEMENT SOFTWARE**

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

A large central graphic features a stylized 'X' composed of four thick, three-dimensional bars in dark grey and purple. The word 'MES' is positioned above the top bar, and 'HACCP' is positioned below the bottom bar. The background is a repeating pattern of grayscale circuit boards.

# MINI MOTOR: more than half a century of industrial automation Made in Italy

**M**ini Motor, a company from Emilia situated in the heart of the Motor Valley, has been designing and manufacturing electric motors applicable in different industrial sectors and conceived for Industry 4.0 for over 55 years. From Italy to the rest of the world, Mini Motor is present in Europe, the USA, and the Arab Emirates with a wide network of dealers. A range aimed at innovation with products designed for automation and motion control, such as the DBS series: brushless motors with integrated drive and absolute multi-turn encoder, whose connectivity is ensured by the support of the 6 most common field buses. First of its kind, WBS is a brushless servo motor with an integrated wireless drive, thanks to the built-in wireless interface and the presence of an inductive charge battery. For demanding sectors such as food&beverage, Mini Motor has designed, following the principles of Hygienic Design, the motors of the Clean series in 316L stainless steel, easy to clean and resistant to jets of boiling water (80°C), high pressure (90 bar) and corrosion caused by food and beverages, of which it avoids contaminati-

tion and alteration. The latest novelty is represented by the Fast Change series: the Mini Motor line that was born from listening to a market that is more and more aimed at personalization and diversification of packaging and therefore also at the need for a reliable and fast format change. Compactness, compatibility, and high integration in the system, remote control and speed guaranteed by the higher implementation speed of the motors (double compared to competitors), and the reduction of machine stops during format changeover are the characteristics of FC. In addition to these, there is an electronic system that allows parameters to be set and diagnostics to be carried out remotely, allowing control and monitoring of the operating status of the product and therefore predictive maintenance. Mini Motor does not limit itself to responding to market demands but pushes its innovation further with products capable of truly improving work in companies and bridging the gap with competitors. 

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



# MINI MOTOR: oltre mezzo secolo di automazione industriale Made in Italy

**M**ini Motor, azienda emiliana sita nel cuore della Motor Valley, da oltre 55 anni progetta e produce motori elettrici applicabili in diversi settori industriali e ideati per l'Industria 4.0. Dall'Italia al resto del mondo, Mini Motor è presente in Europa, USA ed Emirati Arabi con una capillare rete di rivenditori. Una gamma volta all'innovazione con prodotti ideati per l'automazione e il motion control, come la serie DBS: motori brushless con azionamento integrato ed encoder assoluto multigiro, la cui connettività è assicurata dal supporto dei 6 bus di campo più comuni. Primo nel suo genere, WBS è un servomotore brushless con azionamento integrato senza fili, grazie all'interfaccia wireless incorporata e alla presenza di una batteria a carica induttiva. Per settori esigenti come food&beverage, Mini Motor ha progettato, seguendo i principi dell'Hygienic Design, i motori della serie Clean in acciaio Inox 316L, facile da pulire e resistente a getti di acqua bollente (80°C), all'alta pressione (90 bar) e alla corrosione causata da cibi e bevande, dei quali evita contaminazione

e alterazione. L'ultima novità è rappresentata dalla serie Fast Change: la linea Mini Motor che nasce dall'ascolto di un mercato sempre più volto alla personalizzazione e diversificazione dei packaging e quindi anche alla necessità di un cambio formato affidabile e veloce. Compattezza, compatibilità e alta integrazione nel sistema, comando da remoto e celerità garantita dalla maggiore velocità di attuazione dei motori (doppia rispetto ai competitor) e dalla riduzione di fermo macchina nel cambio formato sono le caratteristiche di FC. A queste si aggiunge un'elettronica che consente di parametrizzare e fare diagnostica da remoto permettendo controllo e monitoraggio dello stato di funzionamento del prodotto e quindi la manutenzione predittiva. Mini Motor non si limita a rispondere domande di mercato, ma spinge oltre la propria innovazione con prodotti capaci di migliorare realmente il lavoro nelle aziende e di colmare i gap dei competitor. 

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

# Free your power we do it WIRELESS



**With or without battery**  
with induction charging in air  
till to 25 mm



## COA - Can Over Air is born

We have studied a proprietary wireless bus on ZIGBEE technology on 2.4 Mhz, which enables driving a motor wirelessly by simply sending information through a coordinator provided by Mini Motor.



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

# Pack-Sim: software for automatic design/simulation of screws and stars

**S**canny3D S.r.l. is a highly specialized company that deals with the design and production of reverse engineering systems, in particular 3D laser SCANNER, and the development of CAD-CAM software for the industry. For the bottling sector, the company offers a complete, fast and automatic solution that involves the integration of a 3D rotative laser scanner with a software for the design of stars and screws.

PACK-SIM has been designed and developed entirely by Scanny3d for the design and fast and automatic simulation of SCREWS and COUNTER SCREWS, but also for the realization of STARS profiles to be included in machines of filling, labelling and packaging lines.

It consists of several modules. The Star simulation module is able to simulate up to 3 grip quotes at the same time and guarantees the full compatibility of the generated geometries (exportable in STEP and IGES formats) with the main CAD system. The Screw module allows to design and sim-

ulate screws and counter screws with various types of handling. The Multistar module allows to simulate the entire bottling line in all its main phases.

Furthermore, the software allows the design of SCREWS of any type by defining CUSTOMIZED MOTION LAWS in terms of speed, rotation and position of the bottle during the handling. This module allows to design any type of screws in 3D: from simple transport screws, to rotation, inversion and orientation screws up to the more complex screws with double or triple helix to group or separate bottles and containers through the simultaneous simulation of pairs of counter rotating screws (screw and counter screws).

The 3D simulation is performed in a few minutes and allows to obtain a 3D model of the screw with a perfectly smooth surface ready to be made. 

[www.scanny3d.com](http://www.scanny3d.com)



# Pack-Sim, software di progettazione/simulazione di stelle e coclee

**L**a Scanny3D S.r.l. è un'azienda altamente specializzata che si occupa di progettazione e produzione di sistemi di reverse engineering, in particolare SCANNER laser 3D e sviluppo di software CAD-CAM per l'industria.

Per il settore dell'imbottigliamento l'azienda offre una soluzione completa, veloce ed automatica che prevede l'integrazione di uno scanner laser 3D rotativo con un software per la progettazione di stelle e coclee.

PACK-SIM è stato ideato e sviluppato interamente dalla Scanny3D per la progettazione e simulazione veloce ed automatica di COCLEE e CONTROCOCLEE, ma anche per la realizzazione di profili di STELLE da inserire nei macchinari delle linee di riempimento, tappatura, etichettatura e packaging.

È composto da diversi moduli. Il modulo di simulazione Stelle è in grado di simulare fino a tre quote di presa contemporaneamente e garantisce la piena compatibilità delle geometrie generate (esportabili nei formati STEP e IGES) con tutti i principali CAD. Il modulo Coclea consente di progettare e simulare

coclee e contrococlee con svariate tipologie di movimentazione. Il modulo Multistar permette di simulare l'intera linea di imbottigliamento in tutte le sue fasi principali.

Inoltre il software consente la progettazione di COCLEE di qualsiasi tipo mediante la definizione di LEGGI DI MOTO PERSONALIZZATE in termini di velocità, rotazione e posizione della bottiglia durante la movimentazione. Questo modulo consente di progettare coclee in 3D di qualsiasi tipo: dalle coclee di semplice trasporto, alle coclee di rotazione, inversione ed orientamento fino ad arrivare alle coclee più complesse con doppia o triple elica per realizzare il raggruppamento o la separazione di flaconi e bottiglie mediante la simulazione contemporanea di coppie di coclee controrotanti (coclea e contrococlea).

La simulazione 3D viene svolta in pochi minuti e permette di ottenere un modello 3D di coclea con superficie perfettamente levigata e pronta per essere realizzata. 

[www.scanny3d.com](http://www.scanny3d.com)

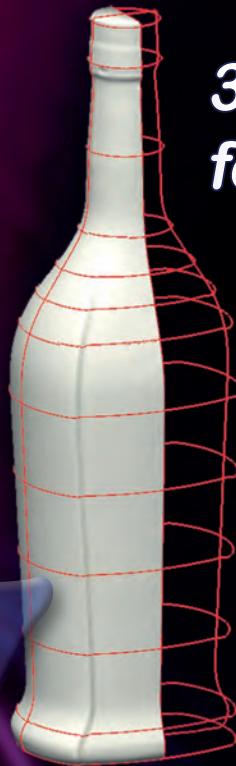
# SCANNY3D®

From real bottle...

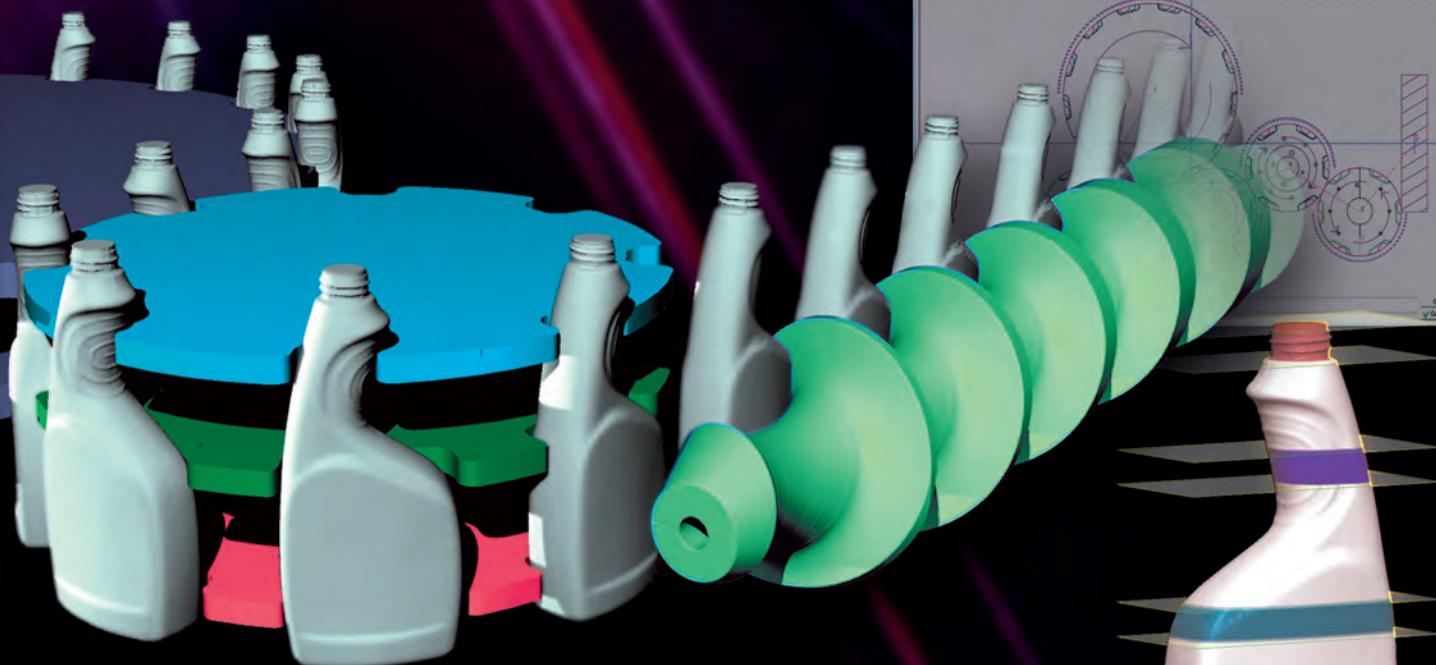
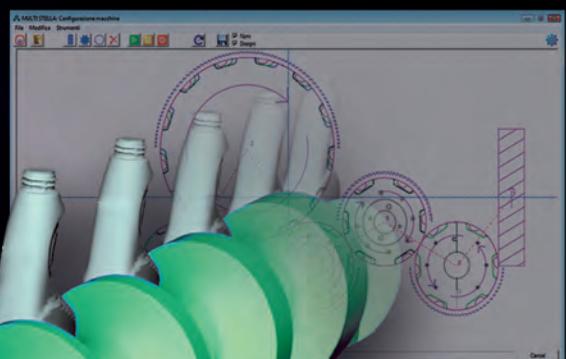
3D laser scanning systems

## 3D SCANNER for bottling industry

...to 3D model



**PackSim**  
Software for automatic design  
of SCREWS & STARS



SCANNY3D® S.r.l.

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

☎ +39 0734-510410 info@scanny3d.com

**WWW.SCANNY3D.COM**

# XHOLDING, giving voice to moving objects

**C**onnecting physical to digital is much more than a simple payoff, it's the core foundation of the Xholding group. We aim to help and push the evolution of Italian companies just connecting objects, documents, goods, and information in a continuous dialogue.

Since 2000 - when the first company of the group, Xholding, was founded - we've been providing professional printing systems, automatic identification and RFID solutions, Mobile Device Management software, Wi-Fi networks, radio surveys and document management software. These services are much more than our mission: for us they are the answer to simplify a fundamental part of the production process: traceability and identification.

Becoming a trusted partner who works with passion is the real challenge the group faces every day. In Xhold-

ing we always want to anticipate possible problems and critical issues, providing hedging solutions.

The commitment towards customers has always been the priority for Xholding group. Still, it has grown with our other two companies: Axter and Xerum, respectively engaged in the distribution of products in the Italian North-West area and IT consulting.

The letter X of the new logo shows the union of three companies in a single group, linked by a unique mission: to meet the innovation challenge launched by the Italian industrial panorama. Through constructive and constant confrontation with companies, professionals, and partners, Xholding renews its commitment day after day to do more and better. 

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



# XHOLDING, giving voice to moving objects

**C**onnecting physical to digital è molto più del motto del gruppo Xholding, ma l'esatta traduzione di ciò in cui crede con forza: facilitare l'evoluzione delle imprese italiane in modo semplice, connettendo tra loro oggetti, documenti, merci e informazioni in un dialogo continuo.

Sin dal 2000 - anno in cui viene fondata Xholding, la prima azienda delle tre che costituiscono il gruppo Xholding e che si rivolge prevalentemente al mercato del Nord-Est italiano - viene portato avanti l'impegno nel fornire alle aziende sistemi professionali di stampa e rilevazioni dati, identificazione automatica ed RFID, Mobile Device Management, Reti e Soluzioni Wi-Fi e soluzioni software per la gestione documentale.

Un insieme di prodotti, software e progetti che costituiscono la risposta al problema di semplificazione di una parte fondamentale del processo produttivo: la tracciabilità dei prodotti.

Insieme ad Axter e Xerum, rispettivamente impegnate nella distribuzione di prodotti nell'area del Nord-Ovest e nella consulenza informatica, si è consolidato l'impegno verso i clienti, divenendo per loro partner fidato, a cui rivolgersi non solo per l'expertise, la professionalità e la passione dei suoi collaboratori, ma anche per la capacità di saper guardare lontano, più avanti del momento attuale. Una lungimiranza che permette di scorgere problemi e criticità prima che accadano è il tratto distintivo di Xholding. Tratto evidente già nella X del suo logo, segno grafico che mostra visivamente lo slancio che ha accompagnato l'evoluzione e l'unione di tre aziende in un unico gruppo, legato da una missione comune: raccogliere la sfida di innovazione lanciata dal panorama industriale italiano. Tramite il confronto costruttivo e costante con aziende, professionisti e partner Xholding rinnova giorno dopo giorno il suo impegno nel fare sempre di più, sempre meglio. 

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



# CONNECTING PHYSICAL TO DIGITAL



Connettere l'analogico con il digitale è molto più del nostro motto aziendale. È l'esatta traduzione di ciò in cui crediamo con forza: **facilitare l'evoluzione delle imprese italiane.** Collegare tra loro oggetti, documenti, merci e informazioni in una comunicazione continua per rendere tutto identificabile e sicuro.

**LOGISTICS**

**SUPPLY CHAIN MANAGEMENT**

**RFID**

**IOT SOLUTIONS**

**MOBILE DEVICE MANAGEMENT**

# REER, manufacturer of safety sensors

**F**ounded in 1959, ReeR is today the biggest manufacturer of safety sensors in Italy and one of the major players worldwide with a strong presence in all industrialised countries and an extensive sales, distribution and after-sales network.

ReeR offers a complete range of **optoelectronic barriers**, photocells, **laser scanners**, safety interfaces and **safety controllers**. The wide range of products available allow ReeR to claim one of the most comprehensive product portfolios in the safety industry. The variety of models and different product characteristics engineered for specific applications, allow users to benefit from ReeR's extensive knowhow. Versions with IP69K watertight enclosure (ECOLAB certified) can be used in presence of water and steam as required by the Food & Beverage industry.

ReeR is also a key player in the machine directive drafting process, allowing being always up to date in terms of compliance of its own products as well as following the evolution of the standards.

In today's market the design and construction of a safety system of a complex machinery is ruled mainly by economics and flexibility of the system itself. This is the main reason behind ReeR's effort to engineer and develop a modular and configurable **safety controller: Mosaic**.

Mosaic system is modular, configurable and can manage all safety functions of a machinery, a system or a plant. Mosaic can manage sensors and switches like for example: safety light curtains, photocells, laser scanners, emergency stops, electromechanical switches, magnetic switches, RFID switches, inductive sensors, safety mats and edges, two-hand controls, enabling switch, encoders and proximity sensors.

The overall system can be configured starting with a stand-alone main unit or, to its maximum extents, with the main unit and up to 14 expansion modules. All modules communicate via a proprietary MSC bus and can be connected to main industrial field bus. 

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



# REER, costruttore di sensori di sicurezza

**R**eeR, fondata nel 1959, è oggi il più grande costruttore di sensori di sicurezza in Italia e uno dei maggiori nel mondo. Presente in tutti i paesi industrializzati con una rete di distribuzione e assistenza competente ed efficace.

La gamma ReeR offre un assortimento completo di **barriere optoelettroniche**, fotocellule, **laser scanner**, interfacce e **controllori di sicurezza**. L'ampia scelta rende il catalogo dell'azienda uno dei più completi in assoluto nel mondo della sicurezza, grazie alla varietà di modelli ed alle caratteristiche applicative studiate in funzione delle varie esigenze degli utilizzatori. Le versioni con contenitore stagno IP69K possono essere utilizzate in ambienti caratterizzati dalla presenza di acqua e vapore come nell'industria alimentare e delle bevande (certificazione ECOLAB).

ReeR è anche protagonista nel processo normativo sulla sicurezza delle macchine. Per questo è sempre all'avanguardia in merito alla conformità dei propri prodotti e nel seguire l'evoluzione dei requisiti normativi.

Oggi la progettazione e la realizzazione dell'impianto di sicurezza di un macchinario complesso dipendono in larga misura da fattori economici e da esigenze di flessibilità.

Per questo motivo ReeR ha realizzato il **controllore modulare configurabile di sicurezza Mosaic**, in grado di concentrare tutta la gestione delle funzioni di sicurezza di una macchina o di un impianto.

Mosaic gestisce sensori e comandi di sicurezza quali: barriere fotoelettriche, fotocellule, laser scanner, pulsanti di arresto di emergenza, interruttori elettromecanici, interruttori magnetici, interruttori RFID e induktivi, tappeti e bordi sensibili, comandi a due mani, pulsanti uomo morto, encoder e proximity. Il sistema può essere composto dalla sola unità principale o, in massima configurazione, dall'unità principale e da 14 espansioni.

La comunicazione tra i moduli avviene tramite il bus proprietario MSC e può essere interfacciato verso i più comuni Bus di campo industriali. 

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

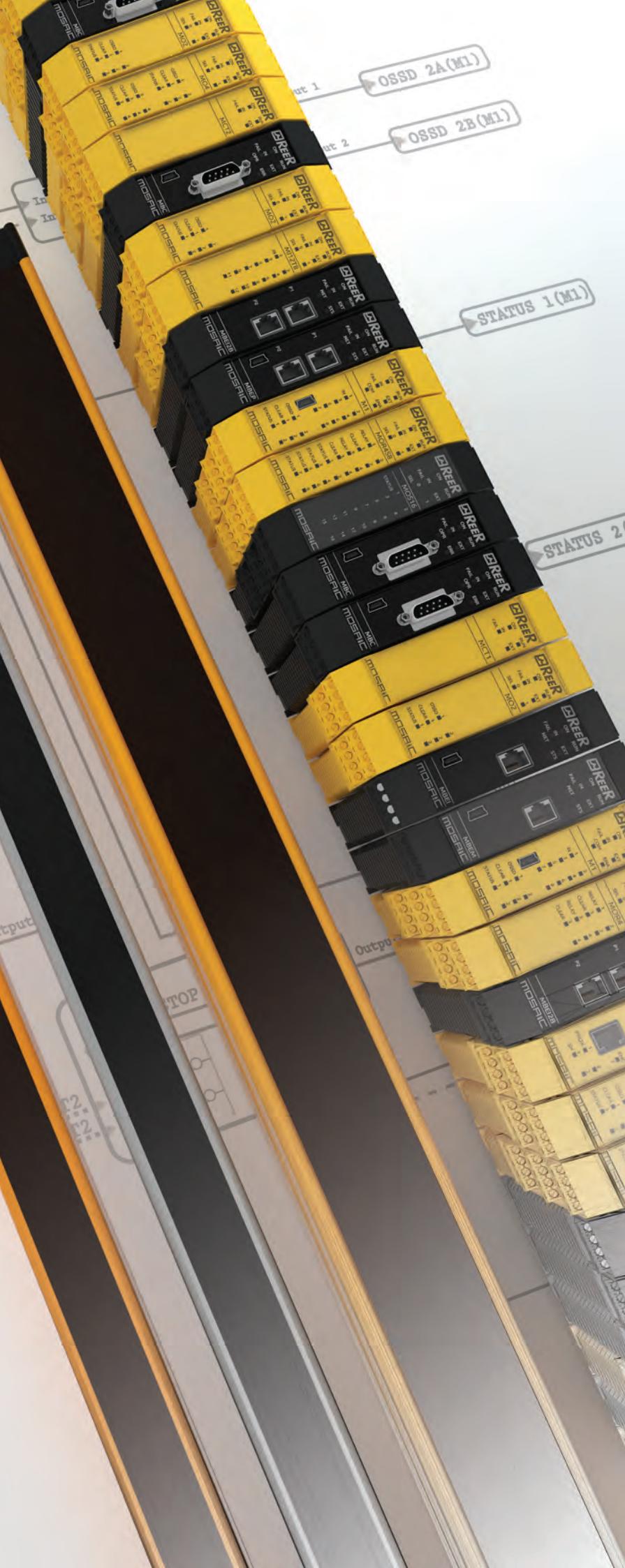


*Your future's safe!*

If safety in the workplace is essential, it becomes crucial in highly automated environments.

Thanks to the experience achieved by cooperating with the world leading companies in the machine tools, automotive, packaging and palletisation industries, Reer is able to offer a wide range of safety devices, such as: light curtains, programmable controllers, photocells and interfaces able to meet each application demand.

Reer has always been at the forefront also in the field of optoelectronic curtains for automation, measurement and control.



[www.reersafety.com](http://www.reersafety.com)  
[info@reer.it](mailto:info@reer.it)

# KELLER SPA , Digital Pressure Transmitters

**S**eries 30 X: Fast, digitally compensated pressure transmitters with analog output. The sensor signal is measured up to 500 times per second with a highly precise A/D converter (16bit). After each measurement, the exact pressure value is calculated (elimination of the linearity- and temperature errors). The analog output signal is updated via the D/A converter. This technology allows highly precise and fast pressure measurements, even over high temperature ranges.

**Analog Output:** The scalable analog output offers the standard analog interfaces: • Voltage output (0...10 V) • Current output 2-wire technology (4...20 mA). The outputs are protected against reverse polarity and short-circuit.

**Digital Interface:** In addition to the analog signal output, these pressure transmitters offer a digital, bus-capable interface, offering the following possibilities: • Read-out of the pressure- and temperature values. • Customer-side calibration of zero and gain. • Scaling of the analog output to other pressure ranges or -units . •

Configuration settings. • Read-out of information, such as serial number, compensated pressure- and temperature ranges... • Two wire RS485 half-duplex with 9'600 baud or 11'5200 baud.

**Digital Compensation Technology :** Non-linearities and temperature dependencies of the pressure sensor can be eliminated to a large extent with a mathematical model of the sensor. In production, each pressure transmitter is measured over the entire temperature-and pressure range. These measuring values are the basis for the mathematical model.

## Series 30 X

This compensation technology reduces the error band to typically 0.05 %FS over the entire pressure- and temperature range, which is an improvement of factor 20 to 50 (see graphics below). Each transmitter is supplied with a calibration certificate, indicating the data measured at at least 3 temperature- and 4 pressure points. 

[www.keller-druck.com](http://www.keller-druck.com)



# KELLER SpA , Manometro digitale, tecnologia manometrica, ingegneria meccanica

## Ulteriori tracce della pressione

**S**ulle importanti funzioni di controllo nella costruzione di macchinari e nell'impiantistica la KELLER SpA, società per le tecnologie manometriche, presenta il manometro digitale LEO 2 ad elevata precisione.

Nel campo di temperatura compensato di 0...50 °C l'apparecchio controllato da un microprocessore rileva due valori di misurazione al secondo, con una precisione complessiva che ricade tipicamente nello 0,1 %FS. Il doppio display digitale fornisce il valore della misurazione attuale e simultaneamente il valore minimo o massimo della dimensione del processo raggiunto nel corso del processo stesso. Due tasti posizionati ergonomicamente permettono di sfruttare in modo sicuro tutta la funzionalità del manometro modello LEO a microprocessore. Oltre alla scelta tra cinque differenti unità di misura, all'inizio dei periodi di osservazione vengono neutralizzati i valori estremi memorizzati fino a quel momento. In modalità standard il manometro elettronico si spegne automaticamente circa 15 minuti dopo l'ultima pressione di un tasto. La capac-

ità della batteria, con l'apparecchio impostato sulla modalità di funzionamento continuativo, arriva fino a 1400 ore. Una modalità di funzionamento di LEO 2 non comune, ma di assoluto rilievo nell'utilizzo pratico, permette di definire un qualsiasi valore di rilevazione come "linea dello zero" attraverso la semplice pressione di un tasto. In questo modo il manometro indicherà ogni volta gli scostamenti da questo valore nominale.

Il manometro, sviluppato e costruito in base alle esigenze dell'utilizzo pratico, è disponibile in quattro campi di misura da -1...3 bar fino a 0...700 bar. La forma di costruzione standard offre già la classe di protezione IP65 per la struttura di alloggiamento. Con la custodia di protezione opzionale LEO 2 funziona in maniera affidabile anche in ambiente esterno con qualsiasi condizione meteo. L'apparecchio è disponibile anche nella versione di protezione Ex conforme alla normativa 94/9/CE (ATEX 100a). 

[www.keller-druck.com](http://www.keller-druck.com)



# KELLER unplugged!

L'internet delle cose inizia con un sensore.

Trasmettitori di pressione e sonde di livello con interfacce digitali sono realizzati per soluzioni IoT.

Tensioni di alimentazione basse e consumo energetico ottimizzato, ideali per soluzioni wireless alimentate a batteria.

Campo di pressione: 0,3...1000 bar / Certificazione ATEX / Informazioni sulla pressione e sulla temperatura.

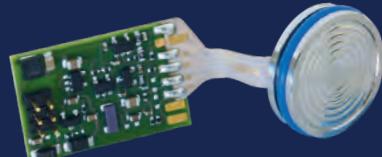
#### D-Linea trasmittitore di pressione

- I<sup>2</sup>C-interfaccia fino a 5 m di cavo
- 1,8...3,6 V (ottimi. con batterie a bottone)
- 20 µW @ 1 S/s e 1,8 V
- Fascia di errore ± 0,7 %FS @ -10...80 °C



#### X-Linea trasmittitore di pressione

- RS485-interfaccia fino a 1,4 km di cavo
- 3,2...32 V (ottimi. per 3,6 V batterie a ioni di litio)
- 100 µW @ 1 S/min e 3,2 V
- Fascia di errore ± 0,1 %FS @ -10...80 °C



# New LinMot, constant quality in servo cappers

The linear and the rotary movements, and the complete capping process can be completely decoupled from carousel movement, thus guaranteeing constant process quality.

LinMot linear rotary motors, distributed in Italy by Pamoco, can realize any arbitrarily combined linear and rotational movements. Motion profiles, linear or rotary speeds, press forces or tightening torques can be controlled completely independent from each other. In addition, the cap position can be monitored at the end of capping procedure in order to detect caps that did not reach their final position or slanted sitting caps. For this reason, linear-rotary motors are used in flexible cappers where the capping process is fully programmable. LinMot linear-rotary motors, combined with the drives C1100 and C1200 series, can be easily be implemented in multi-head carousel. Only motor,

logic supply and communication bus have to be supplied through slip rings on the carousel, to be wired to the individual multi head modules. As the motor cables are mounted fix, no moving cables or cable tracks are needed on the carousel, resulting in long live and long service intervals.

The linear and the rotary movements and therefore the complete capping process can be completely decoupled from carousel movement.

This guarantees a constant process quality also at different speeds or startup and shutdown of a machine. With strokes up to 300mm it is now also possible to use LinMot's linear rotary motors in cappers for voluminous bottles or aerosols with pump or spray closure in which the long suction tube is inserted vertically together with the cap. 

For more details please visit the following website:  
[www.linmot.com](http://www.linmot.com)



## LinMot, qualità costante nella servotappatura

I motori lineari rotativi di LinMot, distribuiti in Italia da Pamoco, permettono di combinare movimenti lineari e rotativi. I profili di moto, le velocità lineari o rotative, le forze di spinta e le coppie di serraggio possono essere completamente controllate in maniera indipendente una dall'altra. In aggiunta la posizione del tappo può essere rilevata alla termine della procedura di tappatura al fine di capire se il tappo non ha raggiunto la sua posizione finale oppure se si è inclinato.

Per questi motivi il motore lineare-rotativo viene utilizzato per tappatrici flessibili ove il processo di tappatura è totalmente programmabile.

I motori lineari rotativi LinMot, abbinati agli azionamenti della serie C1100 e C1200, possono facilmente essere implementati nelle giostre multatesta. Soltantanto l'alimentazione delle logiche ed il bus di comunicazione devono essere forniti attraverso i "contatti rotanti" della "giostra" collegandoli

direttamente ad ogni singolo modulo multi testa. Grazie al fatto che il cavo motore è fisso non ci sono cavi o catene portacavi in movimento sulla giostra, con il risultato di una elevata durata di vita e lunghi intervalli di manutenzione.

I movimenti lineari e rotativi e tutti processi di tappatura possono essere totalmente disaccoppiati dal movimento della giostra; questo garantisce un processo con qualità costante anche a differenti velocità od in fase di partenza o di arresto della macchina.

Con corse sino a 300 mm è ora possibile utilizzare il motore lineare rotativo in tappatrici per bottiglie di grandi dimensioni, aerosols o spray nei quali il lungo tubo di aspirazione è inserito verticalmente insieme al tappo. 

Per ulteriori informazioni consultare il sito Internet  
[www.linmot.com](http://www.linmot.com)

**pamoco**<sup>®</sup>



**VERSIONI  
AD ALBERO  
PASSANTE**

***LinMot*<sup>®</sup>**

**MOTORE  
LINEARE-ROTATIVO  
CON CONTROLLO  
DI FORZA E DI COPPIA**

Pamoco S.p.A. - Via R. Lombardi, 19/6 - 20153 Milano  
Tel. (+39) 02 3456091 - Fax (+39) 02 33104342  
e-mail: info@pamoco.it - web: www.pamoco.it

# PLP SYSTEMS offers complete and customized solutions for dosing, coating and weighing of powders and liquids

**O**ur teamwork, the technical competence and flexibility of our engineers are the key to our success. We attach great importance to being open to new ideas and unique solutions, this being an integral part of our PLP culture, but also innovation, precision and reliability.

PLP SYSTEMS continues to establish itself as one of the world leaders in the dosing of liquid components and in the micro dosing of ingredients in powder or granules, presenting to the market the most advanced technological solutions in the sector.

Both liquids and powders play a fundamental role in the creation of the final product and that is why the production processes of dosing, mixing and coating must be managed in an accurate and precise manner.

## These are some of our solutions:

MDP, Micro Dosing for Powders (powder micro dosing) is a system used for the micro dosing of different types of powder ingredients.

Size, capacity and logical function can be designed and adapted to meet customer needs.

The system is normally used as a batch dosing scale, dosing each powder individually into the weighing hopper.

Other types of configurations are possible such as loss-in-weight dosing, continuous dosing and volumetric dosing.

The MDP has been designed with the aim of achieving a smooth manufacturing process and a simple maintenance system. A various range of products such as size, grain size and physical / chemical characteristics can be processed. It has a wide dosage range, from a few grams to several kilograms and the hoopers dose up to 500 kg in just 3 minutes and the system is also able to handle special products thanks to the specific design of the individual hoppers.

The system is very compact, in fact a carousal of 12 dispensers can be housed in just 4 square meters. The manufacturing process is very simple, as the system can be supplied with the automation program



complete with safety switches, barcode readers, alarms, reports and traceability database of the production process.

## Proboera Description:

The proportional doser "ProBoera 1A" was introduced on the market to satisfy the expectations and needs of the wine sector. The technology used is the result of PLP's extensive experience in dosing liquids in various sectors.

This machine is designed for use in oenology and in the beverage sector and more specifically for the dosage of gum arabic, sulfur dioxide, enzymes, dyes, acids, flavors or other liquid additives.

The PRO BOERA can be installed just before the bottling line, after microfiltration. It identifies the flow of wine (or other drinks) and automatically adjusts the addition of additives, up to 3 at the same time. The operator will only have to set the percentage of product to add, after which the machine works in total autonomy.

## Drum Description:

The "DRUM COATER" drum coating system is a complete machine, capable of mixing in line croquettes, potato sticks, diced vegetables, oat flakes, cornflakes, puffed rice, cereals, rice, croutons, almonds, chips, walnuts, etc.

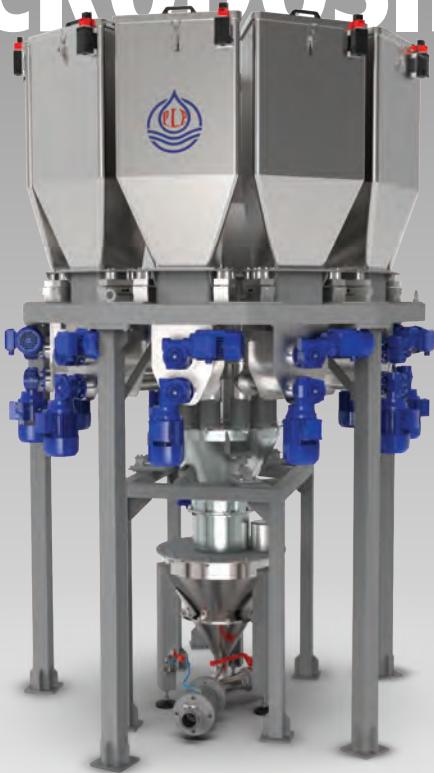
This type of system is used for the addition of liquid additives such as oil, dyes, chocolate, caramel, etc., and the addition of powder additives such as flavorings, spices, salt, dyes.

The drum has a valve system located on the discharge, which allows small batch mixes of the product with longer retention times. This guarantees excellent coverage over the entire surface, even with a high percentage of additives.

The system is designed according to the production capacity by completely dimensioning the drum. For more information, please visit our website [www.plp-systems.com](http://www.plp-systems.com)



# MICRODOSING



**PLP Systems**

**TECHNOLOGY  
IN LIQUID  
HANDLING &  
POWDER DOSING**

**PROBOERA**



## DRUM COATER



PLP Systems offers industrial systems for the micro dosing of ingredients, coating of food products and addition of micro liquids in line, all have the option of being customized according to client's needs.

PLP Systems was founded in 1980, in Lugagnano Val d'Arda Piacenza and over the years it has achieved a wealth of experience in the design and production of high-quality products, with the guarantee of skill and professionalism.

**PLP SYSTEMS SRL**

Sp21 N.303 - 29018 Lugagnano Val D'Arda Piacenza, Italy  
Tel. +39.0523.891629 - Fax +39.0523.891013

[www.plp-systems.com](http://www.plp-systems.com)

[info@plp-systems.com](mailto:info@plp-systems.com)

# A partner above the rest for the purchase and overhaul of **bottling and packaging machines**

**B**BM Service, a leading company in the bottling and packaging sector, is above the parties when it comes to providing technical advice to help you select the products with the best quality/price ratio, among the many opportunities from major manufacturers.

Often, at the beginning of a line revamping-investment, people make the mistake of buying new or used machinery without having considered a number of details, such as production targets, space, condition of the machinery, disposal of previous materials, realistic timeframes, and costs. In order to avoid any unexpected issue, it is important to have a transparent and competent partner who is able to assess the feasibility and the resources required.

Our customers also rely on us for the purchase of seemingly minor equipment, such as preform machines, homogenizers, product storage tanks, quality spare parts, and other wear material. At BBM, we leave nothing to chance.

In addition to highly-specialized counselling, our services include the provision of assembly instructions, the assistance

of specialized technicians for start-up and testing, and engineering studies to drastically reduce the energy consumption of production lines. Through specific and in-depth analyses, BBM Service will identify every possible upgrade that, applied to blow molding machines, fillers, and shrink-wrappers, right up to palletisers, will allow optimization of costs, productivity, and materials. All of this will be realized through tailor-made solutions and cost savings, and will be implemented right at the customer's premises by a team of specialized technicians. Customisation, flexibility, rapidity and constant presence are just some of the strengths that led some of the top players in the beverage sector to continue to choose BBM.

On our website **www.bbmpackaging.com** you can view the complete range of used machinery, as well as the numerous interventions that BBM is able to carry out. Contact us for free advice on your bottling and packaging machinery: our technical department will solve any problems you may have and identify the most feasible solutions for your needs. 



## Un partner super partes per l'acquisto e la revisione di **macchine di imbottigliamento e confezionamento**

**B**BM Service, azienda leader nel settore dell'imbottigliamento e del confezionamento, è al di sopra delle parti nel fornire consulenza tecnica e di ricerca sul mercato, per selezionare il prodotto che abbia il miglior rapporto qualità/prezzo tra le tantissime possibilità offerte dalle maggiori case produttrici. Spesso, all'inizio di un investimento per la trasformazione di una linea, si incorre nell'errore di acquistare di macchinari nuovi o usati senza aver considerato una serie di dettagli, come gli obiettivi di produzione, gli spazi, la condizione dei macchinari, l'eventuale smaltimento di materiali precedenti, tempistiche e costi realistici. Per evitare sgraditi inconvenienti in corso d'opera, è importante affidarsi a un partner trasparente e competente, che sia in grado di valutare la fattibilità del progetto e le risorse necessarie. I nostri clienti si affidano a noi anche per l'acquisto di attrezature apparentemente secondarie, come macchine per creare preforme, omogeneizzatori, serbatoi per lo stoccaggio prodotto e altro materiale di consumo. Noi di BBM non lasciamo niente al caso.

Oltre a consulenza altamente specializzata, tra i servizi che spesso proponiamo c'è la fornitura di istruzioni di montaggio, l'assistenza di tecnici specializzati per l'avviamento e

il collaudo e lo studio ingegneristico per ridurre drasticamente i consumi energetici delle linee produttive. Attraverso analisi specifiche ed approfondite, BBM Service identificherà ogni possibile upgrade che, applicato a macchine soffiatrici, riempitrici e fardellartici, fino alla palletizzazione, consentirà di ottimizzare i costi, la produttività e i materiali. Tutto questo attraverso soluzioni su misura, caratterizzate da risparmi in termini di costi e tempi di ammortamento ridotti, realizzate direttamente da tecnici qualificati presso la sede dei clienti. Customizzazione, flessibilità, rapidità, presenza costante sono solo alcuni dei punti di forza per cui alcuni tra i top player del settore beverage continuano a scegliere BBM.

Sul nostro sito internet **www.bbmpackaging.com** è possibile visionare la proposta completa di macchinari usati e di implementazione BBM, oltre ai numerosi interventi che i tecnici della società sono in grado di effettuare. Contattaci per avere una consulenza gratuita sui tuoi macchinari per l'imbottigliamento e il confezionamento: il nostro ufficio tecnico risolverà qualsiasi tuo problema e saprà individuare le soluzioni più fattibili per le tue esigenze. 



## TURNKEY SOLUTIONS DESIGNED FOR THE CUSTOMER

Our long-term experience in the turnkey supply of water and beverage bottling lines, plants and machinery has enabled us to acquire competence, professionalism and the highest levels of technical service.

We offer our customers specific solutions, customizations, functional modifications, for the customer and with the customer.

ASSISTANCE &  
TECH SERVICE

ENGINEERING &  
UPGRADE

QUALITY  
SPARE PARTS

OVERHAULED  
MACHINERY

# BY YOUR SIDE IN PACKAGING

**BBM**  
YOUORIENTED SOLUTIONS



# New success for AKOMAG

In the beverage industry, the automatic washing of recycled bottles has now reached a high level of specialization. In this context, works AKOMAG, company located in Soragna (PR), able to offer a varied production, which includes bottle washing machine, rinsing machine, sterilizers for glass or PET bottles, crate washer and accessories to complement. Very large is the choice of the washer, the potential of which obviously varies in base at the model, and the ranges it is from 100 to 60.000 bph. The modular structure of all installations allows to gradually increase the functions and the level of sophistication, including special washing sections and sanitizing, automatic control of process parameters, security systems, energy recovery, reduction of discharges and automatic sanitization of the parties most important from the point of view of hygiene.

## Start the washing.

At low production capacity, the range offer GENESI, available in very small dimensions in order to be inserted in any operating environment. Designed under the indication of the producers with low production capacities, the series has a simple but functional washing cycle, which lowers operating costs (water, energy, detergent) without negatively affecting cleaning bottles to recycle, the complete removal of the labels and their total evacuation outside. The particular ease of use and maintenance, increases productivity and reduces downtime.

The modularity of the GENESI series allows at the customer to "build a machine to measure", adapting it from time to time to different types of use (water, wine, oil, beer, soft drinks). Constructed in accordance with the Machinery Directive (CE), is equipped with all the accessories needed for the proper functioning: a heat exchanger built with stainless steel tubes arranged geometrically to prevent the deposit of mud or various precipitation that would compromise the performance or, alternatively, a combustion chamber built with direct burner operation. Safety guards and dust cover to protect the unloading of bottles; grouped grease; saving valve for the water network and automatic control of the presence of water in the last rinsing station; electronic speed control; electronic security on the main gearbox that stop the machine in case of overload; spray pumps with casing and impeller made in



stainless steel AISI 316 and protective filters; valves for emptying the waste paper and spray tanks; control panel adjustable, made in stainless steel; IP55 electrical plant; gauges and thermometers in visual range of the operator; setting and control of all the machine by "touch-screen". This are the main amenities that characterize the series. The GENESI machine is also arranged for the introduction of detergent and liquid additives in the bath and in the detergent tank, disinfectants and other products in the spraying tanks. Internal spraying (made with self-cleaning rotating nozzles) and external high pressure spraying are easily removable for routine cleaning and maintenance. The loading and unloading of bottles is completely automatic, and perfectly synchronized with the movement of the main chain.

## Dry cycle.

To streamline the washing cycle, the company has realized the HYDRA series, a series of fully automatic machines which comprise a first station for emptying the bottles followed by pre-washing spraying and first pre-maceration bath. This configuration helps to reduce the pollution of the detergent bath and reduce fuel consumption. The triple station for labels extracting ensures their complete detachment from used bottles, while the rotating filter displaced over the entire width of the machine ensures the evacuation outside.

The bottle washing is complete with indoor and outdoor spraying, which occurs with high-pressure cleaner distributed with rotating nozzles self-cleaning and self-centering. To complete rinsing, however, ensure the phase abatement alkalinity followed by spraying with external and internal water network. Built according to the Machinery Directive (CE) also, the series has a different predispositions that increase safety, including:

sensors for slowing down and eventually stopping the machine in case of failure or obstruction of bottles on conveyor; detergent introduction and liquid additives in the bath and other products in spray tanks; the automatic loading and unloading of the bottles is perfectly synchronized with the movement of the main chain; the economizer valve for the water network and the automatic control of the presence of water on the last rinsing station.

[www.akomag.com](http://www.akomag.com) - linkedin: Akomagsrl



sempre PROTAGONISTA  
nei GRANDI progetti



**AKOMAG**

Frazione Diolo, 15/D - 43019 Soragna (PR), Italy  
Telefono: 0524.599097 | Email: [info@akomag.com](mailto:info@akomag.com) | [www.akomag.com](http://www.akomag.com)

# Heads for **industrial washing** of containers

**M**ore than 30 years of experience in the production of cleaning heads, as well as a continuous and encouraging feedback from the customers.

This is what makes Bolondi Cleaning Heads a reliable firm and a committed partner for both low- and high-pressure washing. Our washing solutions are carefully customised with machines and plants for – but not limited to – food, cosmetic and pharmaceutical plants.

All cleaning heads and the relative accessories are characterized by a highly innovative design and represent real jewels of advanced technology. Bolondi Cleaning Heads, an ISO 9001 certified company, invests an important amount of its profits in research and development to offer increasingly in-

novative solutions for rotating washing system. Our solutions bring significant advantages to both our customers and the environment: deeper cleaning, shorter cleaning times, less water consumption and reduced use of chemical agents. As a result, washing cycles are optimized with a consequent reduction of production costs.

Bolondi Cleaning Heads is very sensitive to environmental sustainability issues, all washing heads are, in case of disposal, 98% recyclable for the same use. To facilitate the validation of the cleaning process, as well as to ensure the quality of the products on the market, Bolondi Cleaning Heads provides, upon request, the following certificates: Atex, 3.1 material certificate, Rhos-PED, FDA. 

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



## Testine per **lavaggio industriale** di interni

**P**iù di 30 anni di esperienza nella produzione di testine di lavaggio, nonché continui riscontri positivi da parte dei clienti, rendono Bolondi Cleaning Heads un punto di riferimento attendibile e un partner affidabile per soluzioni di lavaggio sia a bassa che ad alta pressione. Queste tecnologie vengono integrate con particolare cura all'interno di macchine e impianti per l'industria alimentare, cosmetica, farmaceutica e non solo.

Tutte le testine prodotte ed i relativi accessori sono caratterizzati da un design altamente innovativo e rappresentano dei veri e propri gioielli di tecnologia avanzata.

Bolondi Cleaning Heads, azienda certifica ISO 9001, investe una parte importante dei propri profitti in ricerca e sviluppo questo, per offrire soluzioni sempre più innovative di sistemi rotanti

di lavaggio. Le soluzioni adottate portano vantaggi significativi ai nostri clienti: miglior risultato di pulizia, tempi di pulizia ridotti, limitato consumo di acqua da cui derivano minori reflui da smaltire, inoltre, ridotto impiego di agenti chimici. Tutto questo porta ad ottimizzare i cicli con conseguente riduzione dei costi di produzione.

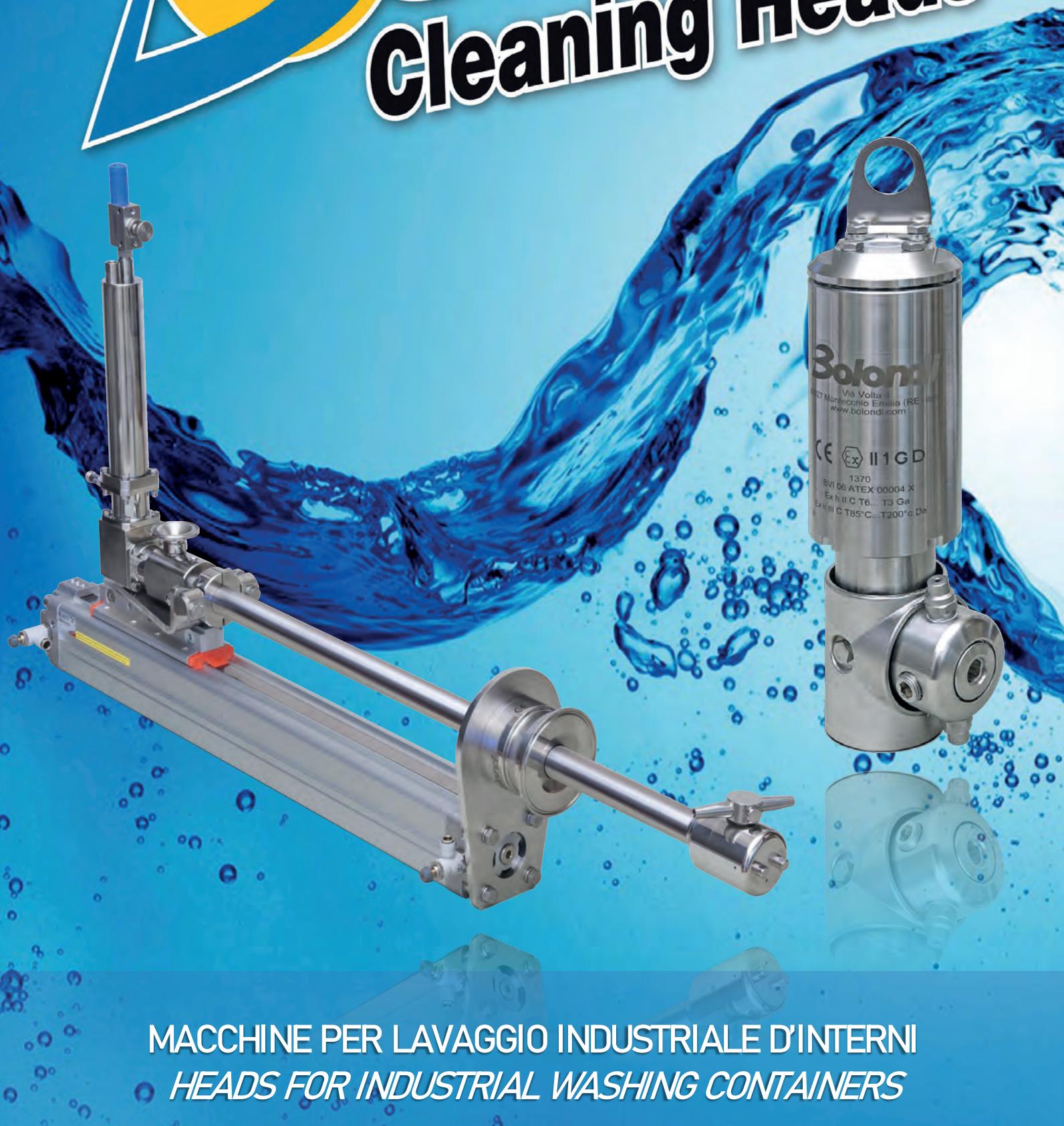
Bolondi Cleaning Heads è particolarmente sensibile ai temi di sostenibilità ambientale, tutte le teste di lavaggio sono, in caso di smaltimento, riciclabili al 98% allo stesso uso.

Per facilitare la validazione del processo di pulitura oltre che per assicurare la qualità dei prodotti immessi sul mercato Bolondi Cleaning Heads può fornire i seguenti certificati: Atex, certificato materiale 3.1, Rhos-PED, FDA. 

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

# Bolondi

## Cleaning Heads



MACCHINE PER LAVAGGIO INDUSTRIALE D'INTERNI  
*HEADS FOR INDUSTRIAL WASHING CONTAINERS*

# GRANZOTTO, a story of innovation with an eye into the future

**L**ocated in the heart of the Prosecco hills, Unesco heritage since 2019, GRANZOTTO is an Italian company based in Susegana.

In over 50 years of business GRANZOTTO has always stood out for the continuous effort to offer customers high customizable solutions, using cutting-edge technologies, specifically in the food industry, throughout the sales process.

Research, in-depth knowledge and innovation have always been the fundamental basis for its success and authenticity.

Faithful to its initial mission, with over 50 years of experience behind it, GRANZOTTO looks into the future with renewed enthusiasm, distinguishing itself for the high-level tailored solutions, for the complete management of liquid products in the food and chemical sector.

Laying at the base of GRANZOTTO experience is the development of plants for the manufacturing pro-

cess of food products. Temperature and refrigeration control, transfer and piping, product recovery and line cleaning alongside with the supply of auxiliary services and the management of the entire production site represent the best of the GRANZOTTO expertise.

The company orientation towards people's values has provided the foundation of a team with the best professionals. Each role - technical, commercial, administrative, operational - is enriched by the value and competence of capable professionals.

In over 50 years of design and production activities, GRANZOTTO has collected more than 1000 references, an average customer satisfaction rating of 4.8 / 5 and 11 European patents making the company a distinguishing mark in terms of competence, customized solutions and reliability. 

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



## GRANZOTTO, una storia di innovazione progettata nel futuro

**R**icerca, conoscenza approfondita e innovazione garantiscono lunga vita alle aziende ed elevata soddisfazione ai clienti: queste sono e sono state le linee guida di GRANZOTTO che in 50 anni di storia si è costantemente prodigata per offrire alla clientela sempre il meglio in fatto di tecnologie, prestazioni degli impianti per la gestione completa dei liquidi nelle industrie alimentari, servizi pre e post vendita. E anche ora, con oltre 50 anni d'esperienza alle spalle, guarda al futuro con rinnovato entusiasmo, affinché l'innovazione contraddistingua la propria offerta di impianti, sistemi e servizi.

GRANZOTTO è un'azienda italiana con sede a Susegana in provincia di Treviso, nel cuore delle colline del Prosecco, patrimonio Unesco 2019. La realizzazione di impianti per la manifattura di prodotti alimentari è alla base dell'esperienza GRANZOTTO. La gestione completa dei "prodotti alimentari liquidi" è parte integrante della tecnologia GRANZOTTO. In particolare il recupero prodotto e il lavaggio delle linee produttive,

il controllo temperatura e la refrigerazione, il trasporto e la distribuzione, la fornitura di servizi ausiliari e la gestione dell'intero sito produttivo rappresentano il meglio della competenza GRANZOTTO.

GRANZOTTO possiede una struttura aziendale orientata alle persone. Ogni ruolo - tecnico, commerciale, amministrativo, operativo - è arricchito dal valore e dalla competenza di professionisti capaci. Ogni singola idea, procedura, soluzione, scelta, analisi, consiglio, proposta vede la soddisfazione, la tranquillità e il successo dell'azienda cliente come obiettivo principale dell'intero team GRANZOTTO, in tutte le sue funzioni. Oltre 50 anni di attività progettuale e produttiva, più di 1000 referenze, una valutazione media della soddisfazione del cliente pari a 4.8/5, 11 brevetti europei fanno della GRANZOTTO un sicuro punto di riferimento relativamente a competenza, soluzioni personalizzate, affidabilità. 

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

# EFFICIENCY AND SUSTAINABILITY IN OVER 50 YEARS

Industrial plants and systems for the transfer, recovery of the liquid, cleaning of the production lines.

LEVER PLAN

**INDUSTRIAL PLANTS, SYSTEMS  
AND SERVICES FOR THE COMPLETE  
MANAGEMENT OF LIQUID PRODUCTS IN THE  
FOOD AND CHEMICAL SECTOR.**

Tailored solutions, from the layout of the project up to final installation

- Cip Integrated Cleaning System for production plants
- Pigging System for product recovery
- Product transfer and distribution
- Product temperature control system
- Skid for liquid product process
- Automation and management of the production plant

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



# OSTS the best services for the bottling industry

**O**STS offers the bottling industry companies the best services for production line performance improvement together with innovative solutions for handling cost reduction. The long term experience of the founders and their team, makes OSTS the best partner to contact.

**Spare parts supply:** wide range of compatible spare parts suitable for the main manufacturers' machines and systems. All our spare parts are produced by certified suppliers, following our own technical specifications.

**Modernizations and upgrades:** solving solutions by means of innovative technical proposals for all inefficiencies generated by critical parts or systems on the line which may affect performance and operational costs.

**Changing parts:** changing parts for new labels and new containers.

**Conveyors supply and accessories:** supply of conveyors of bottles, cartons, packs and pallets.

**Automation, wiring and elettric cabinets:** utilizing components of the main brands (Siemens, Allen Bradley, BR, Beckhoff etc.), OSTS can develop and realize line automation projects based on the technical specifications requested by the customer.

**Engineering and lay out:** planning of complete lines. Projects to implement or relocate pre-existing lines or parts of lines. Lay out change and replacement of existing lines.

**Diagnostic check-ups:** our specialized technicians can provide diagnostic check-ups for single machines or for complete lines. After an accurate analysis on the maintenance status, we suggest the necessary service to be undertaken, especially carrying on work-phase coordination in order to optimize timing issues.

**Maintenance:** our specialized technicians carry out ordinary and extraordinary maintenance work. 

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



## OSTS il miglior partner per l'industria delle bevande

**O**STS offre alle aziende del settore delle bevande tutti i servizi volti a migliorare e mantenere il rendimento delle linee di produzione nonché ad ottimizzarne i costi di gestione. L'indiscussa esperienza dei soci fondatori e dei suoi collaboratori fanno di OSTS il partner ideale da contattare.

**Parti di ricambio:** ricambi compatibili per macchine e impianti dei principali costruttori. I ricambi vengono prodotti da fornitori selezionati in base alle nostre specifiche tecniche.

**Modernizzazioni e upgrades:** sostituzione di parti meccaniche o dispositivi critici con innovative soluzioni tecniche che consentono di abbassare i costi operativi e migliorare le prestazioni.

**Cambi formato:** progettazione e realizzazione di attrezature per lavorare nuove bottiglie ed etichette.

**Fornitura di nastri trasportatori e accessori:** fornitura di nastri trasportatori bottiglie, cartoni, fardelli e palette.

**Automazione, cablaggi e quadri elettrici:** studio e

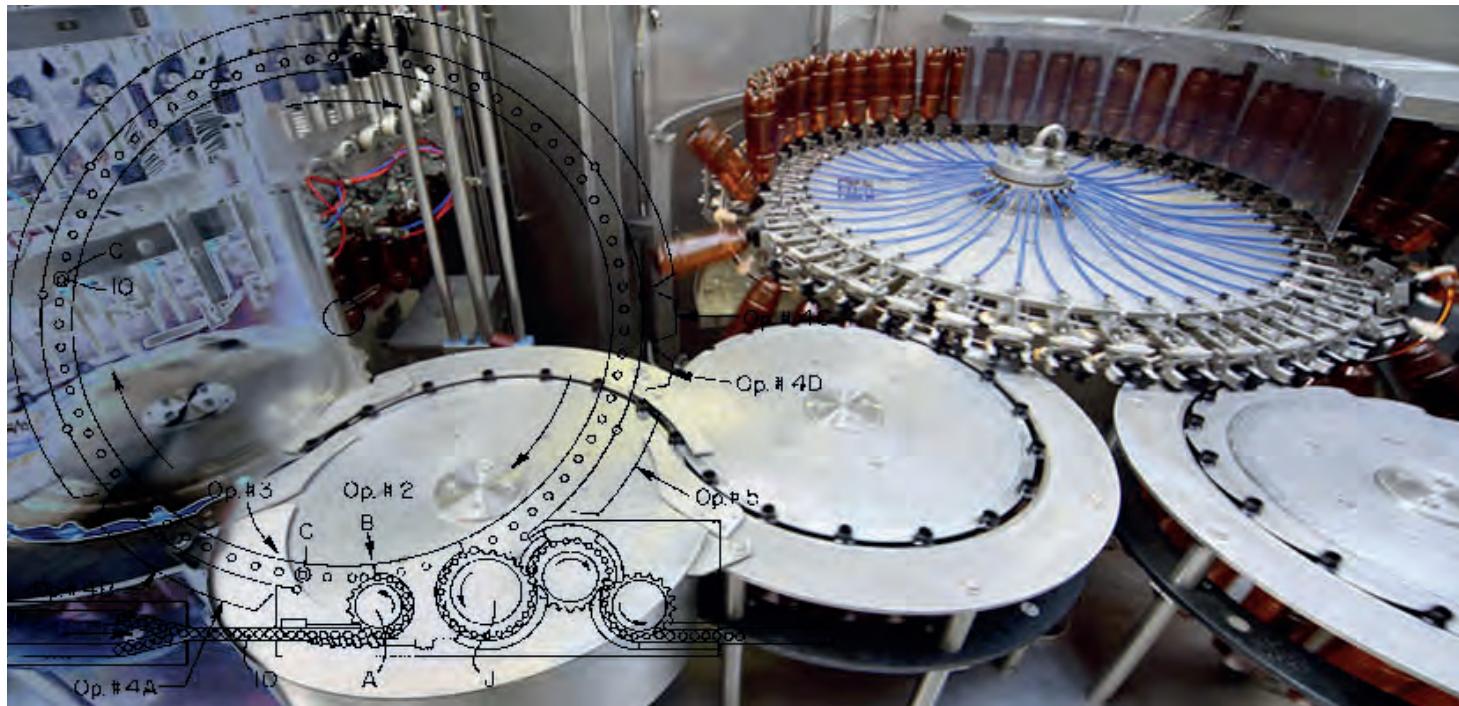
realizzazione dell'automazione di linea utilizzando la componentistica delle principali marche (Siemens, Allen Bradley, BR, Beckhoff etc.). OSTS può sviluppare e realizzare progetti di automazione sulla base delle specifiche tecniche richieste dal cliente.

**Ingegneria e layout:** progettazioni di linee complete, integrazioni e miglioramenti di linee esistenti, ricollocamento di linee o parti di esse. Fornitura di nastri trasportatori bottiglie, cartoni, fardelli e palette.

**Visite diagnostiche:** visite diagnostiche per singole macchine e per linee complete, tramite accurate ispezioni atte ad evidenziare le inefficienze di funzionamento. Diagnosi sullo stato di manutenzione e individuazione delle azioni da intraprendere per ottenere un miglior rendimento.

**Manutenzione di impianti e macchine:** manutenzioni ordinarie e straordinarie con nostri tecnici specializzati. 

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



# PRESMA, non standard technology

**P**RESMA, a leading manufacturer of multi-station injection moulding machines for thermoplastics, is the only company that produces specific models for the moulding of resin corks for enological use. The specific range for this field can count on 4 models based on productivity and final application. These machines are offered not only for the production of cylindrical wine corks, that can be personalized with raised logos on both sides, in two colours/materials, but also for 'T' closures used for spirits and drip caps for oils. For these last two models, considering the number of different versions with different dimensions and configurations, we designed tailor-made solutions equipped with high tech automation that guarantees constant production and quality of the product.

ROTO T1/24, the less productive model of the range, is offered as standard, XL and XXL that can be equipped with insert loaders, to allow the manufacturing of T Corks with heads up to 50mm diameter and 48 mm in height. Its main feature is the vertical mould holding table. It can be offered as a Hybrid or fully electric machine (except model XXL) that can reach a production, when moulding small corks, from 1200 to 1500 pieces/hour. For the higher injected volumes with longer cooling times the output decreases to 700/800 pieces/hour.

ROTO T1/48 V EL stems from the need to produce 'T' corks with the automatic loading of different size of plastic and wooden caps, without mould changing. The machine, which is equipped with 48 moulds for injecting the leg only, uses the cap as a sort of cover: its positioning is made through a double pneumatic slide. A suction cap picks up the insert and drops it onto the upper side of the carousel. During the injection process, a pneumatic cylinder mounted at the corresponding station, ensures the necessary contrast. The hinged type horizontal plasticizing unit is equipped with a vertical nozzle head, injecting from the bottom. This machine can also produce 'T' corks, without caps, as well as wine corks; it is possible to set different parameters on a certain number of stations which allows it to run two different kinds of cork at the same time. These are divided after the ejection process. The output is 1.000/1.400 pcs/ hour.

ROTO T2/48 and Roto T4/48 are respectively the mid to high performance models. Both solutions can be built as the "XL" version giving a maximum cork size of 38 mm diameter and 46 mm height. The quality of the moulded corks is guaranteed by the direct injection into single cavity tools. In the T2 model, the nozzles are aligned with the 48 single cavity mould holders on the carousel: the T4 machine is equipped with 4 nozzles positioned by 2 overlying carousels



**Non Standard  
Technology**

with a total of 192 moulds. During each injection process, Roto T2/48 produces 2 corks, Roto T4/48 ex-

actly the double. With these 2 models, it is possible to run different products such as wine corks and/or 'T'-corks in 2 or 4 colours or 1 and 2 two colour corks using different materials. If we consider single component parts, for both machines the cycle time is between 1.9 and 2.1 seconds, obtaining an hourly output of around 2500/3500 (T2/48) and 5000/7000 (T4/48).

## Two new models have recently been added to the range:

the ROTO T2 / 45 which differentiates it from the tested ROTO T2 / 48 for the number of stations, the new actuation of the mold-holder table and the new mold opening / closing system, created to meet very specific needs in the production of particular caps T for spirits. As for the others, this model is also offered in the hybrid and electric version and can also be equipped for bi-material / two-color molding and with insert".

the ROTO T-8 is a small eight stations rotary machine designed for the production of samples ensuring the same molding quality as the "older sisters". Due to the few mold-holding stations with which the press is equipped and the and the necessary cooling times, productivity is significantly lower. This version is reserved for those companies that need to do molding tests, samples or even small productions and can therefore have a dedicated press without necessarily having to do it on production presses.

All the available models can be equipped with an insert loader for 'T'-cork rigid caps and with pick-and-place units to run double-colour/double component corks in automatic (only by ROTO T2 E T4 models) mode by putting the part injected with the first component into the adjacent tool and moulding -on the second component/colour. With this system, it is possible to produce corks for sparkling wine with different densities on either side and 'T' corks with the "head" in a different colour. In the "fully electric" version, the drives of the "transfer" injection unit are with electro-motor driven by frequency converter for the plasticizing unit and with brushless motor for the injection cylinder. The table rotation is electro-mechanic.

The reliable "Rotologic" software, entirely developed by Presma, guarantees an optimum management of the machine functions and of the personalization requested by every single end user. Also, thanks to its set-up for modem and internet assisted remote service, it is possible to provide a just-in-time after sales service. 

[presma.it](http://presma.it)



**RESIN CORKS by**

**presma**  
Made in Italy



**Roto T1/24**

**Roto T1/8**



**Roto T1/48 V**



**Roto T2/45**



**Roto T2/48**



**Roto T4/48**



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



**presma**  
SPA  
Injection Moulding Machines

Via delle industrie, 8/10  
21040 Torba di Gornate Olona (VA) Italy  
Tel. +39 0331811611  
Fax +39 0331820026  
e-mail: info@presma.it - www.presma.it

**Non Standard  
Technology**  
for Thermoplastics and Rubber

# The top quality **INDUSTRIAL MIXERS**

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

## 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. 

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

**ESCHER**  
mixers

# | MISCELATORI INDUSTRIALI di alta qualità

**E**scher Mixers è specializzata nella produzione di macchine per l'impasto e la miscelazione, nei settori della panificazione e della pasticceria artigianale ed industriale. Negli anni, abbiamo maturato una conoscenza specifica che ci ha permesso di sviluppare macchine e soluzioni per le necessità di una clientela variegata e per i diversi tipi di mercato. Le nostre macchine sono notoriamente riconosciute per la loro robustezza, la loro longevità, l'accuratezza delle finiture e per la qualità dell'impasto che riescono ad ottenere.

## Macchinari per industria della panificazione

Proponiamo concetti di miscelazione a Spirale e Wendel. Entrambe le soluzioni possono essere con vasca rimovibile attraverso un sistema brevettato di bloccaggio e movimentazione del carrello MR-MW Line o con sistema di scarico inferiore MD-MDW Line con nastri trasportatori o sollevatori vasche in combinazione con sistemi automatici con movimentazione lineare e stoccaggio delle vasche di lievitazione su magazzini verticali o lineari, sistemi di impasto automatici rotativi, sistemi di recupero sfridi, sistemi con

tramoggia traslante e dispositivo a stella/ghigliottina/rulli e ghigliottina ed altre soluzioni personalizzate.

## Macchinari per industria dolciaria

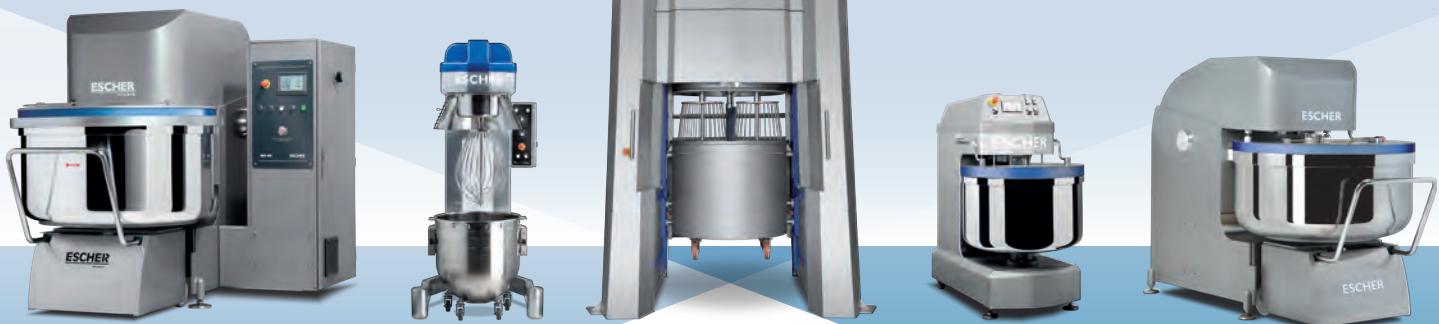
La gamma di Mescolatori Planetari con doppio utensile per l'industria della pasticceria si caratterizza per la mancanza di sistemi di lubrificazione ad olio, migliorando il livello d'igiene e riducendo la manutenzione della macchina. Una vasta gamma di utensili intercambiabili è disponibile per i diversi usi ed impasti. Per le produzioni industriali, abbiamo ideato la Linea PM-D con il movimento degli utensili indipendente, con velocità regolabili singolarmente e con possibilità di invertire il moto. Mentre la Linea PM-DB con la struttura a ponte permette l'inserimento automatico degli ingredienti, l'insufflazione d'aria per ridurre i tempi d'impasto e incrementare volume, la lavorazione dell'impasto con pressione negativa/positiva e la pulizia con sistema CIP di lavaggio. Diverse opzioni per lo scarico delle vasche sono disponibili. 

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



# ESCHER

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the Industrial Mixer  
*technology for mixing*

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# NEW SPIRAL OVEN: Tecnopool aims at innovation

**T**ecnopool, leader in the production and installation of machinery and complete lines for the heat treatment and processing of food products, hasn't stopped aiming at innovation, even in this complex moment in history. Despite the ongoing pandemic and today's complicated geopolitical situation, Tecnopool continues to offer the best technological solutions to satisfy any customer request in a timely manner. Aiming at innovation means improving and streamlining one's products. With this in mind, the Padua-based company has further developed its spiral oven, the flagship of its range. Tecnopool believes in the enormous potential of this product and the many benefits it can offer its customers who, in addition to requiring industrial production levels, also demand flexibility in terms of both manufacturing capability and variety of products to process. For this reason, the Tecnopool spiral oven represents a true technological step forward in the industry. In an uncertain socio-economic scenario, where business paradigms are being redesigned, focus on the customer is key. For Tecnopool, this commitment has translated into a development agenda centered on connectivity and digitalization, to enable customers to enjoy many services: re-

mote assistance, spare parts purchasing and information on up and running installations. Among Tecnopool's priorities there is also the will to excel in the after-sale service. "An indispensable service for the continuity and fluidity of the industrial process that guarantees equipment efficiency in the long term," says Fabrizio Korošec, CEO of Tecnopool S.p.A. - "Furthermore, all our machines are compatible with Industry 4.0 requirements: this underlines the great attention that Tecnopool puts into sustainability and energy savings, aspects that are essential for avoiding raw material waste, increasing equipment production efficiency and minimizing energy consumption."

Tecnopool is an integral part of the TP Food Group, which consists of various companies in the food processing industry. Thanks to a strong synergy, it provides complete automated lines at the service of the bakery sector: highly technological lines, with tailored design and construction, where quality excellence is the priority. In fact, all the equipment can be tried first hand by the customer in a dedicated Test Room, as a mark of guarantee in terms of performance. 

[www.tecnopool.it](http://www.tecnopool.it) - [www.tpfodgroup.com](http://www.tpfodgroup.com)

## NUOVO FORNO A SPIRALE: Tecnopool punta sull'innovazione

**T**ecnopool, l'azienda leader nella produzione e installazione di macchinari e linee complete per il trattamento termico e la trasformazione dei prodotti alimentari, anche in un momento storico complesso come quello che stiamo vivendo, non smette di puntare sull'innovazione. Nonostante il perdurare della situazione pandemica e l'attuale complessa situazione geopolitica, Tecnopool continua a presentare le migliori soluzioni tecnologiche per rispondere in maniera sempre più puntuale ad ogni esigenza del cliente. Puntare sull'innovazione significa migliorare ed efficientare i propri prodotti. In quest'ottica, la realtà padovana ha sviluppato ulteriormente il suo forno a spirale, prodotto di punta della gamma aziendale. Tecnopool crede nell'enorme potenzialità di questo prodotto e nei benefici che può portare ai clienti. Una clientela che, oltre a richiedere livelli di produzione industriali, necessita allo stesso tempo di flessibilità in termini di capacità produttiva e di varietà di prodotti da processare. Il forno a spirale Tecnopool rappresenta, quindi, un vero passo in avanti tecnologico nell'industria. In uno scenario socio economico incerto, in cui si stanno ridisegnando i paradigmi di business, l'attenzione al cliente diventa prioritaria. Un impegno che, per Tecnopool, si è tradotto in un programma di sviluppo

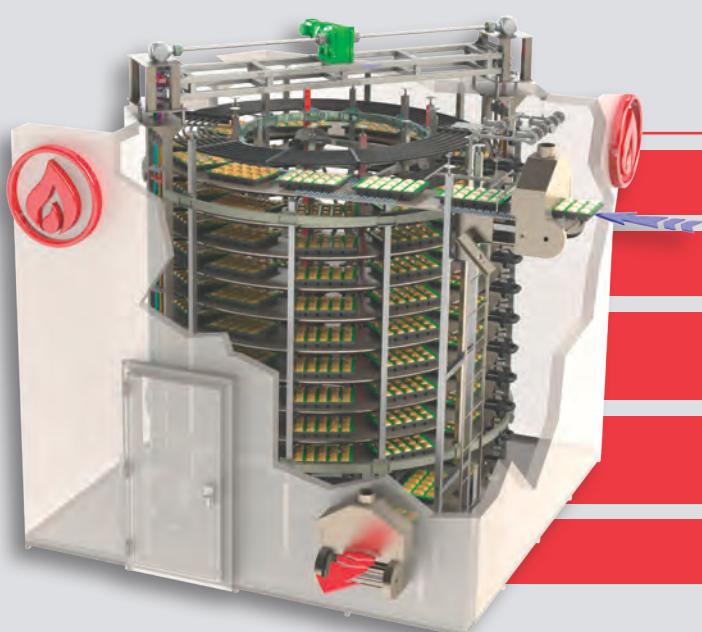
della connettività e digitalizzazione che consente ai clienti di beneficiare di molteplici servizi: assistenza da remoto, acquisto dei pezzi di ricambio e informazioni sugli impianti in servizio. Tra le priorità di Tecnopool anche la volontà di eccellere nel post-vendita. "Un servizio indispensabile per la continuità e la fluidità del processo industriale che si fa garante dell'efficienza dell'impianto nel lungo periodo - spiega Fabrizio Korošec, CEO di Tecnopool S.p.A. - Inoltre, tutti i nostri macchinari sono compatibili con i requisiti dell'Industria 4.0: questo sta ad indicare la grande attenzione che Tecnopool dedica alla sostenibilità e al risparmio energetico, aspetti fondamentali per evitare lo spreco di materie prime, aumentare l'efficienza produttiva degli impianti e minimizzare il consumo energetico". Tecnopool è parte integrante di TP Food Group, composto da diverse aziende del food processing che, grazie ad una forte sinergia, è in grado di fornire linee complete automatizzate a servizio del settore della panificazione. Linee altamente tecnologiche progettate e costruite in maniera sartoriale in cui l'eccellenza qualitativa diventa una priorità. Tutti gli impianti, infatti, possono essere testati dai clienti direttamente in una Test Room, come sigillo di garanzia anche in termini di performance. 

[www.tecnopool.it](http://www.tecnopool.it) - [www.tpfodgroup.com](http://www.tpfodgroup.com)



The only limit  
is our customer's  
**IMAGINATION**

We design, develop and implement innovative and customized solutions for the food processing industry: high-performance systems for your business



### Spiral Oven

Increased thermal efficiency

Energy savings

Easier cleaning and maintenance operations

Perfect baking curve for all types of products

Integrated steam system



**TECNOPOOL**  
PART OF TP FOOD GROUP

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

# EUROPA: professional bakery, pastry and pizza ovens

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

The strong entrepreneurship of the company's management, the long experience of a dynamic team of qualified technicians and the professional competence of a closely-knit workgroup always ready to foresee the real market requirements, permitted to grow up rapidly and establish itself over the main international markets.

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

Over the years, EUROPA has consolidated worldwide its own position thanks to a constant renewal of the range with increasingly more advanced products. It continues to grow year by year, increasing its presence both in Italy and abroad, relying on a strong mark which means quality and modernity.

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

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

The "Black Line" presents a wide range of solutions for large and regular production, including:



electric deck ovens, steam tube deck ovens, both traditional and evolved rotary rack ovens, multi-loading deck ovens and provers.

It features two models of rotary rack oven: the traditional GALILEO, with rear heat exchanger, and the evolved JOBS, with side heat exchanger. Furthermore, both series have two different versions, the DIGIT and the PRO ones, to satisfy all customers' requirements. Among its many characteristics, the standard DIGIT version comes with digital control panel, 2-speed baking fan, weekly programmable ignition system, motorized steam damper and stainless-steel outer panels. The PRO version, instead, has the electromechanical control panel, manual steam damper and 1-speed baking fan. However, regardless their differences,

GALILEO and JOBS have several common qualities, such as: solid structure, refined design, improved technology and surprising recovery times.

The "Green Line" presents multiple products for small production, regular production, bakery cafés and horeca. It includes electric modular deck ovens, compact rotary rack ovens, mini-rotary rack ovens, convection ovens, combined solutions and provers. Among the products of the new "Green Line" series, the main ones are those composing the BELL and COOPER series: ultra-compact rotary rack ovens for bakery and pastry products.

Thanks to their modular structure, they can be installed in less than 2 hours, they can pass through common doors and they can be fitted into premises with very low ceilings.

The special "FREESTYLE" version (patented) allows reducing the consumptions from 33% to 66% when the baking of a complete rack is not needed: you can decide whether to bake 5, 10 or 15 trays and thus to use 1/3, 2/3 or 3/3 of the power. Stainless steel massive structure, modern design, excellent baking quality, versatility and friendly use, are subjects that make the BELL and COOPER series suitable for all customers expecting great performances from a small oven.

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

# ESCHER

mixers



the Industrial Mixer  
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# LAWER excellence in dispensing systems

**L**awer means assurance of accuracy, repeatability, traceability, security, efficiency, saving and know-how protection. Lawer supplies the industry with products, solutions and services to increase the reliability, safety and efficiency of dosing and dispensing operations for powders and liquids micro-ingredients. Lawer covers a market position in which it is leader as global product and solution provider and it sets strong and high standards in all areas of its business. That is reflected in the company motto: "the true accuracy". Lawer has more than 50 years' experience in supporting the industry to ensure the highest quality of the products. Its ability to do so is based on the "Italian quality" of its products and services combined with continuous investment in developing leading technology. As a result, more than 2,500 customers put their trust in this company having allowed it to supply them with thousands of systems and solutions during its long history. Via a world-wide presence, Lawer stands beside its customers around the globe and through the whole life cycle of its products, from the assistance with selecting the right equipment, design-in support, installation and after-sales service. Lawer is a global automatic dosing and dispensing systems manufacturer based in Biella area, providing products for various industries as textile, cosmetics,

painting/coating, food, plastic and rubber. Lawer strongly invests in quality and excellence, service, engineering support, after-sales service, assistance and innovation, and it encourages and facilitates a company culture of systematic and sustainable creativity and innovation. Lawer provides automatic powder dosing systems with single scale technology, double scale technology and multi scale technology to organize production in an innovative way by automatically weighing the powder micro-ingredient components of recipes and batches in different processes of the food preparation industry. For applications in small-medium size laboratory, Lawer offers different models of UNICA systems: **UNICA TWIN** - 100 l capacity silos /single or double scale /12-24 or 36 silos. **UNICA HD** - 50 l capacity silos /single scale /8-16 or 24 silos. **UNICA MD- SD** - 18-36 / 12-24 l capacity silos single scale/3 silos. For application in industrial production, Lawer provides systems with high productivity and efficiency. **SUPERUNICA** fully automatic weighing system / silos capacities (300, 150, 100 and 50 l) / single scale technology. **SUPERSINCRO** automatic dosing operations in automatic thermoformed bags consisting of tubular films/multi scale technology. 

[www.lawer.com/en/](http://www.lawer.com/en/)



## LAWER: eccellenza dei sistemi di dosaggio

**L**awer fornisce prodotti, soluzioni e servizi all'industria per aumentare l'affidabilità, la sicurezza e l'efficienza delle operazioni di dosaggio e distribuzione per i micro-ingredienti in polveri e liquidi. La sua posizione di mercato come fornitore leader a livello globale di prodotti e soluzioni insieme all'obiettivo di stabilire standard rigorosi in tutte le aree della sua attività, si riflettono nel motto aziendale: "la vera precisione". Lawer ha più di 50 anni di esperienza nel supportare i clienti per garantire la massima qualità dei prodotti. La sua capacità di farlo è basata sulla "qualità italiana" dei suoi prodotti e servizi, unita al continuo investimento nello sviluppo di tecnologie all'avanguardia. Di conseguenza, più di 2500 clienti hanno riposto la loro fiducia in questa azienda e le hanno permesso di fornire loro migliaia di sistemi e soluzioni durante la sua lunga storia. Grazie alla presenza in tutto il mondo, Lawer è accanto ai suoi clienti durante tutto l'intero ciclo di vita dei prodotti, dall'assistenza alla scelta delle attrezzature giuste, al supporto di progettazione, all'installazione e al servizio post-vendita. Lawer è un produttore globale di sistemi di dosaggio e distribuzione automatici con sede a Biella, che fornisce prodotti per vari settori industriali come: tessile, cosmetici, vernici, alimentare, plastica e gomma. Lawer

investe costantemente in qualità ed eccellenza, servizio, supporto tecnico, assistenza post vendita e innovazione e incoraggia e facilita una cultura aziendale di creatività e innovazione sistematiche e sostenibili. Lawer fornisce sistemi automatici di dosaggio polveri con tecnologia a bilancia singola, tecnologia a doppia bilancia e tecnologia multi-bilancia per organizzare la produzione in modo innovativo pesando automaticamente i micro-ingredienti in polvere di ricette e lotti in diversi processi dell'industria di preparazione degli alimenti. Per applicazioni in laboratori di piccole e medie dimensioni Lawer offre diversi modelli di sistemi UNICA: **UNICA TWIN** - silos di capacità 100 l / bilancia singola o doppia /12-24 o 36 silos. **UNICA HD** - silos di capacità 50 l / bilancia singola / 8 o 24 silos. **UNICA MD-SD** - silo 18-36 / 12-24 l / bilancia singola / 13 silos. Per l'applicazione nella produzione industriale Lawer fornisce sistemi ad alta produttività ed efficienza. **SUPERUNICA**, sistema di pesatura completamente automatico/capacità silos (300, 150, 100 e 50 l), tecnologia a bilancia singola. **SUPERSINCRO**, dosaggio automatico in sacchi termoformati costituiti da film tubolari / tecnologia multi bilancia. 

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



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true Accuracy

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scale weighing systems

ACCURACY  
REPEATABILITY  
TRACEABILITY  
SUSTAINABILITY

# let's weigh!



# ITALIAN CREATIVITY

## for your unique project

**W**aves Project is an Architecture and Interior Design Studio established in Milan in the early nineties by Stefano Napolitani, a naval architect trained in Great Britain and New York where he has empowered his all Italian talent.

Waves Project designs apartments, villas, hotels, restaurants, and yachts.

The company achieved remarkable success in transforming large areas into New Concept Living Places.

It designs really personalized interiors with unique Italian touch always with energetic savings.

EVERY PROJECT HAS TO RESPECT THE ENVIRONMENT.

EVERY SPACE HAS TO RESPECT THE QUALITY OF YOUR LIVING

### This is the mission.

This is why the goal of every job of Waves Project is to express their client's desire, realized by the unmistakable Italian creativity, in the complete respect of nature.

Waves Project believes in the respect of the environment.



This is not only concerning for energy saving but also for the quality of people's life.

Building New Concept Living Place means having places with a mix of different functions: home, office and services altogether.

The place where you work in the same place where you live.

This means saving your time for your life. Avoiding pollution.

This means again, living in peaceful countryside, surrounded by all necessary services: security, fitness activities, golf course, shops, bars and restaurants...

### THE ITALIAN TALENT FOR YOUR OWN PROJECT

Realizing unique projects, able to fit with the environment and client desires is a challenge Waves Project would like to collect.

A big building or a restaurant.

Your home interior or your villa...

Your desire is realized with the Waves Project style. An all-Italian style, of course.

[www.waves-project.it](http://www.waves-project.it)



[www.waves-project.it](http://www.waves-project.it)

[waves@waves-project.it](mailto:waves@waves-project.it)



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10 Kertész Street, 2000 Szentendre, Hungary

# ICI CALDAIE, since 60 years your experts in solutions of excellence

**I**CI CALDAIE is a company founded in 1958 which has always focused on energy management and heat production, and has become a leading point of reference among the companies operating in the sector of steam generators for industrial processes and heating. Our headquarters and representation offices in Russia, Belarus, Kazakhstan, Romania, Poland, UK, USA, China and Singapore and our longstanding official dealers in many other countries of the world enable us to be close to the customers who choose our solutions and to accompany them with competence through the study, dimensioning or renewal of their plant.

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

- performances superior to 100% also for steam generators, thanks to the exploitation of technologies of condensation of gases, deriving from our know-how in the commercial sector, with a yearly reduction of

fuel consumption up to 22%;

- reduction of yearly electricity consumption up to 90% thanks to the internal design of integrated systems and to the competence in our proposals of revamping and optimisation of existing plans;
- Nox emissions <18 mg/Nm due to several R&D projects and to the cooperation with international partners;
- the possibility to work automatically and safely with no need of supervision;
- user friendly use and control;
- the option of remote monitoring in order to optimize the service operation with no need of on-location technical interventions

We have developed specific products for dedicated applications in the food industry, integrated systems able to satisfy even the largest demand for steam, with solutions complete and tailored to this sector. 

Follow us on LinkedIn or at [www.icicaldaie.com](http://www.icicaldaie.com)



## ICI CALDAIE, da 60 anni specialisti in soluzioni di eccellenza

**I**CI CALDAIE è un'azienda fondata nel 1958 da sempre focalizzata nella gestione energetica e nella produzione del calore, diventata punto di riferimento tra le aziende operanti nel settore dei generatori di vapore per processi industriali e riscaldamento. La nostra presenza con sedi dirette e uffici di rappresentanza in Russia, Bielorussia, Kazakistan, Romania, Polonia, Gran Bretagna, USA, Cina e Singapore, e storici distributori ufficiali in svariati altri paesi del mondo ci permette di essere vicini ai clienti che scelgono le nostre soluzioni ed accompagnarli con competenza nello studio, dimensionamento o rinnovamento dell'impianto.

**I nostri generatori sono apprezzati nel mondo perché hanno dimostrato:**

- rendimenti superiori al 100% anche per generatori di vapore, grazie allo sfruttamento delle tecnologie di condensazione dei fumi derivanti dal know how nel settore commerciale, con conseguente riduzione dei consumi di combustibile annui fino al 22%;

- riduzione dei consumi elettrici annui fino al 90% grazie alla progettazione interna di sistemi integrati ed alla competenza nelle proposte di revamping ed efficientamento di centrali esistenti;
- emissioni di NOx < 18 mg/Nm<sup>3</sup> grazie a svariati progetti in ambito R&D e alla collaborazione con partner internazionali;
- possibilità di funzionare in maniera automatica e sicura senza la necessità di supervisione;
- semplicità di uso e regolazione;
- possibilità di essere supervisionati da remoto in modo da ottimizzare le operazioni di assistenza senza la necessità di interventi dei tecnici sul posto.

Abbiamo sviluppato prodotti specifici per applicazioni dedicate all'industria alimentare, sistemi integrati in grado di soddisfare anche le richieste di vapore più gravose, con soluzioni complete progettate su misura per questo settore. 

Seguici su LinkedIn o su [www.icicaldaie.com](http://www.icicaldaie.com)

# YOUR EXPERIENCE. OUR TECHNOLOGY.



## Steam and superheated water boilers for food industry

Whatever your specific sector in the food and beverage industry, your treasure is the recipe and results you've achieved after years of research and innovation, searching for the best ingredients and processes. Considering the way you transfer heat to your product, how you clean, how you sterilize, will all make the difference and contribute to achieve the result you are looking for. For 60 years we have worked to innovate and develop our solutions for the food and beverage industry, with an holistic approach which includes the knowledge of your specific requirements. Your experience. Our technology. Amazing results.

# MH MATERIAL HANDLING SPA

## conveyors and more

# M.H.

Material Handling Spa offers conveyors and handling solutions for food and pharmaceutical packaging lines, starting from conveyor belts to the most complex buffering systems as well as merger and sortier devices.

The founding partners began their experience in industrial automation in 1979, finally opening MH in 1986. The company still benefits from their forty years of activity in many different markets: automotive, servicing machine tools, assembly lines and of course packaging lines for food and pharmaceutical, which represent the company's core business over the last thirty years.

The added value of the know-how accumulated so far is made available to customers starting from the

first contacts by means of an assessment of the initial situation of the customer's lines or a preliminary analysis of the projects, with the aim of optimizing the costs and benefits ratio.

The engineering department uses 3D CAD to develop the projects with the aim of obtaining a representation of the machines as realistic as possible, so as to minimize any changes during installation. Thanks to the diversified network of industrial partners, MH is able to develop turnkey solutions for its customers, receiving products from the process machines and conveying them through all the stages of the packaging up to the logistics warehouse. 

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



# MH MATERIAL HANDLING SPA

## nastri trasportatori e dintorni

# M.H.

Material Handling Spa offre soluzioni di trasporto e manipolazione dei prodotti per le linee di confezionamento alimentare e farmaceutico, partendo dai nastri trasportatori fino ai più complessi dispositivi di accumulo, unificatori e smistatori.

I soci fondatori hanno iniziato la loro esperienza nell'automazione industriale nel 1979, aprendo infine MH nel 1986. L'azienda beneficia ancora oggi di quarant'anni di attività in molteplici mercati: automotive, asservimento a macchine utensili, linee di assemblaggio e ovviamente linee di packaging alimentare e farmaceutico, che rappresentano il core business dell'azienda negli ultimi trent'anni.

Il valore aggiunto del know-how fin qui accumulato viene messo a disposizione dei clienti già a partire dai primi contatti per mezzo di un assesment della situ-

azione iniziale delle linee del cliente o di una analisi preliminare dei progetti, con l'obiettivo di ottimizzare il rapporto tra costi e benefici.

Il reparto di ingegneria si avvale di CAD 3D per sviluppare i progetti con l'obiettivo ottenere una rappresentazione delle macchine quanto più realistica possibile, in modo da consentire di ridurre al minimo eventuali modifiche in fase di installazione.

Grazie alla diversificata rete di partners industriali MH è in grado di sviluppare per i propri clienti soluzioni chiavi in mano prendendo in consegna i prodotti dalle macchine di processo e accompagnandoli attraverso tutte le fasi del confezionamento fino ad arrivare al magazzino logistico. 

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



## CONVEYORS



MH is an Italian Company with 30 years of experience in engineering and building conveyor lines for food packaging. Its 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.

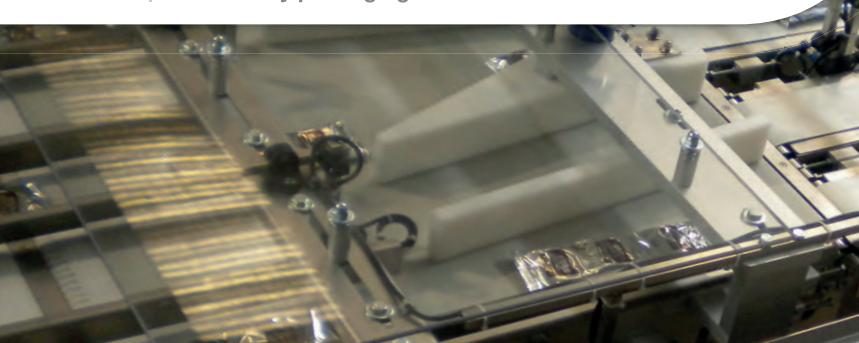


BAT BUFFER

## 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



# GAM INTERNATIONAL :

## thirty-five years of made in Italy quality

**Q**uality of the components, customer service, time reliability. Our company was born thirty-five years ago in order to propose to the Italian and international markets professional catering equipment which would distinguish itself for its features.

**Growing with customers.** Another important feature of the company surely is the long experience matured close to those who use, day after day, our machines. That's why we know, for example, that it is very important to assure to the customers a fast and complete service during the years. But not only. Thanks to the valuable suggestions of those who use our mark, the design department is able to plan equipments not only more accurate for material and technical solutions, but also more careful to those details which in every condition improve their practicality and safety.

**A real italian quality.** In this way, GAM International mark represents for our customers a guarantee of another advantage: the unique and unrepeatable value

coming from the experience of Italian restaurateurs and pizza makers, known worldwide for the passion and the attention they use for their creations. An incomparable heritage of knowledge, that our company faces every day, becoming the ideal partner for those who want to reach the excellence.

### **GAM INTERNATIONAL BECOMES AWARE AND**

**AIMS TO THE GREEN.** Always sensible to environment themes, the R&D department of GAM International looks continuously for innovative materials and technical solutions to be used in the products. The target is to grow manufacturing cutting-edge machines that have to be user-friendly, safe and with the lowest possible impact on the environment. We strongly believe that every little improvement on a large scale is the only tool we have to pursue the target of environmental sustainability, therefore we aim to manufacture hi-efficiency machines. 

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



# GAM INTERNATIONAL :

## trentacinque anni di qualità made in Italy

**Q**ualità dei componenti, servizio ai clienti, affidabilità nel tempo. La nostra azienda nasce trentacinque anni fa per proporre al mercato italiano ed internazionale attrezzi professionali per la ristorazione che si distinguessero per le loro caratteristiche.

**Crescere con i clienti.** Altra caratteristica importante dell'azienda è sicuramente la lunga esperienza maturata accanto a chi utilizza, giorno dopo giorno, le nostre macchine. Ecco perché sappiamo, ad esempio, che è molto importante assicurare ai clienti un servizio rapido e completo negli anni. Ma non solo. Grazie ai preziosi suggerimenti di chi utilizza il nostro marchio, l'ufficio progettazione è in grado di progettare attrezzi non solo più accurate per materiali e soluzioni tecniche, ma anche più attente a quei dettagli che in ogni condizione ne migliorano la praticità e la sicurezza.

**Una vera qualità italiana.** In questo modo il marchio GAM International rappresenta per i nostri clienti una garanzia di un altro vantaggio: il valore unico

ed irripetibile derivante dall'esperienza di ristoratori e pizzaioli italiani, conosciuti in tutto il mondo per la passione e l'attenzione che dedicano alle loro creazioni. Un patrimonio di conoscenze ineguagliabile, che la nostra azienda affronta ogni giorno, diventando il partner ideale per chi vuole raggiungere l'eccellenza.

### **GAM INTERNATIONAL DIVENTA CONSAPEVOLE**

**E MIRA AL VERDE**. Sempre sensibile alle tematiche ambientali, il reparto R&D di GAM International ricerca continuamente materiali innovativi e soluzioni tecniche da utilizzare nei prodotti. L'obiettivo è quello di far crescere la produzione di macchine all'avanguardia che devono essere facili da usare, sicure e con il minor impatto possibile sull'ambiente.

Crediamo fortemente che ogni piccolo miglioramento su larga scala sia l'unico strumento di cui disponiamo per perseguire l'obiettivo della sostenibilità ambientale, per questo puntiamo a realizzare macchine ad alta efficienza. 

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

# THIRTY-FIVE YEARS OF MADE IN ITALY QUALITY

**Quality of the components, customer service, reliability and sustainability over time.**

Always sensible to environment themes, the R&D department of GAM International looks continuously for innovative materials and technical solutions to be used in the products. The target is to grow manufacturing cutting-edge machines that have to be user-friendly, safe and with the lowest possible impact on the environment.

GIANNI DONATTI

PIZZA AND BAKERY EQUIPMENT

DISHWASHERS AND WAREWASHERS

FOOD PREPARATION EQUIPMENT



35°  
1987-2022

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international

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# MACFRUT 2023



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