# Sachet and stick solutions for the food industry



**Clever** Technology



# We have been crafting packaging machinery for the food industry since 1965.

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Universal Pack is an international point of reference when it comes to the design and manufacture of vertical machines and fully automatic lines for single dose packaging in the food, pharmaceutical, chemical and cosmetic industries. Thanks to the continuous exchange of information with our customers, with always an eye on the needs of end consumers, we can offer cutting-edge solutions for any type of flexible packaging: stick-packs, sachets sealed on all four sides, shaped packs and cartons.

NERCOL

VESCAFE

ficiency, reliability

CNC. All is interconnected by means of an OPC (Open Platform Communications) protocol to guarantee ultimate precision of components and constant availability of spare parts. Project management is based on an internal process that allows information to





### Efficiency, reliability and experience are our strong points.

In over 50 years spent on the field, we have built a know-how that can now offer proven solutions to pack food products. Universal Pack produces state of the art technology for primary and secondary packaging. Our systems are built in compliance with a 4.0 logic for interconnection of processes and centralisation of information. Our aim is to guarantee total traceability of materials and high standards of quality in terms of efficiency, reliability and durability. We build over 80% of the parts in-house, thanks to the best the market has to offer in design software and to a production facility with the latest generation be shared, design reviews to be immediately effective and saved and customers to be constantly informed on the latest updates. Before leaving our production facilities, each machine undergoes stringent quality checks, heavy duty tests and Failure Mode and Effect Analysis (FMEA), which focus on granting the required performance and the maximum level of reliability, safety and integration with the customer's MES (Manufacturing Execution System) for analysis of big data. Today, Universal Pack's ALFA (stick-packs), GAMMA (sachets sealed on 4 sides), THETA (sachets sealed on 4 sides) and DELTA (cartons) series, are synonymous of Made in Italy quality all over the world.









# Stick-pack technology







### Fast and accessible

Our technology for packaging stick-packs has been designed to fulfil the highest production standards both in terms of quality and of speed. It also guarantees the maximum level of modularity when it comes to size changeovers and accessibility for cleaning and maintenance. Design based on principles of hygienic design and on the possibility to isolate the packaging environment allows us to build compact machines, made of stainless steel, to provide adequate solutions to the hygienic issues of the sector and for the intended uses, thanks also to the possibility to handle any kind of laminated film. Special attention has been dedicated to the use of multi-layer recyclable materials.



Stick-packs are recommended for packing powders, granules, liquids and viscous products in single dose format. This type of package offers an excellent level of flexibility in terms of size and design: in addition to a broad variety of different shapes, it can be customised to create packs with a great visual impact. The possibility to use a wide range of laminated film types allows you to obtain the maximum packaging quality and the highest standard of protection of contents.



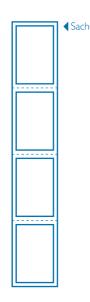
## Sachet technology

Sachets sealed on four sides are ideal for packing powders, granules, pastes, liquids and viscous products as well as tablets. A wide range of sizes and customisation options makes it easy to find suitable solutions for any technical and aesthetic requirement. Thanks to the great variety of materials that can be used for the package, finding the right option for protection and preservation of the content is simple.

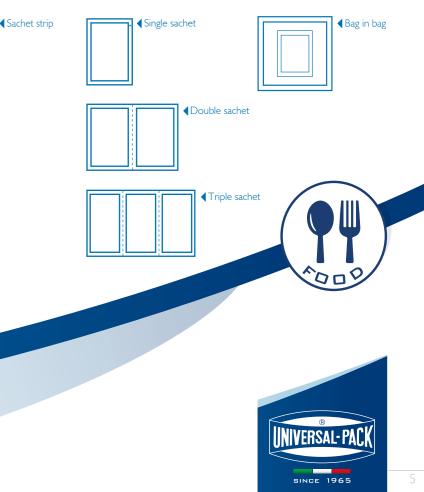


### Clean and accurate

Gamma and Theta vertical continuous motion packaging machines are the expression of Universal Pack technology for 4-side-seal sachets. These are automatic machines designed to offer a high production speed. They call for less maintenance with respect to the plate technology, they are easy to access for cleaning and allow for very quick changeovers. Compact machines, made of stainless steel, designed in compliance with the most stringent hygienic design criteria for the food and pharmaceutical industries. They can work with any kind of laminated product and feature an isolated packaging environment. Special attention has been dedicated to the use of multi-layer recyclable materials.



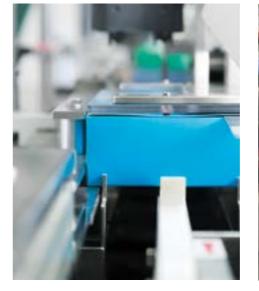




# Secondary packaging technology



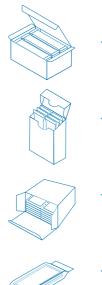






### Simple and solid

Compact automatic cartoning machines and carton forming and closing systems of the DELTA series have been designed to combine a high production speed to the utmost ease-of-use and easy accessibility for cleaning and maintenance. Universal Pack is the single supplier of complete lines, thanks to its exceptional experience in engineering customised solutions for primary and secondary packaging. The connecting units for stacking and counting are entirely made in-house and fitted with any customized device to accomodate our customer's needs, such as on edge placement and independent countings. Furthermore, our machines can be connected to ends of line from other suppliers.



Our expertise in the field of automatic cartoning machines for the food industry allows us to handle any type of carton, from flat blanks to pre-glued cartons. Great flexibility in handling different sizes and diecuts, added to maximum compatibility for interfacing other with end-of-line systems (internal separators, leaflets, barcodes, tamper-evident seals and so on) are the strong points of Universal Pack secondary packaging technology. Other solutions of this kind such as flow-pack, pouches and american boxes can also be provided.

#### Casket opening

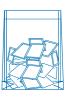
◀ Head opening

◀ Side opening

Flowpack



American box



Pouch





# Dosing systems

Patented Universal Pack dosing systems are the result of deep knowledge of the products physical characteristics acquired through time (liquids, pastes, gels, powders, granules and tablets) and the intense reseach in the in-house laboratory. All our products are analysed in our lab and are inserted in a database that is constantly updated and that is at the disposal of the R&D department for tests on pilot devices under development. Touch screen technology installed on the weighing and dosing units grants repeatability of all parameters.

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### Accurate and stable

Universal Pack machines are designed and built to guarantee high standards of accuracy and stability. They can accommodate different dosing units with micrometric dynamic or static weighing systems (electronic scales provide immediate feedback to the dosing unit that is therefore automatically adjusted) allowing for maximum dosing accuracy. They are equipped with sophisticated CIP systems for cleaning and each mechanical part in contact with the product is made using certified and traceable materials. All machines components must go through and pass very strict quality control checks before being declared suitable for assembly by the in-house Quality Control Centre.















## Cleaning systems

Patented Universal Pack CIP systems have originated from the long-lasting product research and the extensive packaging engineering experience. For this instance the Technical department is constantly researching and testing on field the most suitable design based on the properties of a given product.





### Simple and hygienic

Universal Pack machines are built to guarantee the highest hygienic level in the simplest manner. The R&D department has designed and developed automatic CIP systems for cleaning the inner parts of pipes, vessels, processing equipment, filters and associated fittings. As a matter of fact these systems ensure the full equipment cleaning without the need for disassembling. Moreover, COP (clean out of place) systems can also be provided. These solutions are aimed to reduce machine downtime by providing ready-to-work spare units. Any operator can then thouroughly carry out all the steps of a deep cleaning procedure. All cleaning systems are designed and built abiding by EHEDG guidelines and 3-A sanitary standard.

The next hygienic level available implies Ultraclean technology. This solution is equipped with laminar flow to prevent contamination of the product area, by isolating the dosing and forming groups from the external environment. However, the hygienic proposal is not limited to the product to be dosed, but also extended to the packaging: decontamination and sterilization lamps ensure the highest hygienic level of the laminated film. The choice is yours. Concerning the machine body another popular provision lies in foamable and washable forming and sealing groups.





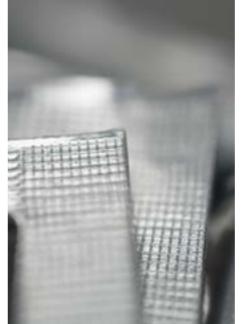




# Eco-packaging











### For the planet

Universal Pack's non-stop research in reducing the packaging industry carbon footprint resulted in streamlined machinery design for packing recycled, recyclable and compostable laminates. LCA (life cycle assessment) is used to measure the environmental impact of our products and identify optimal ways to reduce it. It is a  $360^\circ$  analysis that goes beyond the mere packaging produced and involves every step of the packaging machinery production process. We develop our solutions shoulder-to-shoulder with the main global film suppliers and test them in agreement with major multinational companies in order to provide them with a turnkey solution able to produce eco-packages.

#### UNIVERSAL LAB Over 30 years of scientific research



Our in-house laboratory was built to always ensure the most sustainable and efficient packaging solution. The research in Universal Lab allows us to optimise machine design,

efficiency and reliability by studying the most significant properties of products and newly developed laminates. That's why we are ready to pack any product using the latest ecolaminates in the market and always looking out for the development of new materials.





# Complete packaging lines for stick-packs

• Forming machine

**Synthesis Alfa** fully automatic lines for primary packaging in stick-packs and secondary packaging in cartons are tailormade to guarantee a high production efficiency in the smallest work space possible. Thanks to the use of latest generation technology and to a compact and ergonomic design, they can be run by one operator alone.

- High production speed
- Maximum efficiency, versatility and reliability
- Simple and intuitive use
- Optimal accessibility
- Preventive maintenance
- Hygienic design concept





# Complete packaging lines for 4-side-seal sachets



The simple and ergonomic design, combined with a state of the art manufacturing process allows us to build reliable technologies that are easy to run even by one operator only.

• Counting and stacking unit

4R 4RD • On edge placement station

- High production speed
- Maximum efficiency and reliability
- Simple and intuitive use
- Quick size changeovers
- Optimal accessibility
- Preventive maintenance
- Hygienic design concept

• Cartoning machine









www.universalpack.it