

Sachet and stick solutions
for the pharmaceutical industry



Clever 4.0 Technology



 SINCE 1965

We have been manufacturing packaging technology and solutions for the pharmaceutical industry, for over 50 years.



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 pharmaceutical, chemical, cosmetic and food 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.



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the best the market has to offer in designing software and to a production facility with the latest generation CNC. All is interconnected by means of an OPC (Open Platform Communications) protocol to guarantee the ultimate precision of components and constant availability of spare parts. Project management is based on an internal process that allows for information sharing and effective design reviews with customers who are 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

UNIVERSAL LAB
Over 30 years of scientific research

Our in-house laboratory was built to always ensure the ideal packaging solution. In order to optimise machine design, efficiency and reliability, it is essential to study the physical properties of each product such as: moisture, density, stickiness, viscosity, concentration and so on. Our philosophy is to test all the products and laminates in our laboratory before starting the machine designing. **Universal lab** is also available for customised product and film analysis as well as testing.



Efficiency, versatility and reliability 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 pharmaceutical 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 the interconnection of processes and centralisation of information. Our aim is to guarantee the 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

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

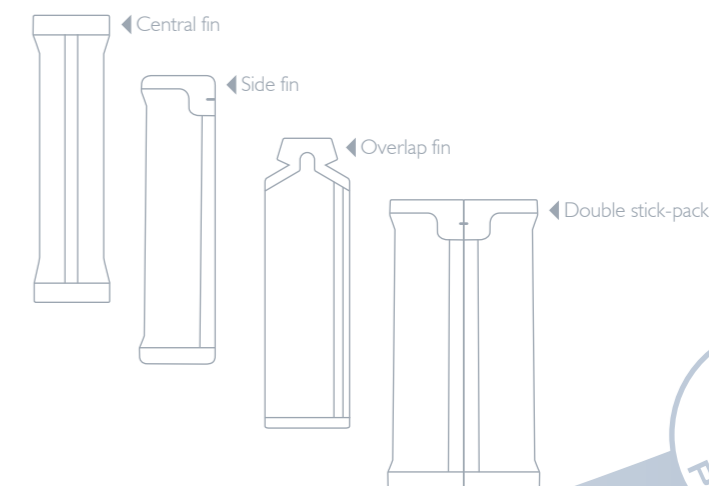


Stick-packs are recommended for packing liquids, gels, powders and granules in single dose format. This type of package offers an excellent level of flexibility in terms of size and design: in addition to a broad variety of different shapes, it can be customised to create packs with a great visual impact. 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.



Fast and accessible

Our technology for packaging stick-packs has been designed to fulfil the highest production standards both in terms of quality and 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.



Sachet technology

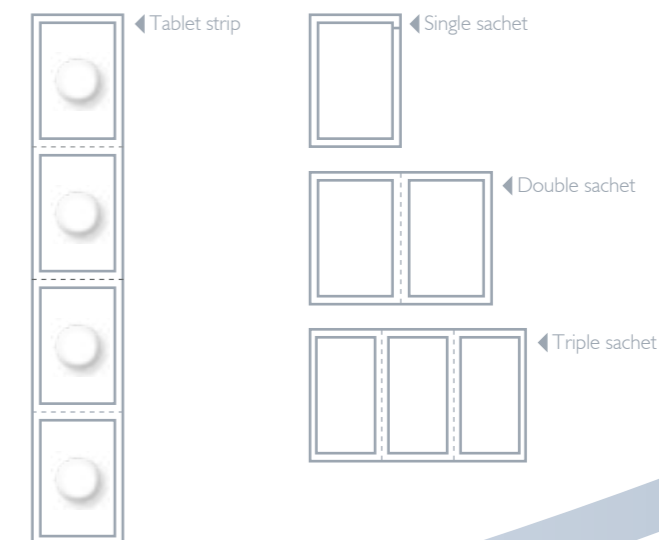


Sachets sealed on four sides are ideal for packing powders, granules, gels, liquids and viscous products as well as tablets. A wide range of sizes and customisation options makes it easy to find suitable solutions for any technical and aesthetic requirement. Thanks to the great variety of materials that 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 pharmaceutical and food 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.



Carton technology

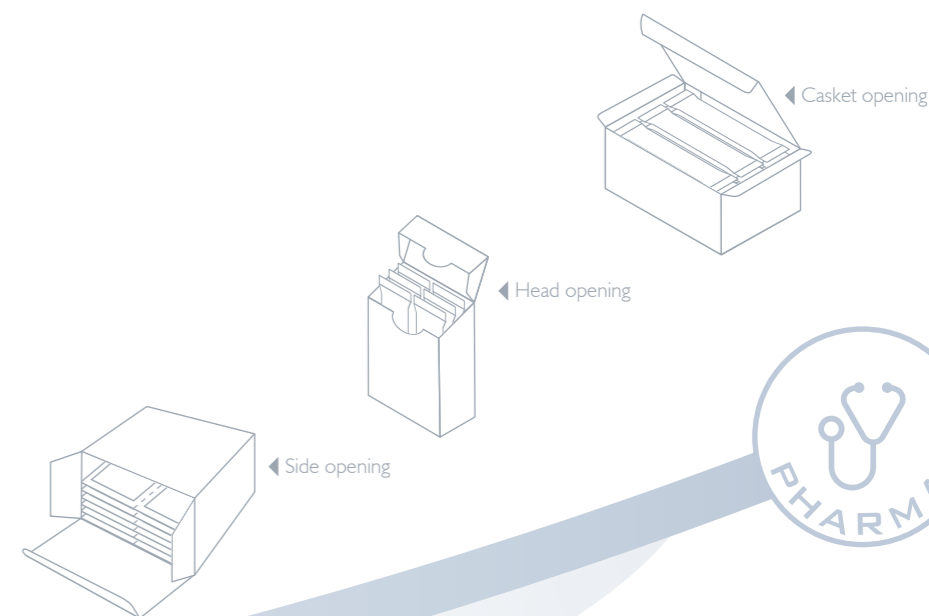


Our expertise in the field of automatic cartoning machines for the pharmaceutical industry allows us to handle any type of carton, from flat blanks to pre-glued cartons. Great flexibility in handling different sizes and die-cuts, added to maximum compatibility for interfacing other with end-of-line systems (internal separators, leaflets, bar codes, tamper-evident seals and so on) are the strong points of Universal Pack 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; at the same time, Universal Pack technology is compatible with other packaging systems. A series of advanced functions, such as the application of patented systems for transferring sachets and devices for authentication (CRF 21 Part I I), serialization and traceability of packages, as well as storage of production lot data, complete our offer.



Dosing systems



Patented Universal Pack dosing systems are the result of deep knowledge of the physical characteristics of materials handled (liquids, pastes, gels, powders, granules and tablets) and of the quality and accuracy standards of the pharmaceutical industry. All our products are analysed in our in-house laboratory 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.



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.



Inspection, serialization and efficiency



The experience we have acquired in our long-lasting partnerships with major pharmaceutical corporations helped us develop the most suitable systems in terms of production management, products traceability and compliance with the latest regulations. This process of constant growth and enhancement reflects on our prime quality integrated automatic packaging lines and the abundant set of accessories to increase quality control.



serialization takes place with the creation of a unique number for every carton to ensure their traceability. The aggregation process follows with the generation and recording of a new unique code deriving from the previous numbers to create a fully traceable supply chain. Discover Universal Pack's concept of all-round quality control.



All-round

Our wide selection of applications for quality control results in a number of accessories either inline or at the end of the packaging line; some prominent applications include dynamic and static check weighers for bags and cartons (inline and end of line), pharma code readers on the reel, leaflet and carton bar code readers, cameras for OCV/OCR, tamper evident stamp application and check, coding and coding control on boxes, flaps closure check. Furthermore, our batch management systems allow the operator to easily control all the recipe parameters at once and get a clear overview of different production batches. Finally, in order to track any good produced by our packaging line,

INDUSTRY 4.0

The range of controls is enhanced by the 4.0 industry predisposition of our machines which can connect and exchange data with the factory production network, download data from the MES, creating a comprehensive system to manage large production volumes. Customers' machine can also connect to Universal Pack factory for remote support and assistance.



Validation, certificates and traceability



Quality might be an ambiguous concept if you cannot prove it while comparing it to clearly defined standards. In Universal Pack we take quality very seriously and never get exhausted of giving evidence of it. Our machines are built from scratch with prime quality materials and complete with state-of-the-art technology. Get to know our comprehensive range of certificates to grasp what prime quality means to us.



Rigorous and clear

We uniquely code every single component, keep full track of it and provide documentation certifying its compliance with Pharmaceutical industry regulations. An essential list ready for you includes for instance: certificates of all materials and parts in contact with the product, welding certificates, calibration certificates and parts full traceability. The provision goes beyond the latter certificates for proving the components quality and compliance, as it stretches to further documents concerning the line construction and effectiveness. The list goes on with IQ (Installation qualification), OQ (Operational qualification), PQ (Performance qualification), FDS (Functional design specifics), HDS (Hardware design specifics) and Risk analysis.



As fundamental parts of the safety measures in the pharmaceutical industry, security systems to govern access and recorded data on the production line can also be provided. They can manage different levels of access (e.g. operator, factory, administration) making the machinery compliant with **CFR 21 part 11** regulation.



Eco-packaging



Universal Pack is actively researching and has already implemented measures to reduce their carbon footprint: use of renewable energy, lowered undifferentiated waste, machine consumption optimization and green 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° 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 Pack is ready to pack any product using the latest eco-laminates available in the market and always looking out for the development of new materials.



Complete packaging lines for stick-packs

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



Synthesis Alfa fully automatic lines for primary packaging in stick-packs and secondary packaging in cartons are tailor-made 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.



Complete packaging lines for 4-side-seal sachets

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



• Sachet machine

• Counting and stacking unit

• Cartoning machine

Synthesis Theta fully automatic lines for primary packaging in 4-side-seal sachets and secondary packaging in cartons are tailor-made to guarantee a high production efficiency in the smallest work space possible.

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.



Flexible packaging lines for stick-packs

- High production speed
- Modular changeover
- Quickest & easiest format change
- Simple and intuitive use
- Optimal accessibility
- Preventive maintenance
- Hygienic design concept
- Compact & ergonomic layout

• Stick-pack machine

• Carton forming machine

• Counting and stacking unit

• Carton closing machine



Synthesis Alfa Flexi fully automatic lines for primary packaging in stick-packs and secondary packaging in cartons are built to achieve the highest degree of flexibility in a compact line. Modular format change to make the most out of your production line.

This state-of-the-art model, which is appreciated worldwide for its precision, reliability and accessibility, can be run by one operator alone.





UNIVERSAL-PACK reserves the right to make any changes to the described machine characteristics - The packaging shown illustrates the range of sachets feasible on our machinery.

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