

Poultrypac

Packaging solutions for the poultry industry













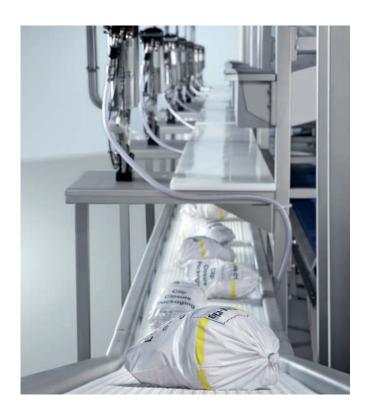
System partner poly-clip



Leading global manufacturer

Poly-clip System is the world's largest provider of clip closure solutions and is world market leader in this sector of the food- and packaging industry. Its range of products and services forms a unique system. This product and service system covers a wide array of innovative solutions from clipping machines, packaging machines and its automation to consumables such as bags, clips and labels.





Poly-clip System is a German family-owned firm, founded in 1922, with its headquarters in Hattersheim, close to Frankfurt/Main. To date the company is the holder of more than 800 patents, itself an indicator of the firm's leading position in global technology.

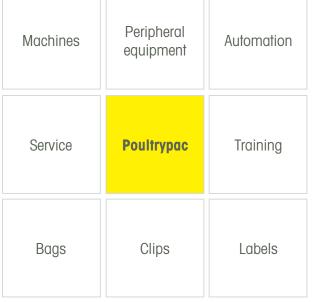
All of the company's relevant system- and performance-based components for the poultry industry are marketed under the umbrella trade name 'Poultrypac'. This range extends from manually operated table top machines to the fully automated packaging line with customised project planning. Packaging with clips is an efficient, safe and hygienic method for the packaging of poultry and poultry parts in bags.

Outside the poultry sector the clip closure system is also successfully used for the packaging of fruit and vegetables, and it is primarily employed in industries which process and package pasty products - in both the food- and the non-food sector. There are many different customer segments, embracing



sausage and ham manufacturers in particular, but also dairy producers and manufacturers of bakery and confectionery products (marzipan), pet foods, sealants, mastics and dental materials as well as civil explosives.

A further key element in this range of Poultrypac system- and performance-based components is the professional and customer-oriented service. Carefully selected distribution partners help to guarantee a dense and reliable service network covering over 130 countries, providing customers worldwide with a qualified service organisation. Furthermore, up-to-date training reflecting current practice is available in the all of the relevant languages, so that customers are able to learn everything they need to know for proper operation and maintenance of their machines and systems. And this is all provided from a single source.



Poultrypac I System- and performance-based-components









Not all poultry is the same

The requirements relating to poultry packaging are constantly expanding. This expansion is driven not just by the need for heightened product safety and reliability, but also by the bewildering assortment of end products now available and by ever-increasing production volumes. An additional challenge is posed by the fact that differing species of poultry exhibit fundamentally differing physical characteristics. It is obvious, then, that in the poultry industry automated manufacturing processes and flexible production methods are critical to success.





Bags, clips and labels

Safety, reliability and quality are guaranteed

Original consumables from Poly-clip System guarantee the highest quality, safety and reliability. They are perfectly tailored to the production process. With their respective product characteristics our bags, clips and labels satisfy the most stringent safety requirements relating to food packaging.

The bags are designed to suit individual packaging solutions and unfailingly exhibit high-level quality and hygiene characteristics. All polyethylene bags and shrink bags are printable with individual designs. Original clips from Poly-clip System guarantee the highest quality. Their manufacture is subject to the most stringent quality tests. They are available in aluminium and plastic, and in a very wide range

of colours and sizes. During the packaging process a label can be provided with updated information and attached to the bag in a tamper-proof manner during clipping. In this way precise product and origin labelling as well as batch tracing data can be applied individually as required. The labels can be supplied as blanks or pre-printed in colour, with a customer logo for example, or as decorative labels.







Bags Clips Labels



Certified safety and reliability

Clip and loop production certified

The clip must be completely free from drawing oils and grease, that is to say approved as safe for use with food. It is with this in mind that the SAFETY-CLIP SYSTEM was developed. In particular, the food-safe, patented SAFE-COAT safety coating of the clip guarantees the maximum level of hygiene. Poly-clip System has this product characteristic regularly monitored in tests conducted by SGS INSTITUT FRESENIUS. It is precisely these tests for safety of use with food that underpin certification. All clips from Poly-clip System are inspected in accordance with LFGB/BedGgstV (German Food, Consumer Goods and Feed Code/ German Consumer Goods Ordinance) and Regulation (EC) No. 1935/2004 - and P-Clips (plastic) in accordance with EU Regulation No. 10/2011 and FDA - and have been awarded the SGS INSTITUT FRESENIUS Seal of Quality.

By obtaining ISO 22000:2005 certification in addition to that awarded by SGS INSTITUT FRESENIUS, Poly-clip System is, from the food safety standpoint, enhancing its reputation with a further level of quality- and hygiene compliance. ISO 22000:2005 ensures regular and independent monitoring of all processes involved in clip and loop manufacture and thus guarantees an even greater level of safety and reliability for the food manufacturer's customers.

ISO 22000:2005 is an internationally recognised food safety standard. In terms of structure and content,

ISO 22000:2005 is based on ISO 9001:2000, but in addition it incorporates both the HACCP (Hazard Analysis and Critical Control Point) requirements and also the recognised principles of good manufacturing practice. It is the core element in FSSC 22000, the food standard recognized by the Global Food Safety Initiative (GFSI), which further takes account of the special requirements of large marketing chains and international manufacturers. Rather than simply testing the finished product, ISO 22000:2005 also intervenes in the preliminary processes. This permits early identification of potential risks and the avoidance or elimination thereof via preventive measures.

In addition, all clip and loop production processes comply with the requirements of Halal Certification Germany. With the Halal certificate the company ensures its customers that it has all the necessary procedures and systems in place for establishing whether the manufacturing of clips from plastic and aluminium, and also of loops, complies with Islamic regulations. The certificate is renewed each year. During the period in which the Halal certificate is valid, unannounced inspections will take place.







System solutions

More than just a machine

Poly-clip System's product and service system can be adjusted gradually to changing needs. The degree of automation is dependent on the product concerned and its individual characteristics such as weight and size, as well as on the production volume. High-quality consumables such as bags, clips and labels ensure trouble-free production and full traceability.

With Poultrypac, Poly-clip System offers customised system solutions for the widest range of packaging processes in the poultry industry. Depending on the degree of automation and the specific request, we work with the customer to develop an overall efficient concept that is fully compatible. Machines with a variety of features are employed according to the product which is to be packaged, from manual clipping machines such as the EZ 4500 for smaller runs up to the Automatic Poultry Loader APL for

large production volumes. Innovative, future-proof and efficient packaging solutions which take account of the size, weight and quantity of products to be packaged are perfectly integrated into the production environment. Customers benefit significantly not simply from Poly-clip System's wide experience in general, but also from the targeted individual advice and consultation which are available, and from the company's philosophy: 'Everything from a single source'.





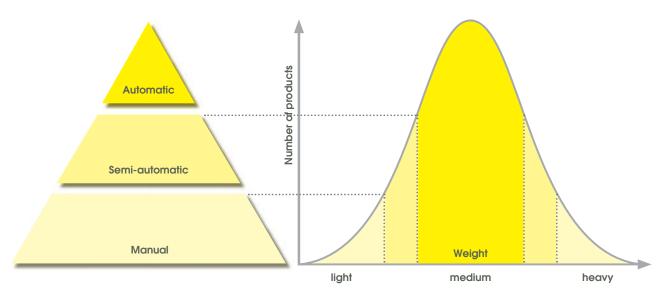


Manual

Semi-automatic

Automatic





The degree of automation is dependent on the quantities to be packaged and on the weight.



Example of a system solution – individual components can be combined to suit the customer's requirements.



Modular components

Clipping machines | Application determines features

With their modular structure, Poultrypac system solutions are expandable in line with customer requirements. Clipping machines from the Easy Clip Line® provide an ideal entry to the industry for customers looking to perform simple packaging of poultry in bags. With these system-based components, packaging solutions can be built in stages and expanded as required.



The clipping machines are made from high-quality stainless steel and industrial plastic, and with clip closure they guarantee tight and secure packaging of the product. Machine versions employing plastic clips (P-Clips) are suitable where metal detection is carried out.







There is a wide range of applications, for the closing of PE and shrink bags, large sacks or nets. Single- or double-clippers are available. Many machines are available as horizontal version, and most single-clippers also as right-hand or left-hand version.







EZ P 9015

MPL | A bagger for everything

The manual poultry bagger is ideal for the efficient packaging of chickens, ducks, geese and poultry parts in bags. In combination with single-clippers of the Easy Clip Line®, the MPL sets standards for packaging in bags.

This machine is a future-proof investment. With its modular design the MPL adapts to increasing demands as production changes, and so maximum flexibility is guaranteed. Consequently, the MPL is very easily integrated into a larger system, such as the PPS (Poultry Packaging Station), for example.



Horns in various sizes



MPL as a table top model



MPL with base frame and single-clip machines



MPL with single-clip machines and labelling systems





APL | Automatic Poultry Loader

The APL is designed for automatic packaging of whole birds, both fresh (with epidermis) and for deep freezing (without epidermis). It reduces the manpower requirement and works with automated testing processes. The strengths of this innovative machine are best appreciated when there is a continuous product flow of constant weight and size. A machine variant using plastic clips is also available as an option.



Peripheral equipment | Supplementary system components



ES 5000 Labelling System



EZ Tag-Feeder Labelling System



VAC Vacuum System



PST Poultry Shrink Tunnel

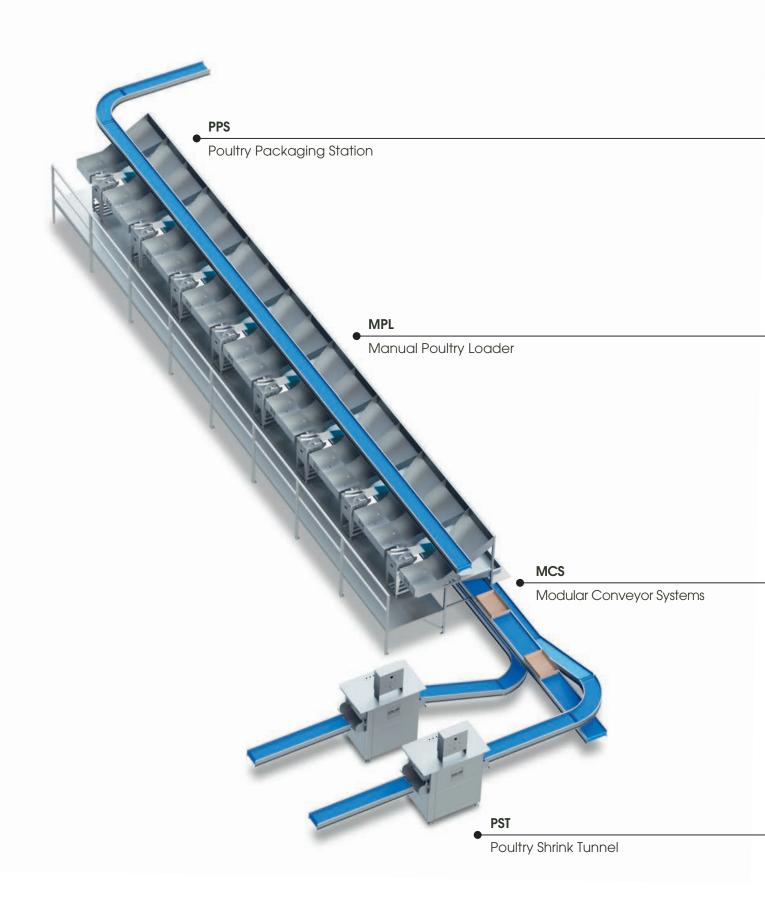
The peripheral equipment expand the range of functions of the individual Poultrypac machines. The extensive programme covers everything from labelling systems for tamper-proof product and origin marking and batch tracing, through vacuum systems and poultry shrink tunnels for shrink packaging, to modular conveyor systems which can be integrated into packaging lines in accordance with customers' specifications.





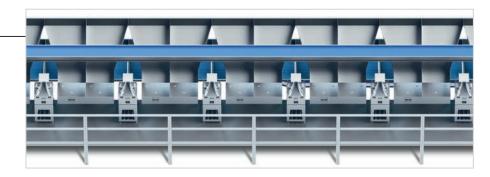
PPS-Line

Flexibility is trumps



Typical example of a 'PPS poultry packaging line' – a system solution for the efficient packaging of chickens, ducks and geese in bags, consisting of 8 PPS with integrated vacuum systems, 8 MPL, 8 EZ 4500 and 2 PST. All machines are connected to each other via modular conveyor systems in a manner best suited to the type of production concerned. In this example, the upper conveyor belt transports pre-sorted poultry in trays direct to a stretch-film packaging machine. On the middle belt, outer packagings filled at the clipping stations are fed to

the cold store. On the two lower conveyor belts vacuumed bags are transported to the shrink tunnels. Thanks to the modular design, the packaging line may be expanded at any time, and is adjusted to the customer's requirements. As fluctuations occur in production volumes, the manpower input on the line can be flexibly controlled through the optimal location of individual work stations immediately next to one another. It can thus be adjusted to the actual workload in each case, and if necessary reduced.



Packaging station

The products are placed directly to the bagger. Short travel paths result in fast, efficient packaging. The packaging process complies with strict hygiene regulations and is optimised by FIFO (First In-First Out) principle.



Bagger

Opening of the bag occurs automatically, thus speeding up packaging of the products.
Optional equipment extends the range of features available. The MPL can process PE bags and strapped bags/shrink bags.



Conveyor systems

For optimisation of production the conveyor belts are customised and are in each case expandable in modular fashion. The hygiene design for product conveyance takes into account the HACCP requirements.



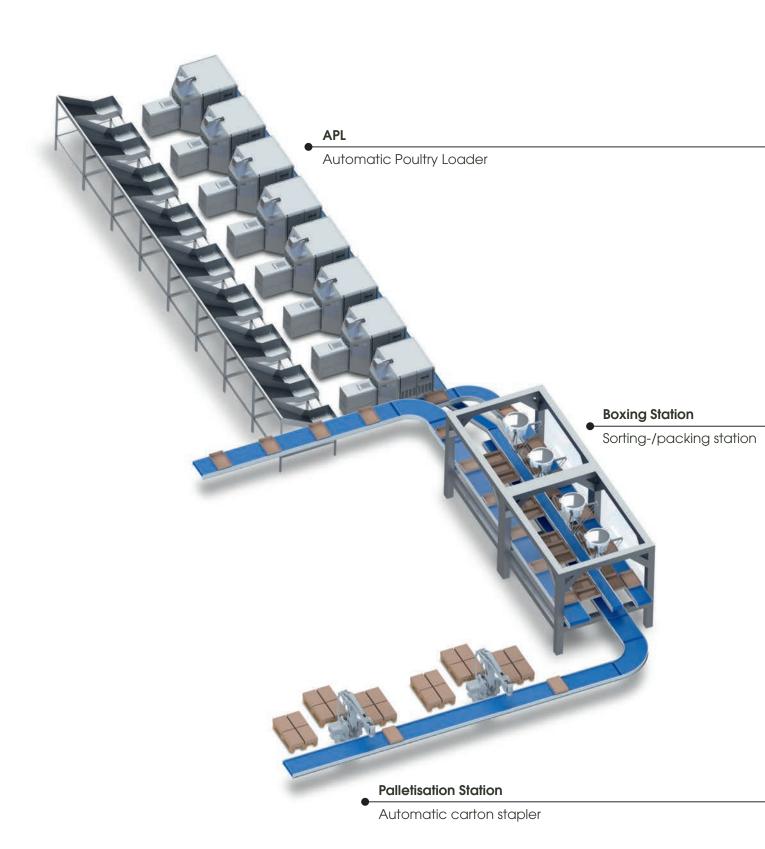
Shrink tunnel

An automatic throughput tunnel for continuous shrinking processes resulting in very tight packaging that is hygienic and visually appealing. The temperature of the water can be individually adjusted to the product.



APL-Line

Efficiency throughout the line



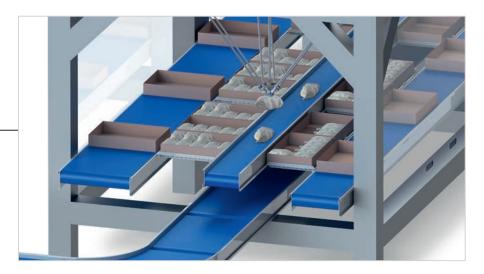
Typical example of an `APL poultry packaging line' for strongly reduced manpower input, consisting of 8 x APL, 8 x collecting stations, 4 x boxing stations and 2 x palletisation stations. All machines are connected one to another via modular conveyor systems in a manner best suited to the type of production con-

cerned. To a large extent the packaging processes operate automatically, thus guaranteeing maximum efficiency. All poultry packaging lines can be planned and designed by Poly-clip System on the basis of customers' specifications.



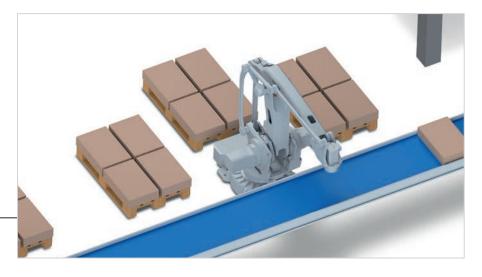
Packaging machine

Efficient packaging of the products into bags with minimum manpower input. The products are inserted one at a time by the operator. Apart from this the process is fully automatic: bagging, hocking, closure with original clips and labelling. With its ergonomic operation the APL is highly impressive and significantly lighters the workload.



Sorting-/packing station

Robots pick up the chickens with customised pickers and put them, sorted according to weight classes, product brands or other criteria, into the corresponding boxes – sorting and packaging at maximum speed.



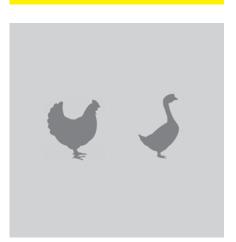
Carton stapler

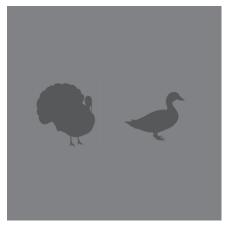
Robots staple the products fully automatically in accordance with individual loading patterns on pallets. The palletisation systems can be flexibly adjusted to all relevant carton sizes.



Poultrypac







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