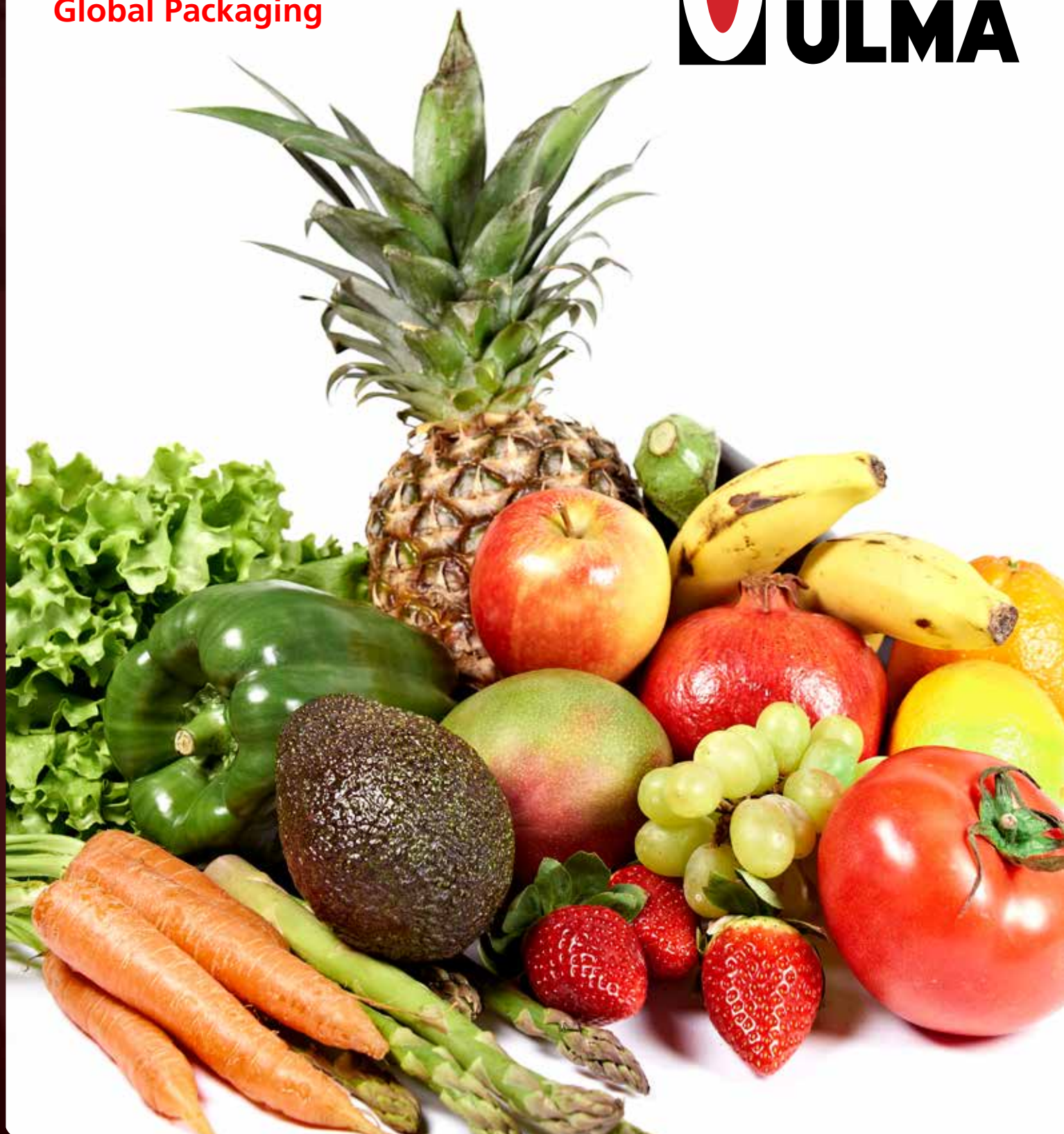


Global Packaging



PRODUCE

Packaging Solutions

Keep it fresh longer

Shelf life extending technologies

After they are harvested, fruits and vegetables live on and have a limited shelf life. To extend it, ULMA offers you the widest range of packaging solutions on the market for the Fruit and Vegetables sector helping you in your search for the optimal packaging for your product.

After harvesting fruit and vegetables keep breathing, ripening, and are exposed to the deterioration (ethylene synthesis), to the microbial growth and, through the transpiration, to the loss of moisture (weight) in the product.

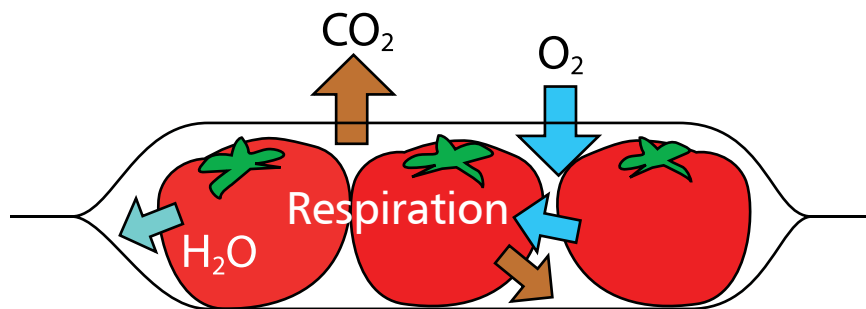
The shelf life of your fresh products can be extended by:

- Storage in cool temperatures (depending on each product).
- Processing in optimum hygienic conditions.
- Avoiding physical damage.
- Adjusting the film permeability for the appropriate product respiration.
- As an option, adding protective gas into the packaging when it is desirable.

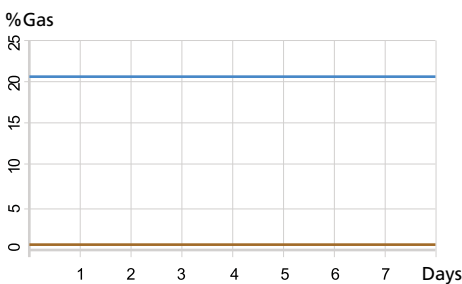
The packing forms a barrier that contains the product and protects it from the microbial growth, from the physical-chemical deterioration and from the contamination, keeps its flavor and odor, and acts like a display for the product marketing, information and traceability.

ULMA Packaging collaborates with research, development and innovation centers such as ADESVA or AINIA and some of the most important companies in the sector to develop the perfect solution for each product adjusting the film's permeability to match the product's respiration rate or adding protective gases if they are required.

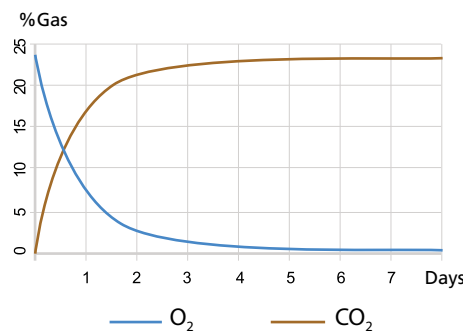
With suitable packaging and different technologies (macroperforations, microperforations, permeable films etc) the permeability and thus the respiration rate of the package can be controlled resulting in an optimal balance in the concentration of gases inside. This extends the shelf life of the product to the maximum.



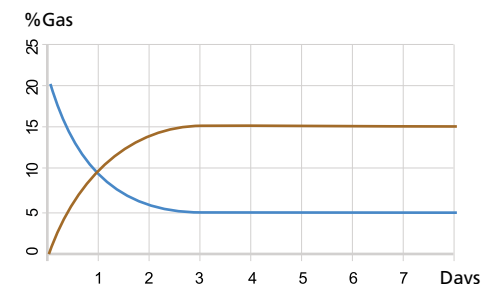
Film too permeable



Film very impermeable



Controlled permeability



Produce Packaging

Specialists in Produce

ULMA makes use of its specialization and knowledge in the Produce sector by offering the widest range of packaging solutions on the market, thanks to the possibility of choosing between five different packaging systems: Horizontal Flow Pack (HFFS), Vertical Flow Pack (VFFS), Thermoforming, Traysealing, and Stretch Film, each with their own specialized technology for extending the conservation of each fruit or vegetable.

In addition, ULMA offers complete fully automated solutions that include from the handling and loading of the product to the final crate packing and palletizing.

In this brochure you can find different applications of our packaging technologies.

Packaging solutions for:

- ▶ Fresh vegetables
- ▶ Fresh fruit
- ▶ Other : processed, ready to eat, herbs..



Fresh vegetables in trays

Stretch film packaging

An economic tray packing for fresh vegetables that protects the product and enhances its aspect with a printed film, which allows using labelling for the identification and characteristics.



Excellent visual aspect with cost effective.

Fresh vegetables in trays

Thermoforming and Traysealing packaging and trays with cover

Fresh vegetables in rigid or flexible trays which allows stacking for their transportation and display. The perfect package for ready to eat vegetables. Optionally, tray can have a rigid cover to increase mechanical protection.

THERMOFORMING



TRAYSEALING



CLAMSHELL



Fresh vegetables in trays

Flow Pack packaging

The flow pack wrapping protects the product and improves its presentation, as well as their identification and optionally offers the possibility to extend the shelf life of the product controlling the moisture and breath.



FLOW PACK IN TRAY

Fresh vegetables without tray



Unitary or grouped vegetables without tray packaging to extend the shelf life of the product.

FLOW PACK WITHOUT TRAY

Fresh vegetables without tray

Flow Pack and Vertical packaging

Fresh vegetables in horizontal and vertical flow pack. Shrink packs for whole or portions protects product allowing labelling. Vertical pack with steady bottom option to display packages on shelves.

Shrink packaging for solid vegetables to prevent the loss of moisture and enhance the aspect.

FLOW PACK SHRINK



VERTICAL



Fresh fruit in trays

Stretch film and Traysealing packaging

Delicate fruit packaging in trays that in addition to protecting the product, it also extends its shelf life. These packs have the main purpose of maintaining the freshness of the product showing an attractive presence to the consumer.

STRETCH FILM



TRAYSEALING



Packed in sealed trays with perforated films or the option of modified atmosphere (MAP) to extend the shelf life of the product.

Fresh fruit in trays

Flow Pack packaging and trays with lid

Fresh fruit in trays for delicate products. The wrapping film or tray & lid pack performs the most suitable atmosphere to keep product's freshness during transport and shelf life.



Fresh fruit group packaging in trays.

Mechanical protection for delicate fruits through a solid tray cover.

FLOW-PACK TRAY



TRAY COVERED

Fresh fruit without tray

Flow Pack packaging

Fresh fruit in groups, branches or unit without tray to protect and enhance its natural aspect. The most economic package with an excellent presentation which allows labelling keeping product's freshness until consumption.



Unitary or grouped packaging in bags or shrink for a reduced loss of moisture-weight.

Packaging of portions preserving freshness.



FLOW-PACK

VERTICAL



FP UNITARY



FP SHRINK

Processed and ready to eat, herbs, pickles ...

Fresh cut vegetables, ready to eat dishes based on fruit or vegetables as well as special vacuum or skin packs to extend shelf life of products.

TF SKIN



FLOW PACK



TS MAP



4th RANGE - TS



4th RANGE - VT



5th RANGE - TS



TF VACUUM + FP



VT VACUUM



5th RANGE - TF



Vacuum and skin packs for extended shelf life.

Automation of packaging lines

ULMA Packaging Automation

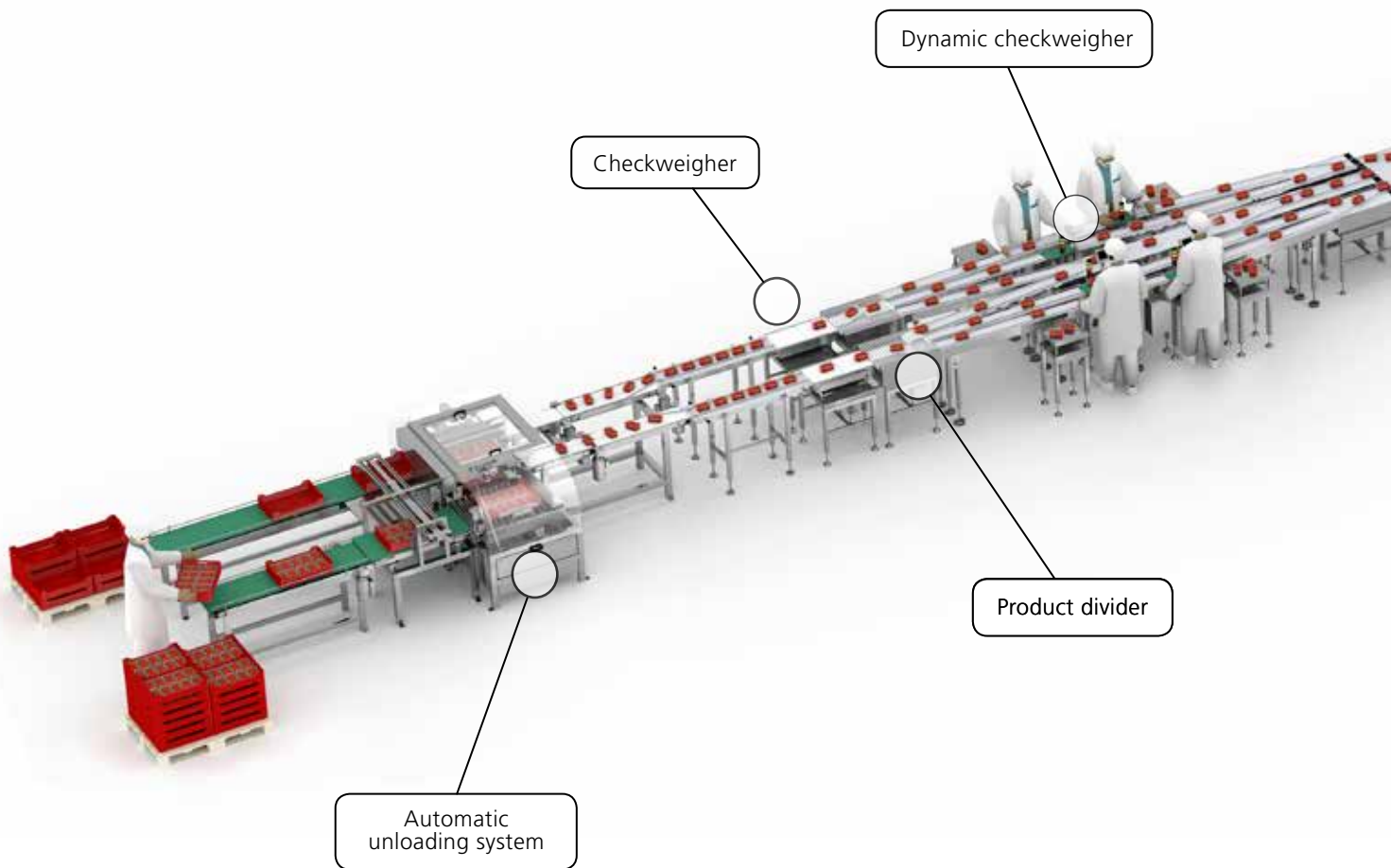
ULMA offers COMPLETE SOLUTIONS:

- Primary processes:
 - Handling
 - Alignment
 - Collating
 - Transport, loading or dosing of products
- Secondary processes:
 - Weighing
 - Labelling
 - Inspection and control
 - Crate packing and final palletizing

ULMA Packaging Automation has developed robotic automatic loading systems, (including artificial vision systems that allows classifying according to size, shape, colour...) automatic unloading and boxing.

All controlled via a Centralized Control System, offering the integration with the production software.

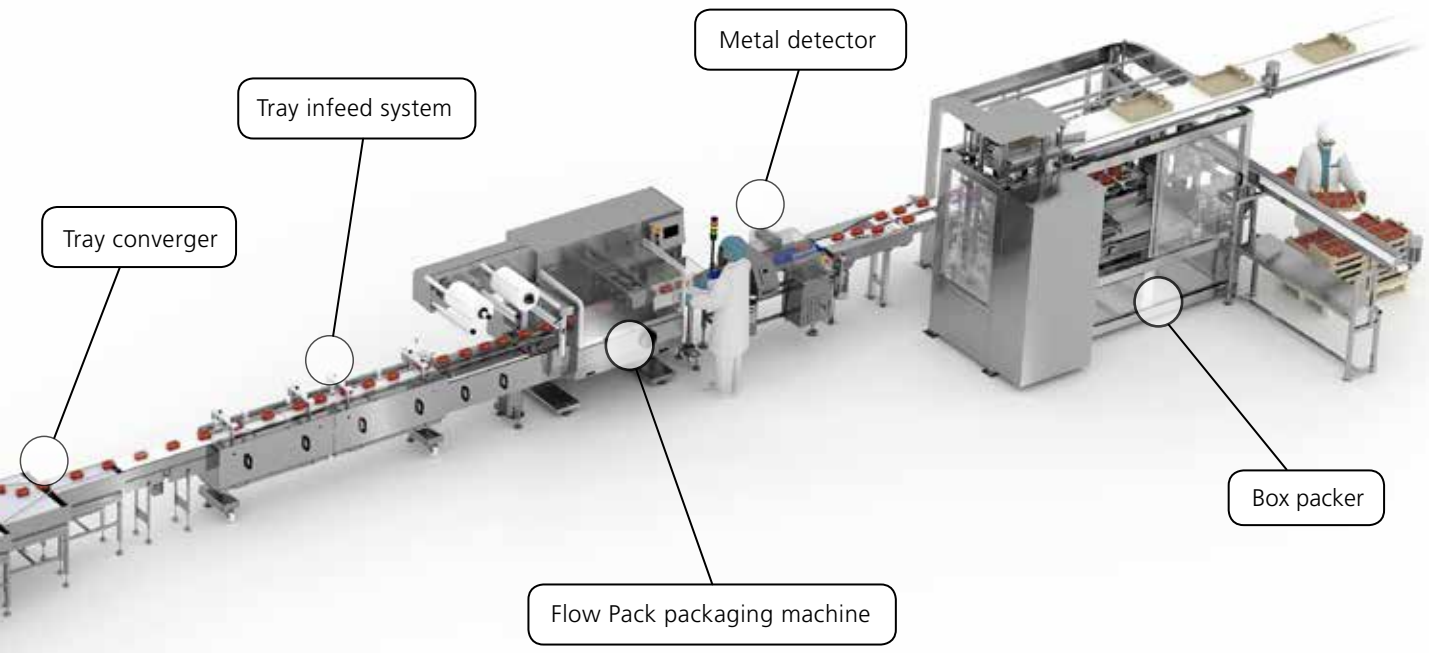
The offer is completed with internal logistics transport systems for empty and/or full crates as well as the denesting and transport of trays.



Strawberry trays in plastic crate



Strawberry tray



Strawberry tray in flow pack package

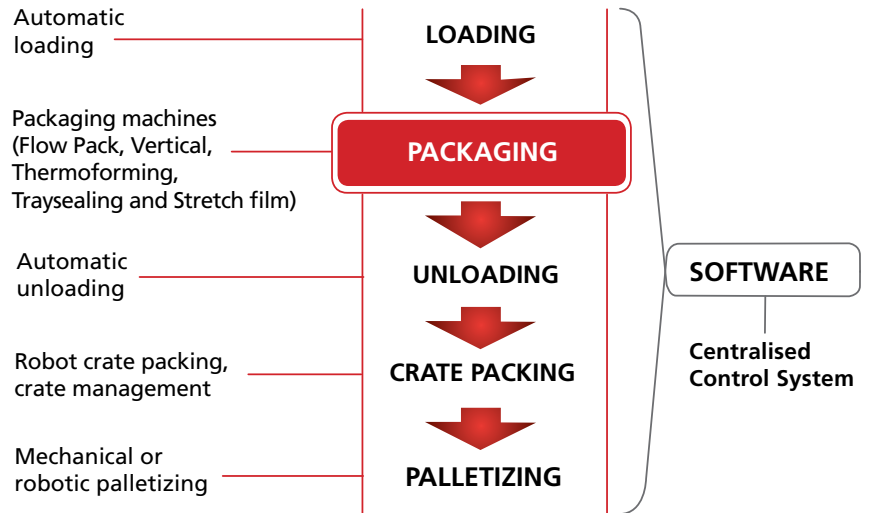


Automatic boxing

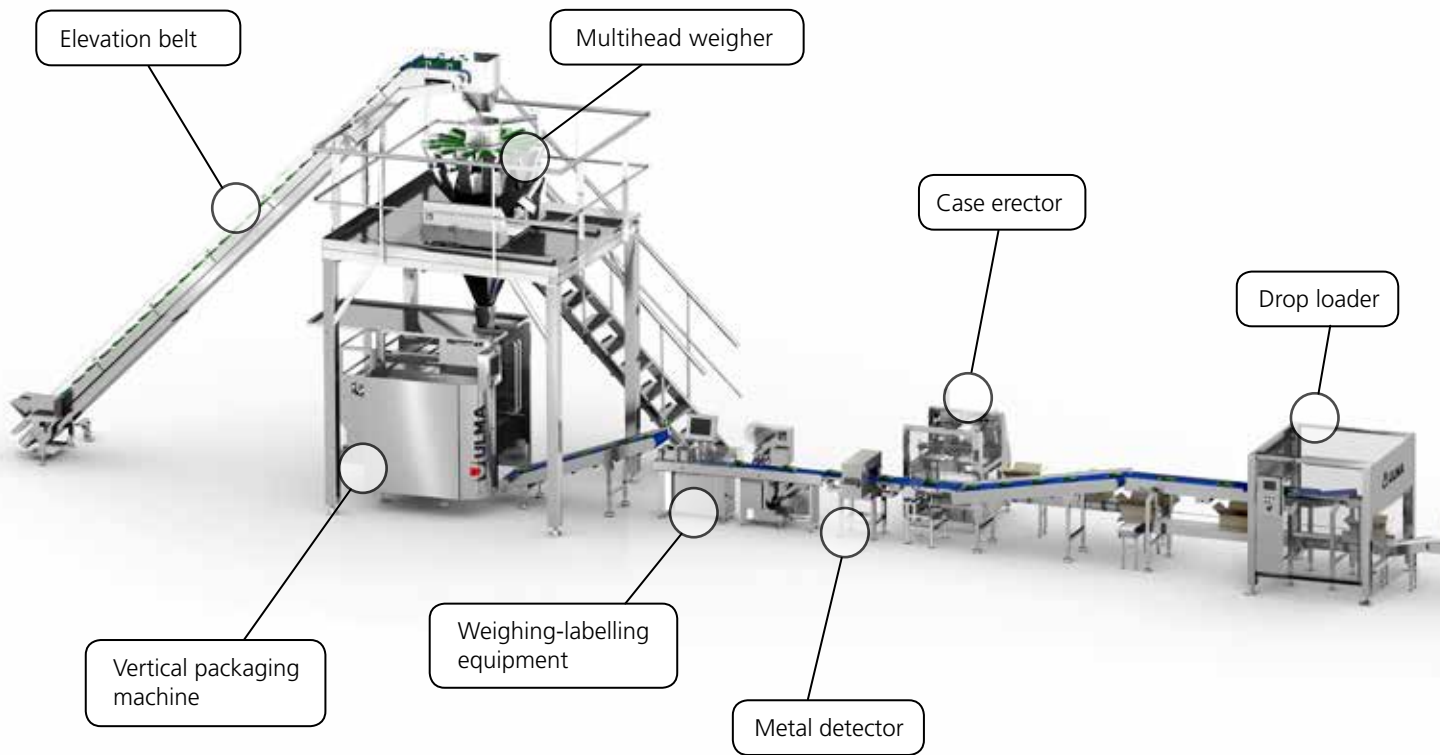
Automation of packaging lines

ULMA Packaging Automation

- ▶ A single point of contact for the client.
- ▶ Design adapted to the specific needs of each client.
- ▶ Complete integration of the automatic line.
- ▶ Optimisation of the mechanical and electronic functionality and performance of the global solution.
- ▶ Simple centralised handling of the complete line.



Full line of frozen vegetables.



Frozen vegetables



Packaged in VFFS



Automatic boxing (Drop loader)

Packaging types and technologies

THERMOFORMING - TF

Flexible pouches or rigid trays are formed by automatic machines called thermoformers. The internal cavity is formed, using a roll of base film, where the product is placed. The container is then sealed with a second film, with the option of vacuum or gas flushing.

▶ TF - VACUUM

Flexible film packs with partial of full vacuum, extending the shelf-life of the product and enhancing the appearance.

▶ TF - MAP

Rigid or flexible film packs are sealed with a protective atmosphere, to enhance colour and extend the shelf life of the product.

▶ TF - SKIN

Vacuum packages where the film fully adapts to the shape of the product improving its aspect and conservation.

TRAYSEALING - TS

Sealing of preformed trays in automatic machines called traysealers. The trays can be foam or rigid.

▶ TS - MAP

Packs with protective atmosphere inside a barrier tray, to extend shelf-life of the product.

VERTICAL (VFFS) - VT

The pack is formed by vertical flow pack wrapping machines. A tube of film is formed around a product and sealed with one longitudinal and two transversal seals.

This packaging technology offers a completely hygienic pack, with high production capacities where the product is vertically charged.

▶ VT - VACUUM

Flexible film packs with partial of full vacuum, extending the shelf life of the product.

STRETCH (Stretch film) - SF

The product is placed in a tray and conveyed to a stretch wrapping machine where stretch film covers the product and seals the film under the tray. This very flexible technology, easily adapts to the needs of the client.

It offers a hygienic and aesthetic package where the product protrudes the height of the tray.

Printed film and labelling can be used to further improve aesthetics and provide detailed information for consumers.

FLOW PACK (HFFS) - FP

A single roll of film is folded and formed as a tube around the product. One longitudinal and two transversal seals are created to close the pack.

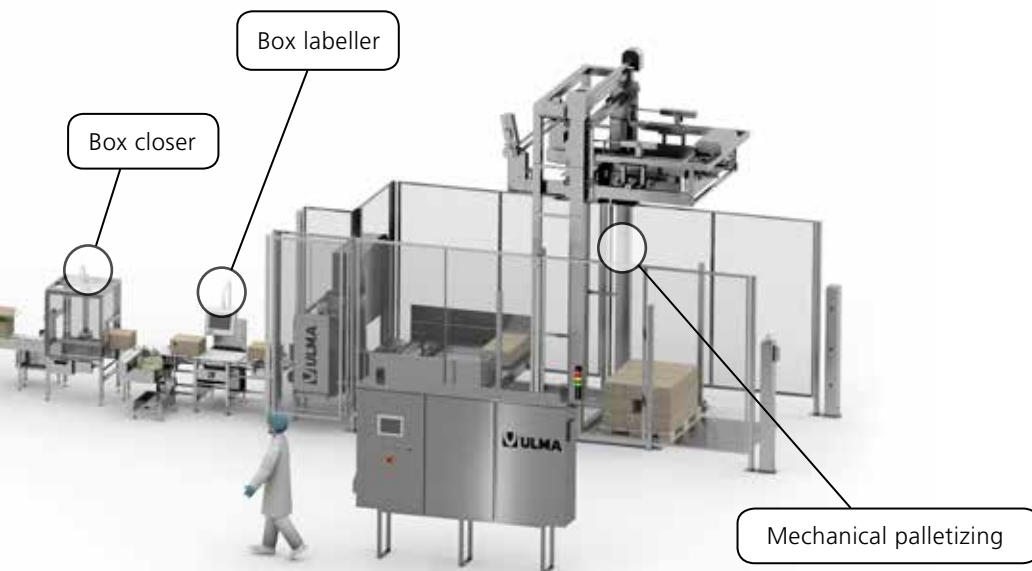
▶ FP - MAP

Packs enclosed with a protective atmosphere in a barrier film to extend the shelf-life of the product.

▶ FP - SHRINK

An economic and hygienic shrink pack solution designed for large production requirements.

Product wrapped in shrink polyolefin passes through a shrink tunnel forming a protective "second skin".



Closing and labelling of boxes



Palletizing of boxes

Service

The ULMA advantage

At ULMA Packaging we are dedicated to work in close collaboration with our clients, which has become our key to customer satisfaction. Our Customer Focus through Service Excellence is the unique ULMA Advantage.



Training

- Training conducted by a team of specialists.
- Our training includes both courses at ULMA and onsite installations.
- ULMA offers modern communication technology for holding long-distance training, including video conferencing.
- Training is conducted during start-up and full production. The training includes technical detail of how to effectively use, clean and maintain the machine, along with important safety training.



Preventative Maintenance

Maintaining your packaging machines in good working conditions assures higher productivity and profitability, and a shorter recovery time of your investment.

ULMA offers customized preventive maintenance service including visits at regular intervals over the year by a trained technical ULMA specialist, who will thoroughly inspect the equipment, focusing on the major mechanisms, controls and safeties of the machine.



Spare Parts

- Machine spare parts in more than 20 countries ensures availability in the least amount of time possible.
- Original spare parts, of the highest quality.
- Guaranteed delivery of standard spare parts to any part of the world within 24 hours via express service and 3-4 days via normal service and for non-standard parts.
- ULMA guarantees the availability of any spare part for at least 10 years after the machine's initial supply.



Technical Service

- We have highly qualified technicians in all countries around the world, providing a locally based, fast service.
- We offer extra services for special promotional periods.
- A Broad Service Availability, offers access to resources and the ease of contact from anywhere in the world.
- Immediate telephonic technical support via technical experts specialised in each product line.
- Remote assistance via the Internet, enabling our programmers to remotely take control of your machine and diagnose problems.
- Option to purchase various spare part kits with the machine.
- Retrofitting of machines already installed to new formats or applications.



ULMA Packaging

Thanks to an experience of more than 50 years, we are a worldwide reference in the design and manufacturing of high-tech packaging systems and equipment.

More than 50 years evolving, innovating, perfecting our technology and our services. An extensive network that is available to offer you solutions anywhere in the world, and to fully satisfy customers that place their trust in us.

For additional information, please visit our website:

www.ulmapackaging.com



ULMA Packaging, S. Coop.
Bº Garibai, 28 - Apdo. 145
20.560 OÑATI (Gipuzkoa) SPAIN
Tel.: +34 - 943 73 92 00
Fax: +34 - 943 78 08 19
Web: www.ulmapackaging.com
e-mail: info@ulmapackaging.com