

Global Packaging



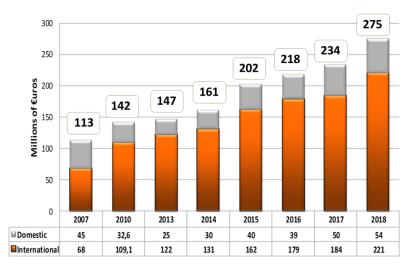


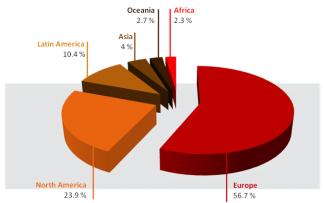
TIA Technical conference 2019 Packaging of tortillas

Barcelona 30-10-2019

Agenda







More than 50 years providing packaging solutions

Employes: 1550 worldwide (900 en

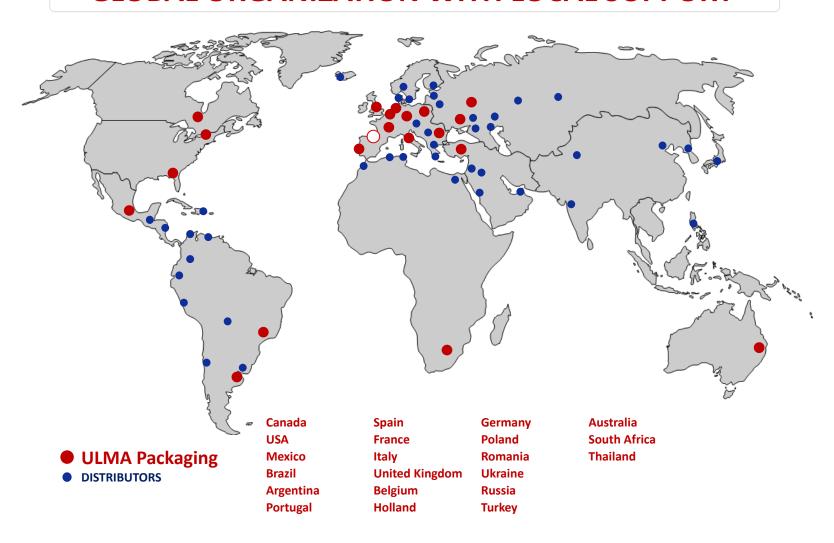
Headquarters, 650 filiales)

Turnover 2018: 275 mill €

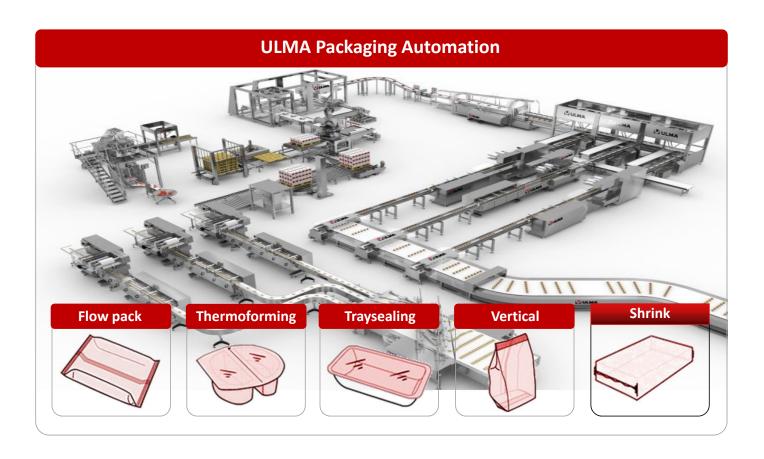
Growing rate at the last 8 years: 51%

75% of the sales are **export sales**

GLOBAL ORGANIZATION WITH LOCAL SUPPORT



Packaging Technologies



Modified Atmosphere Packaging aplications – MAP (1 of 2)

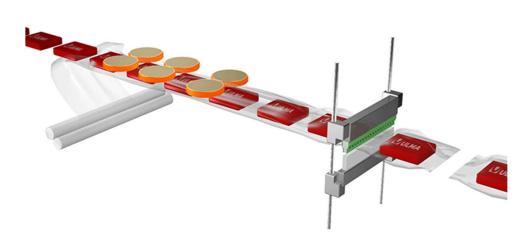
- > Applications where the oxygen within the pack is remove:
 - To increase the shelf life of the product.
 - To reduce the growth of molds within the pack.
 - To keep the natural characteristics of the product.

➤ The film materials used and the packaging technology change depending on the expecting results.

Modified Atmosphere Packaging aplications – MAP (2 of 2)

- Normally a combination of N2 and CO2 is used to removed the oxygen within the pack.
- Typical film materials used are:
 - ❖ PET/PVdC/PE
 - ❖ PA/PVdC/PE
 - OPP/PVdC
 - ❖ OPA/PE
 - *****
- The packaging technologies used for MAP applications with tortillas are:
 - Flow Pack Technology
 - Thermoforming Technology

Flow Pack technology





- The oxygen level inside of the pack in FP MAP applications is high, the product shelf-life goes up to 2 months (aprox).
- This shelf life can be increased using oxygen scavengers (sachet or sticker) since the oxygen level inside of the pack drops drastically up to less than 1%

Thermoforming technology





The oxygen level inside of the pack in TF MAP applications is lower than in a FP machine, since the gas flush can be combined with a vacuum operation. The product shelf-life goes up to 9 months (aprox).

Flow pack vs Thermoforming technology

- > TF shelf-life > FP shelf-life (around 9 months vs 2 months)
- In a FP, the shelf-life can be extended using oxygen scavengers.
- > FP technology is more flexible than the TF.
- The investment in FP technology is lower than TF.
- The cost per pack in FP is lower than in TF.
- > FP pack is more sustainable since the film used are thinner than in TF.
- FP machines are easier to be fed automatically.

Recloseable Packs

- Different kinds of recloseable systems, mainly developed for the Flow Pack machines
 - Flap-pack.
 - * Recloseable by adding Freshpack strip to the pack.
 - Zipper added to the pack crosswise.
 - Side seal with adhesive tape or longwise zipper.

Flap-pack.

- > By means of a die-cut unit placed at the reel holder the film is cut before adding a label.
- ➤ It is compatible with MAP applications.
- > The machine can run without this format.
- ➤ The application is limited at 50 ppm.

Flap-pack.

Recloseable by adding Freshpack strip to the pack.

- The adhesive strip can be added to a existing flow pack with a minor modification.
- It is compatible with MAP applications.
- > The machine can run without this format.
- > 20 % less material used than others zipper o side seals formats.
- > The cost per pack is lower than using the zipper or the flap-pack.

Recloseable by adding Freshpack strip to the pack.



Zipper added to the pack crosswise.

- The plastic zipper is added to at the reel holder to the flat film and once the film tube is formed, it is sealed by the cross seal station.
- It is compatible with MAP applications.
- > As the process to place the zipper is intermittent, the speed is limited at 45 ppm.
- Without considering the savings due to the film, the cost of the zipper is around 40% higher than the freshpack strip.

Zipper added to the pack crosswise.



Side seal with adhesive tape or longwise zipper.

- Also known as 3 seals machine.
- ➤ The main different with a FP machine is that the longitudinal seal is placed vertically.
- The cross seal station is the same than a normal FP machine
- ➤ Zipper or and adhesive tape can be added to do a recloseable pack although the machine can wrap normal not recloseable packs.
- The changeover is more longer than in a normal FP machine since its format needs a fix forming box.

Side seal with adhesive tape or longwise zipper.



Conclusions

- Ulma Packaging has the correct packaging solution regardless the customer's specifications.
- With a direct presence in 20 countries, Ulma Packaging provides local skill service.
- Ulma Packaging customizes its packaging solution to adapt its standard to the customer's requirements.

