



OUR FUTURE **SUSTAINABILITY**

INNOVATION MEANS EFFICIENCY



G. MONDINI

MONDINI SUSTAINABILITY ROAD MAP

01 IMPROVE TRAY SEALING SUSTAINABLE FOOTPRINT

by significantly reducing the unnecessary use of packaging material

We engineered and designed Tray Sealing solutions to eliminate skeleton waste

- **Darfresh® on Tray** - Vacuum skin packaging with no skeleton system for VSP.
- **Zero®** - Modified Atmosphere Packaging with no skeleton waste.
- **PLATFORMER®** - Easily customised trays for the product with less than 2% waste.

02 FOCUS ON RELIABILITY AND ROBUSTNESS

of our systems to facilitate the best possible consistency of protection, safety and integrity of your products

- Guaranteed lowest reject rate thanks to our unique servo mechanical sealing force unit.
- Guaranteed vacuum and skin tightness due to the exclusive robustness of Darfresh® on Tray system giving best possible shelf life and appeal to your products.
- Line integration reducing micro stoppages, faulty packages and unnecessary downtime, without concessions on flexibility and performance.

03 ENGINEERING PACKAGING FORMATS

to reduce ratio of plastic per kg of product and food waste

Design Packaging with advanced Technical performance

- Introduction of cardboard based packaging requiring minimal amount of necessary plastic.
- **PLATFORMER®** - Positive process to reduce plastic by matching tray precisely to product and equal performance of existing trays shrinking carbon footprint.
- Re-Sealable solutions reducing consumer "at home" food waste.
- Increasing the possibilities for vacuum skin technology on multiple pack formats, including paperboard, expanding the range of food products able to benefit from this shelf-life extension technology.

WHY BECOME SUSTAINABLE



ESG
ENVIRONMENTAL
SOCIAL AND
GOVERNANCE

At G Mondini we pride ourselves in being good listeners. What we learn shapes our innovation pipeline to deliver solutions against clearly expressed needs and a strong commitment to be a leader in sustainability.

We feel it is our responsibility as market leader in tray sealing packaging to promote sustainable solutions on our Thermosealer Technology. This approach covers all parts of the system from machine design and construction, flow and efficiency of our system to ensure we are always open to develop and create new solutions from ideas wherever they are generated.

OPEN APPROACH

This open approach means we are willing to engage with many different stakeholders in ensuring our innovations and system developments always have sustainability and the environment as a commitment.

MONDINI WARRANTY

One thing we guarantee is that whatever we do we will not compromise on the Product Protection, Safety and Integrity of our customers.

REDUCE PLASTIC AND CO₂ EMISSION

We are achieving reductions of plastic content by up to 80% while increasing communication and merchandising possibilities with high quality digital printing covering all areas of the package. With the PLATFORMER® system we reduce the carbon footprint of trays by manufacturing on demand at the point of packing.

FLEXIBILITY AND INNOVATION

With PLATFORM® Technology + Trave® Tray Sealer we created a flexible tool that can continually respond to rapid changes in food packaging technologies, market demands and new sustainable materials.



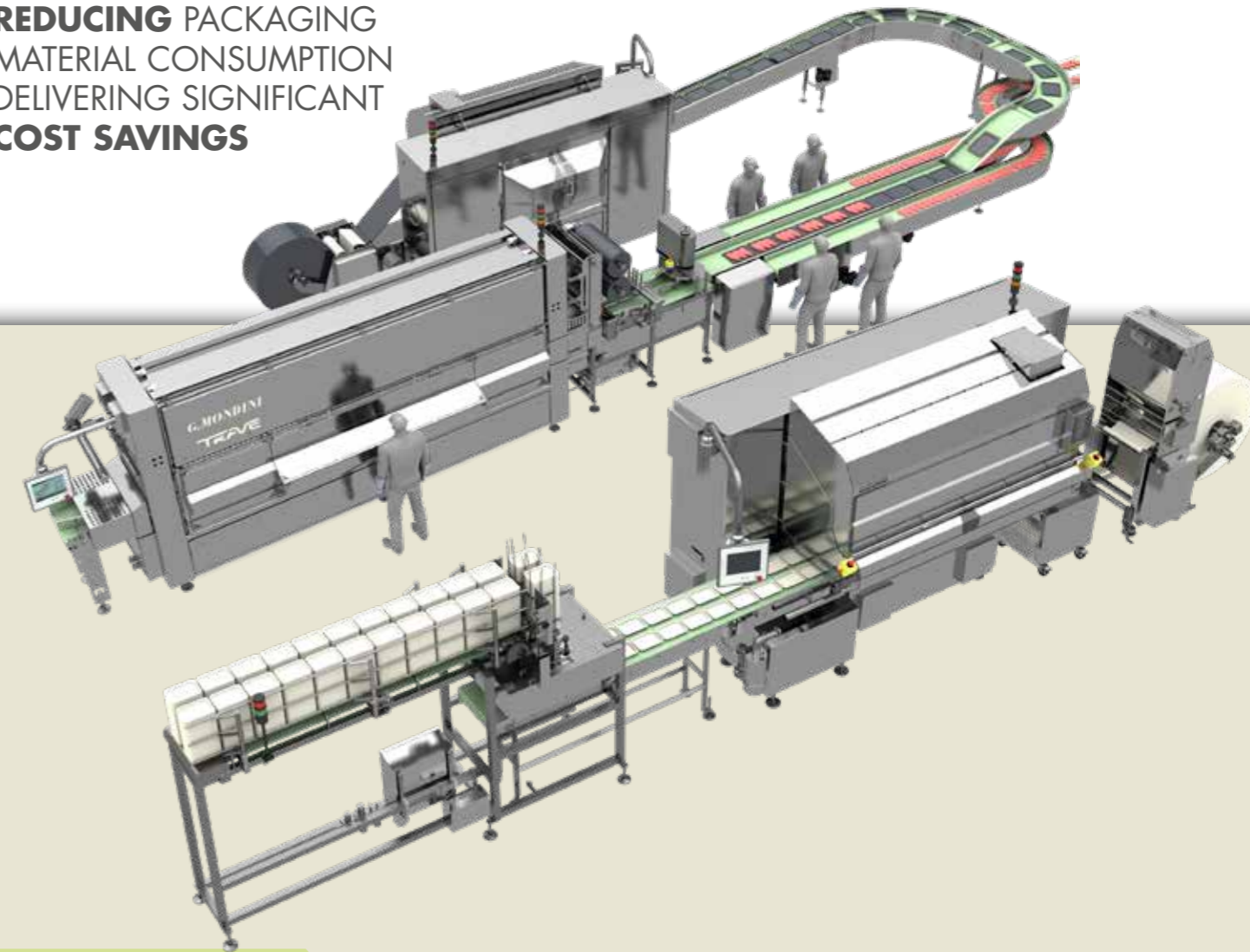
WHAT ARE WE DOING?

THE THERMOSEALER

[PLATFORMER®+Trave Platform® Technology]
is key in the development
of sustainable solutions.

Utilising renewable resources such as fully printable recyclable paperboard to replace plastic and thinner materials we have reduced plastic content of the package by up to 80%.
We deliver matching performances, optimising design with product dimensions and unique engineering technology with our PLATFORMER®, Darfresh® on Tray and Zero® MAP technology.

REDUCING PACKAGING
MATERIAL CONSUMPTION
DELIVERING SIGNIFICANT
COST SAVINGS



PLATFORMER®

Developed in response to customer demands to improve sustainability of the tray sealer technology without reducing the benefits. This we achieved through smart innovative engineering which allows us to produce trays from roll-stock film reels at the customer's factory. The system cuts precisely the amount of plastic needed for each product and promptly

thermoforms the tray. They are filled with product and tray sealed immediately improving system efficiency and security. Significant materials savings are achieved with wastage below 2% while **REDUCING** the carbon footprint of the tray manufacturing and logistics process.

The PLATFORMER® has the flexibility to fabricate trays in

- ▶ OFF LINE tray making and stacking for feeding directly onto existing customer packaging line.
- ▶ THERMOSEALER VERSION
in-line fabricating trays directly linked with the speed of the Trave® Tray Sealer.

The PLATFORMER® produces quality trays which deliver substantial performance improvements versus HFFS thermoforming.

ZERO®

Top film skeleton waste was identified as a key issue by users of tray sealing technology where significant savings could be made.

We responded by developing Zero® technology that delivers these savings of film and improving the functionality of the process.

The new process involved redesigning the film transport system and a new in mould cutting system that will **save up to 25%** of top film usage.

DARFRESH® ON TRAY

A joint development between G Mondini and Sealed Air Cryovac® to extend the proven benefits of the Darfresh® vacuum skin system onto the tray sealing Platform. It is a full system approach combining Trave Platform® Technology in complete harmony with the full range of Darfresh® materials.

Through patented technology the system delivers a new level of performance in

Removing skeleton wastage completely through newly developed innovative film cutting system **saving up to 40%** of film versus standard tray sealers.

Innovative vacuum system delivering best in class vacuum for securing product safety and security

Integration with in line PLATFORMER® technology perfects the Darfresh® on Tray process giving optimisation of materials, performance and package security delivering lowest pack cost

THE RANGE OF TRAVE® TRAY SEALERS

are fitted with Platform® Technology ensuring all packaging formats benefit from the reliability of the unique Trave® servo – mechanical sealing system giving ▶▶

Unrivalled system reliability with lowest guaranteed rejects through perfect quality of seal

Quick and easy change of materials and/or technology

Optimal control of the packaging technology parameters

Best in class productivity with minimal machine footprint

Hygienically designed to enhance shelf-life, food safety and security

OUR SUSTAINABLE PACKAGING SYSTEMS

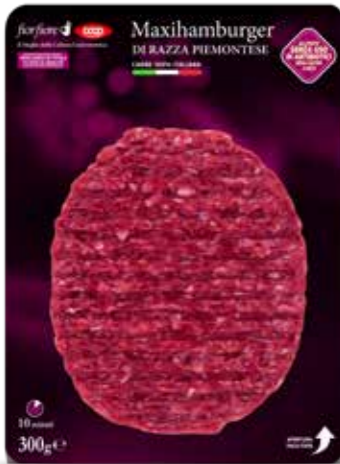
Sustainable paper board materials are central in our new range of VSP and MAP systems to improve their acceptability, increase performance and enhance product security due to perfect sealing technology.

SLIMFRESH®

First of its kind launched by Mondini, it REDUCES plastic content by up to 80% in the vacuum skin market. Combining a fully printed flat cardboard support with a thin high barrier liner, opening new opportunities in pack styling, merchandising and communication.

Whilst maintaining all the benefits of the vacuum skin process it delivers:

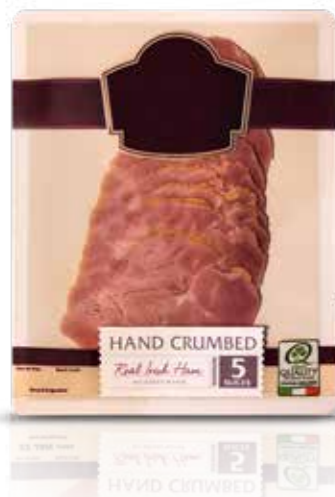
- Flat cardboard support designed to be RECYCLABLE giving consumer possibility to easily separate the liner from the cardboard and place into suitable waste recovery stream.
- Combined with Skin technology to extend shelf life reducing food wastage.
- Fully printable cardboard support extends communication and merchandising.
- Flexibility to run on Trave® Trays Sealers through simple tool changes.



SLICEFRESH®

Building on the success of SLIMFRESH® this new system was developed and launched to bring the benefits of using flat cardboard supports to sensitive sliced products packaged in MAP® such as meat and cheese.

- Increased consumer convenience in re-closable version to help in reduction of consumer food waste.
- Digital printing all over the pack with easy design change to increase consumer communication.
- Thinner pack with increased rigidity that expands opportunities for retail merchandising.
- Flexibility to run on Trave® Trays Sealers through simple tool changes.



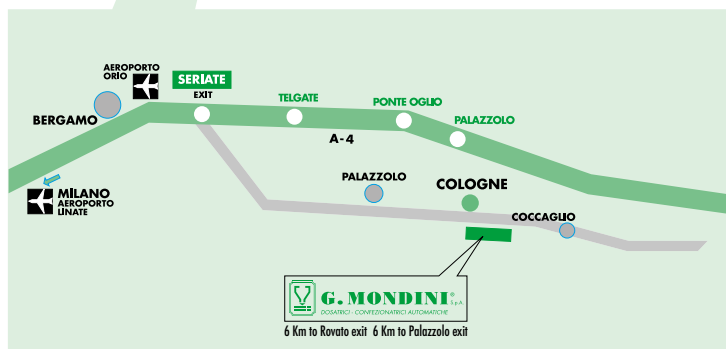
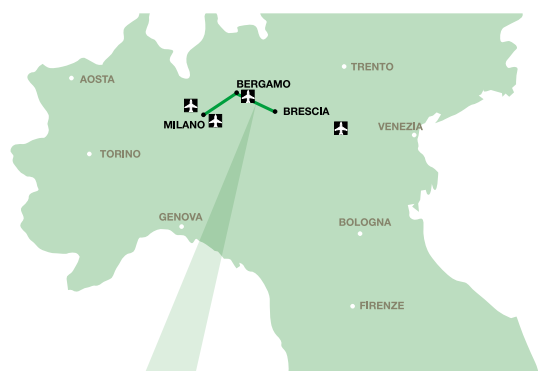
PAPER SEAL
U.S. Patent pending

This new system expands the opportunities to replace MAP and VSP plastic trays with barrier lined cardboard. The process operates by fabricating a MAP tray from a pre-cut flat cardboard, which is formed and a barrier liner automatically applied in one step process. The system is based on the same benefit stream as Thermosealer® technology where the fabricating of trays is conducted directly before the tray sealing process.

Through value engineering and clever pack design we have constructed a cardboard tray system that is straightforward to integrate into current packaging lines giving:

- **SAFETY**
Unique process to generate perfect sealing surface.
Guaranteed state of the art seal integrity equal to traditional plastic packaging.
- **FLEXIBILITY**
Availability of different liners and paperboards offers technical solutions to suit any product. Presented for Top Seal, Modified Atmosphere and Vacuum Skin formats. Recommended for cheese, fresh meats, processed meats, ready-made products, frozen foods, snacks, salads and fruit.
- **FULL BRANDING**
360° Communication on all surfaces of the package.
High quality graphics for premium branding design.
Flexibility on communications format – Printing and/or labelling.
- **LESS PLASTIC**
Reduces plastic content by up to 80%.
Liner forming station with ZERO® technology eliminates all process waste.
Easy Separation of liner and paperboard for simple and efficient recycling at end of life.
- **MINIMUM SIZE MAXIMUM SKILLS**
Trays delivered as flat boards significantly reduce distribution and storage costs Vs premade trays, liner forming with ZERO® waste technology optimises cost of final package.
Reduced inventory with availability of smaller purchase quantities.





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