

## **Packaging Machinery**



## **The world of cheese**

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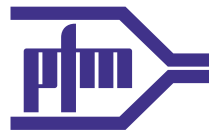
## Specialization and Innovation



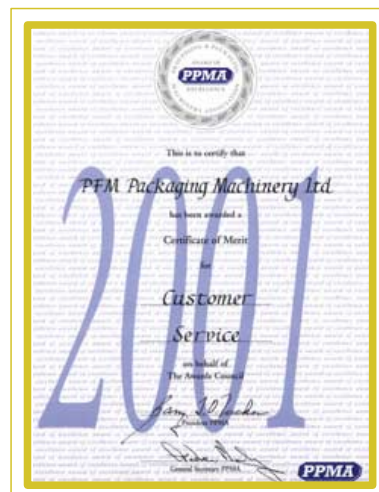
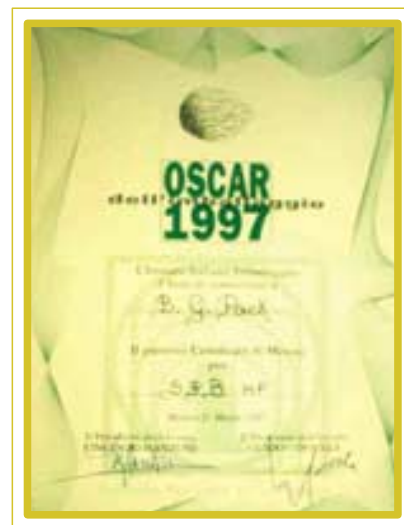
For almost 40 years now, **PFM Packaging Machinery** has been identified worldwide as a manufacturer of highly dependable packaging machinery. Today PFM is an industrial group made up of 5 companies: the Italian Head Office, PFM Packaging Machinery, flanked by the British office, **PFM LTD**, the Canadian office, **PFM Corporation USA & Canada**, **BG PACK SpA** from Bergamo (Italy), which consolidates the group's presence in the market of economic and reclosable packaging and, finally, **MBP** from Mantua (Italy), the latest acquisition, which produces multihead weighers to complete PFM'S wide range of packaging machinery.

**PFM** has dedicated to the cheese industry a specific line of flow-wrap and form-fill-seal machines: the utmost in sanitization capabilities, cantilevered construction, **MAP** packaging, **Open & Reclose**, **Pocket Bag®** packaging are the traits that place PFM among the sector leaders.

After-sales assistance, precise and updated technical manuals, extremely rapid spare parts service, are some of the other elements that distinguish the group as a total quality supplier.



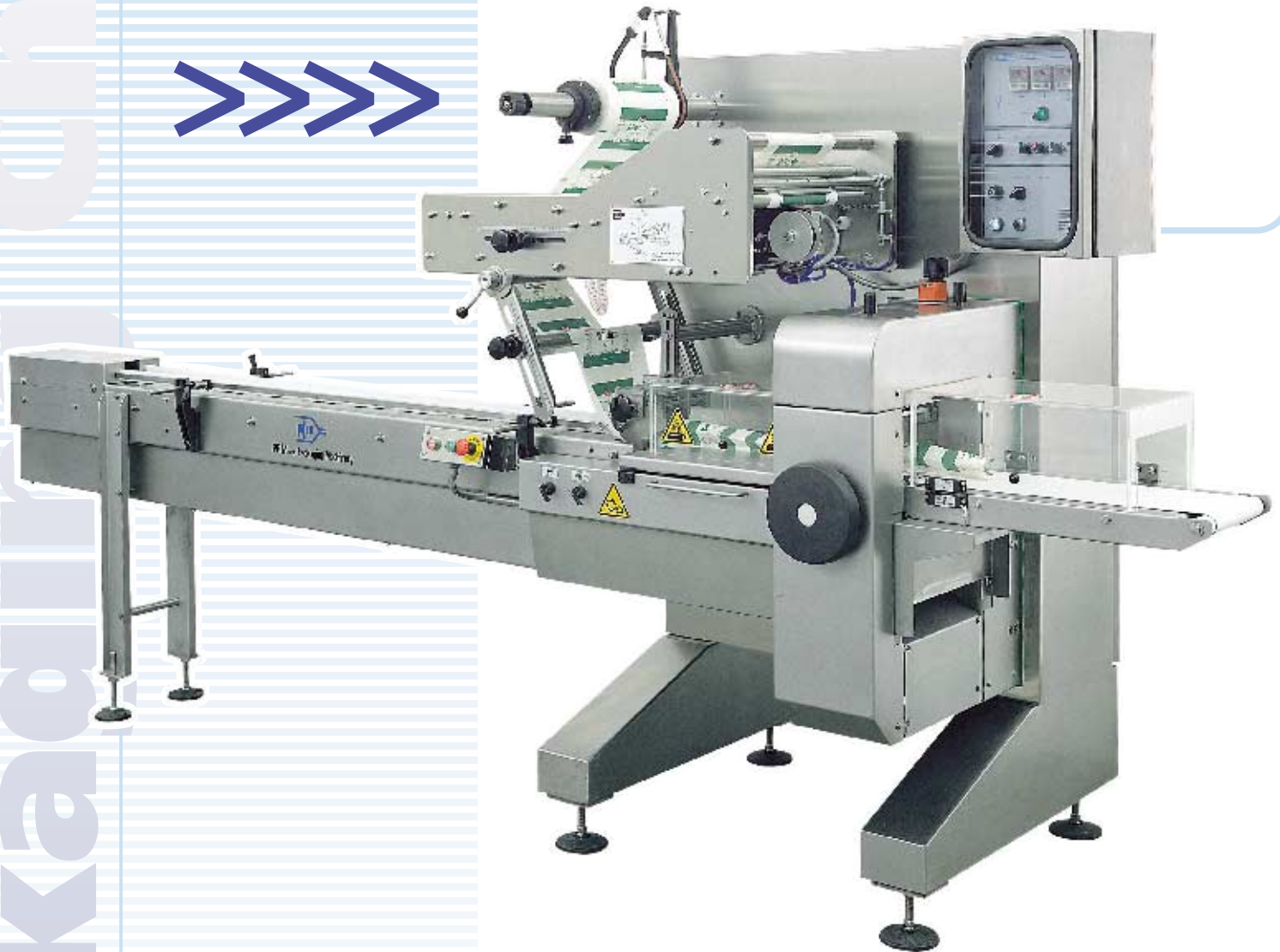
Packaging Machinery



# PFM 300 Superinox

**It is the new horizontal Flow Wrap packaging machine, which produces packages with three seals using heat-sealable packaging material.**

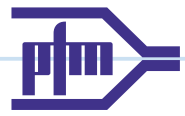
- **Compact**
- **Super hygienic**
- **Highly protected against infiltrations**
- **"Cantilevered" type construction**



## **Main standard features:**

- **Compact design**, construction in AISI 304 stainless steel with radial angles.
- **"Cantilevered" type construction**: the mechanical and electronic components are on the back of the machine leaving the front free for easy cleaning and access.
- **3 tiltable wheel** units in AISI 304 stainless steel and protected by a special guard with front opening.
- **"Cantilevered" style transverse sealing unit**, frame in AISI 304 stainless steel, 1- 2 crimpers per shaft based on different needs. Separate temperature control.
- **2 mt. long infeed conveyor** with interchangeable easy to clean pushers.





**Packaging Machinery**

Designed to work in the harshest environments, careful attention is paid to every detail to ensure high quality packaging. >



*Detail of control panel* ^



**Available models:**

- Three-axled LVA Servo version.
- Shrink version.
- LVA Servo for products with variable length or fixed pitch and print registration.



**Main standard accessories:**

- 2 m long infed conveyor covered with anti-sliding belt and with a metallic joint. Fast assembly/disassembly and cleaning.
- Longitudinal, height-adjustable sealing system made up of 3 separate wheel units, protected and inclinable lengthwise in order to absorb a higher or lower quantity of material and therefore regulate the product wrapping. The first unit draws the material, the second unit carries out the sealing and the third unit the rim folding.
- Long Dwell crossways sealing unit with adjustable height.
- Automatic centring reel holding unit shafts with an electronically controlled multiple belt unwinder.
- Adjustable forming box.
- Individual sealing crimper and sealing wheel temperature controls.



# PFM Tornado LD



**It is a fast horizontal Flow Wrap machine, which produces airtight packages starting from a reel of heat-sealable packaging material. Tornado LD is especially designed for M.A.P.**

**Speed:** the exclusive Long Dwell sealing system allows the machine to achieve 100 hermetically sealed and aesthetically perfect packages per minute.

**Easy to clean and sanitize:** cantilever concept and stainless AISI 304 construction. The mechanical components are at the back of the machine in separate enclosures while the sealing units and the conveying belts are at the front of the wrapper.



Examples of packagable products

## **Servo on line version:**

a new PFM User Friendly and intuitive programming system, which uses a touch screen panel for easily setting the machine functions.

The format change is performed automatically, in particular with regards to:

- Bag length setting.
- Dwell setting.
- Product phasing.
- Print centering setting.
- Date coder printing position setting.

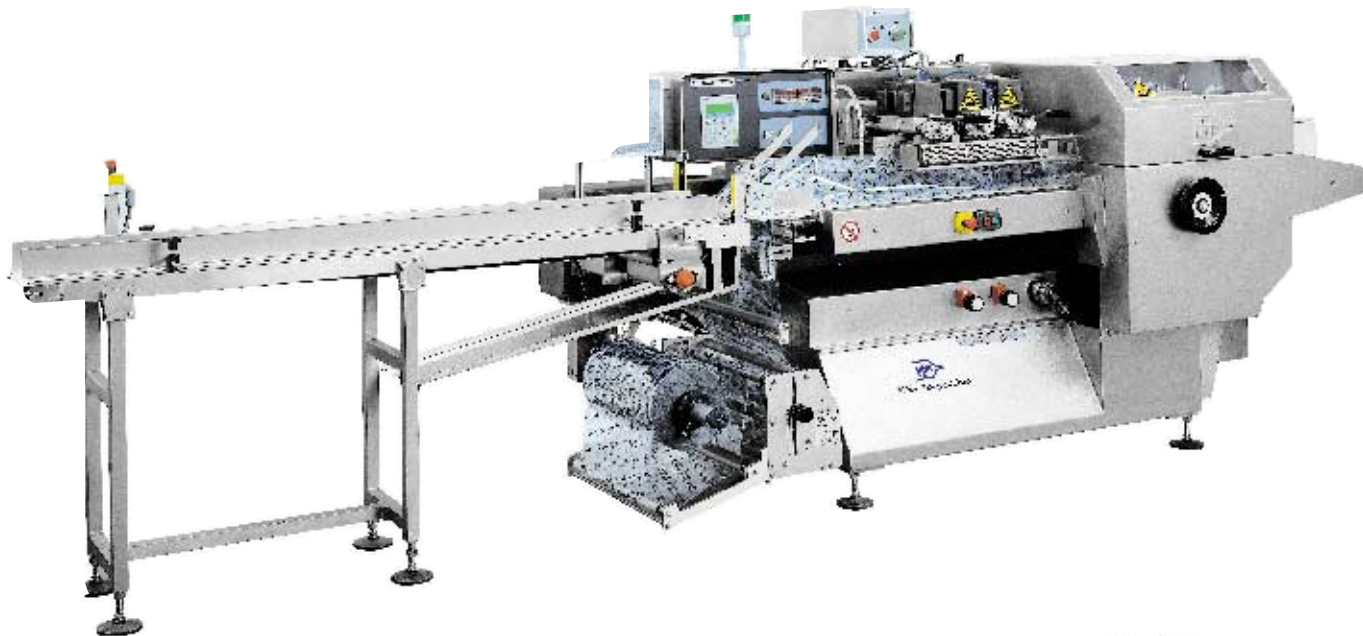
It also features special functions such as the "no product no bag" option and the automatic adjustment of the crossways sealing unit height.

Possibility of on-line remote support system.



## Main standard features:

- 2 mt. long infeed conveyor with interchangeable pushers or flat belt.
- Forming box for packaging material with height and width adjustment for easier format change.
- Double self-centering reel holders with built-in brake.
- Print registration system.
- "Cantilevered" type construction.



Examples of packagable products



## Available models:

- Version with top film reel.
- Version with bottom film reel.
- Electronic Version.
- Servo Version.
- LVA Servo: automatic adjustment of the bag length according to product length.
- Servo Remote - Assistance Service.

# PFM Ghibli >>>>

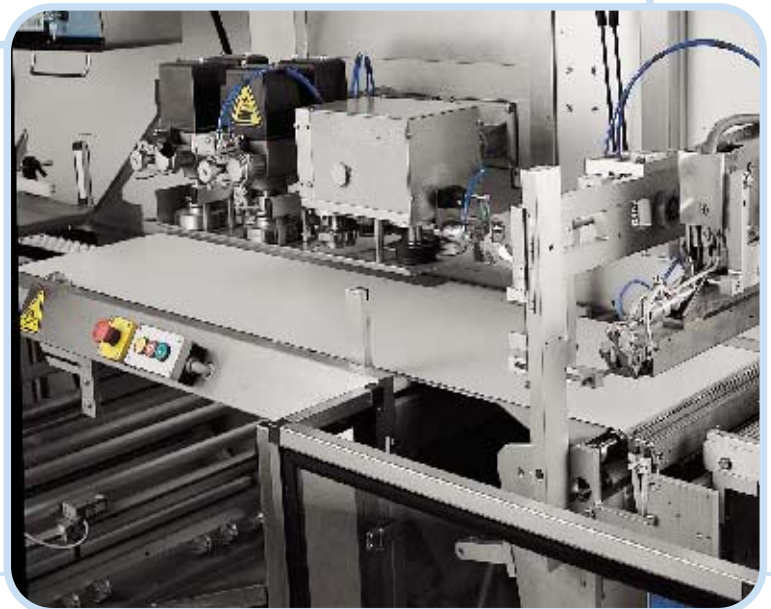
**It is a Flow Wrap machine of the new generation, which produces packs with three seals starting from a reel of heat-sealable packaging material. Suitable for packaging products with large dimensions and also for M.A.P. or subsequent vacuum station.**

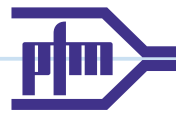
**Maxi Size Pack:** especially designed for packaging cheese with large dimensions using very thick packaging material. Sealing crimpers up to 500 mm and film width up to 1200 mm.

**Box Motion Servo "cantilevered" type sealing system:** separate motors controlling carriage motion and closing of crimpers. Free setting of time, speed and motion of the movable carriage according to the type of product, film and output required. Electronic adjustment of sealing pressure according to the type and thickness of the film.

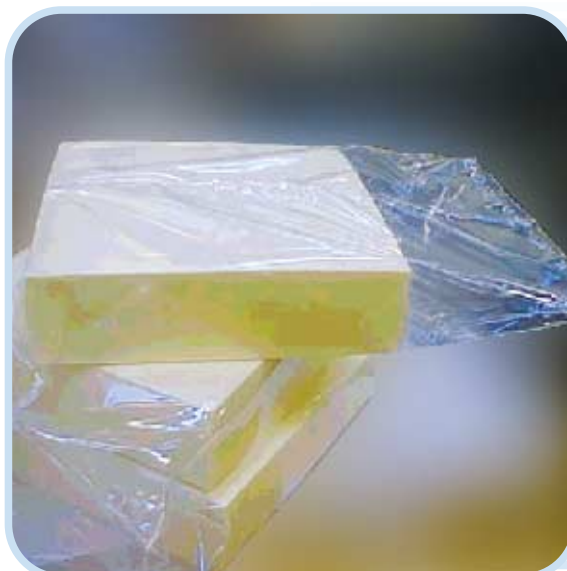
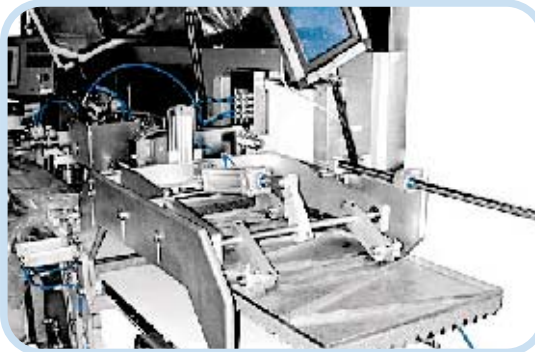
**Total Hygiene and access from every side:** fully "cantilevered" type structure made of AISI 304 stainless steel including the Box Motion without support and therefore more accessible. Completely washable C.S.C. loading belt. Mechanical and electronic components mounted at the back of the packaging machine. Only the sealing and product feeding units are mounted on the front side of the machine. Easy access to every part of the machine. Electronic centering of conveyor belts which can be replaced from the front of the machine.

**LVA or Print Registered:** electronic User Friendly printing system with LVA option (real time length variation according to bag length) or with print registered film.





**Packaging Machinery**



# PFM Mistral >>>>

**It is a horizontal Flow Wrap machine, which produces airtight packs with three seals starting from a reel of flat heat-sealable packaging material. Mistral has also been designed for M.A.P.**



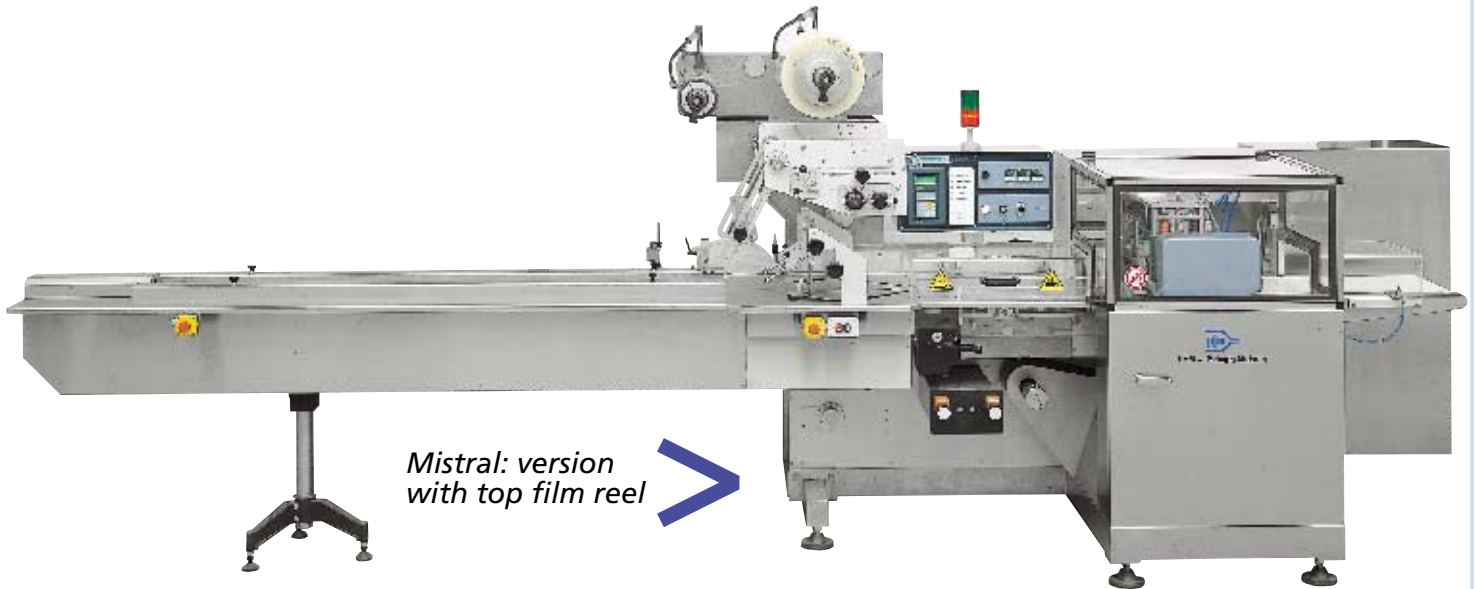
*Mistral: version with bottom film reel*

- **Safety and high production up to 140 ppm also with MAP:** excellent control of gas flow along the film tube, PFM Long Dwell/HS sealing unit, 1-2-3-4 crimpers per shaft (PFM patent), special and User Friendly electronics, perfect temperature adjustment of the sealing devices (+/- 2°C). The wheel units are separate, tiltable and adjustable in height to obtain extended shelf life.
- **Maximum Hygiene on the entire surface:** "cantilevered" type structure made of AISI 304 stainless steel. Mechanical and electronic components mounted at the back of the packaging machine. Only the sealing and product feeding units are mounted on the front side of the machine. Easy access even to difficult areas and simple removal of production residues.
- **Fast format change:** just a few minutes are needed to replace the reel and select a new work program. The adjustable forming box makes the machine ready to package a different product in a short time. From single-use portions to family packs in a few minutes, without the need for specific training.
- **Aesthetically perfect packages:** the precise proportion between the machine and the forming box combined with the exclusive Long Dwell system guarantee aesthetically perfect packages with air tight and well positioned seals.



### Available models:

- Version with top film reel.
- Version with bottom film reel.
- Electronic Version.
- Servo Version.
- Long Dwell HS version.
- BDF version which allows the use of heat-shrinkable packaging material with gas barrier capabilities.
- Servo-Remote assistance service.



### Servo on line version:

A new PFM User Friendly and intuitive programming system, which uses a touch screen for easy setting of functions.

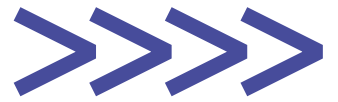
The format change is performed automatically, in particular with regards to:

- Bag length setting.
- Dwell setting.
- Product phasing.
- Print centering setting.
- Date coder printing position setting.
- Version with on-line Remote Support System.

It also features special functions such as the “no product no bag” option and the automatic adjustment of the crossways sealing unit height.



# PFM Scirocco



**It is a servo-assisted Flow Wrap machine, which produces airtight packs with three seals starting from a reel of heat-sealable packaging material. Scirocco has also been designed for M.A.P.**



*Scirocco*

- **Extreme technological evolution:** great design for specific high production requirements. Expandable reel holders, electronically controlled disc brakes, perfect gas recycling inside the film tube even if particularly long. Long Dwell - HS sealing unit, 1-2-3-4 crimpers per shaft (PFM patent) up to 150 ppm. Separate and tiltable sealing wheel unit with cantilevered assembly and adjustable height.
- **Total Hygiene and total access:** fully "cantilevered" type structure made of AISI 304 stainless steel. Mechanical and electronic components mounted at the back of the machine. Only the sealing and product feeding units are mounted on the front side of the machine. Total access to every machine area and immediate removal of production residues.
- **Flexibility and simplicity:** possibility of producing Flow Wraps in MAP, Pocket Bag Open & Reclose, or with ZIP.
- **Perfect Appearance:** precise control of film position, remarkable tube forming space, long sealing time for excellent transportation, forming and sealing of the packaging material leading to perfect packages.





*Examples of packagable products*

## Scirocco PB

**Automatic line for the production of airtight open & reclose packages composed of:**

- **In-line automatic feeding system.**
- **Scirocco PB flow wrap.**
- **Automatic hem folding system.**
- **Labelling station.**



*Scirocco Pocket Bag*



*Examples of packagable products*

# Packaging multi-crimperes

## control and air-tightness

# BG 2800



**The system Open & Reclose** allows to produce a reclosable package with a hem and adhesive band, or with zip, facilitating the closure of the package. The Open & Reclose is enjoying a great deal of success in the sector of portioned cheese and in other sectors as well. It is suitable, in fact, for all food products that are not too tall, whose consumption normally takes place in two or three times.

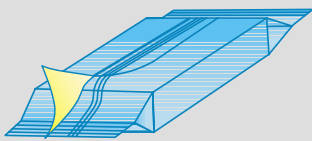
**The ability to reseal the package** ensures the product is maintained fresh. Practicality in opening ensures considerable marketing advantages for the purchaser.



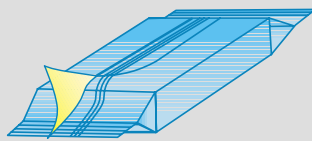
Examples of packagable products



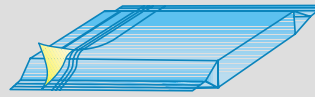
**User Friendly:** 2 axis with an industrial PC-controlled motor, a color touch screen and software developed in Windows NT environment, to facilitate programming as much as possible and allow easy interfacing with other PCs and software.



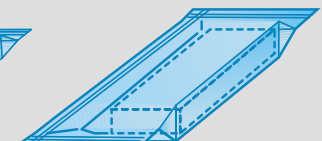
pillow bag (recloseable) from two films - lap seal and fin seal



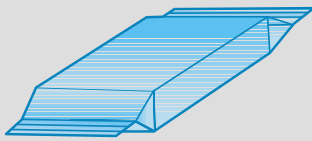
pillow bag (recloseable) from one film - lap seal - (ewl) - with product fed to the machine length wise



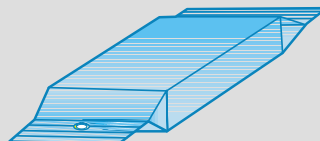
pillow bag (recloseable) from one film - lap seal - (ewl) - with product fed to the machine turned 90°



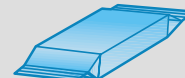
3 side seals bag - lap seal - (ewl)



standard pillow bag - fin seal



pillow bag with hole punch - fin seal



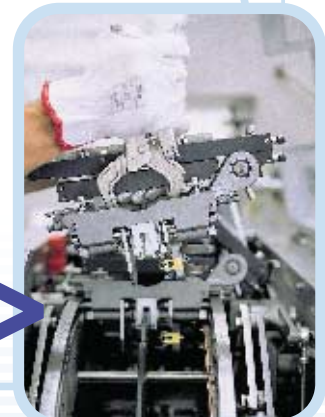
pillow bag miniportion - fin seal

### Rapid Crimper Hook/Unhook System:

format change takes place in a few minutes, with the special tool supplied with the machine, the crimper is grabbed as it comes automatically out of its housing.

Repositioning is equally easy and automatic.

**High flexibility and operational productivity,** guaranteeing absolutely hermetic seals, a fundamental characteristic for MAP packaging.



### Long Dwell Multi- Die Crossways Sealing Unit:

high pressure and long sealing duration are the distinctive elements of the exclusive BG Pack rotating multi-die system.

The material remains tensioned, pulled between the dies, which makes it impossible for it to form wrinkles and imperfections.

The temperature control takes place separately for each die and is monitored through the control panel.

If the temperature of one of the die exceeds the range set, the machine stops automatically, with the defective crimper in the fast release position.

