



## Glass Industry Machinery

**Messersi Packaging designs and manufactures machines and complete lines for the glass industry.**

**Strapping**



**Hooding**



**Wrapping**



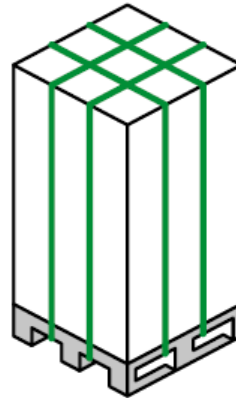
**Thermo-Shrinking**



## PACKAGING SOLUTIONS

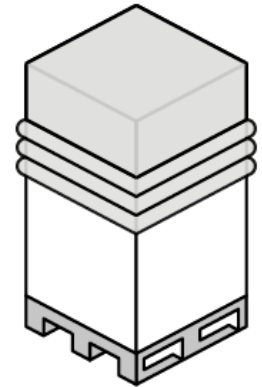
### Strapping machines

Strapping machines – automatic, semi-automatic and for packaging lines, horizontal, vertical and side-sealing – are designed to package all kinds of material easily and quickly. User-friendly and customizable, they are employed in numerous large, medium and small-sized industrial sectors.



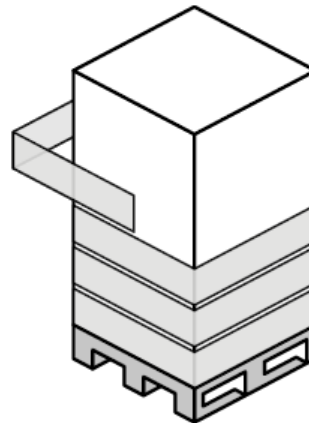
### Hooding machines

Hooders work in two stages: first the film is stretched over the pallet, after which it immediately drops down over the contours until the whole pallet is covered. It is the ideal system for exposed packages requiring protection as well as hygienic and functional safeguards. Stability is guaranteed by the elasticity of the film which makes this type of packaging the best solution for stabilizing and handling particularly unstable loads.



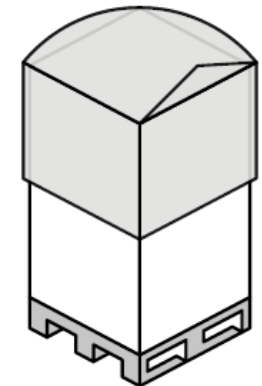
### Wrapping machines

Wrapping machines wrap packages in stretch film, and develop solutions that keep the quality and pace of production high. This product line includes ring, vertical, rotary or still and orbital wrappers. The degree of customization is almost limitless, and the various optionals make these machines indispensable for transporting and handling material goods.

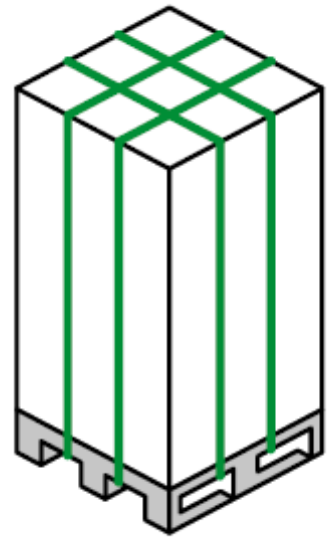


### Shrink wrapping machines

Shrink wrapping machines, suitable for packing palletized products, provide stability as well as good protection from atmospheric agents. Packaging takes place in three stages: the shrink film is prepared and cut to measure, the machine places it round the material to be packaged, the combined – electric or gas-fired – oven causes the film to shrink, and thus to adhere perfectly to both the product and the pallet.

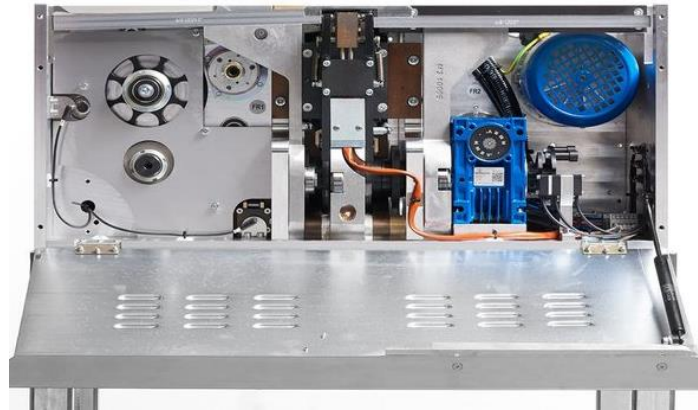


# ***STRAPPING MACHINE***



### *Designed for low maintenance and low TCO*

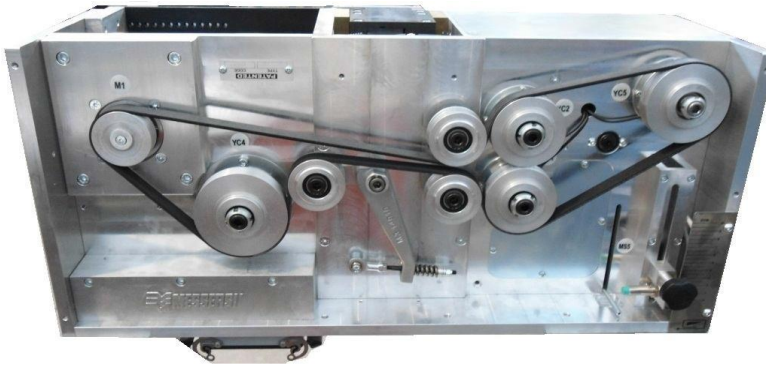
Thanks to the considerable technical expertise in packaging, we adopt in our Philosophy of Designing the "principle of simplicity", that don't let us add "complications" in the design of the machines, in respect of an old business dogma that reads «everything that there isn't, doesn't break!» Moreover, the principle of construction of our machines requires great strength for maximum and better durability, because we believe that they must primarily work to produce business for our customers, at the lowest cost of maintenance possible. And it's because the mechanical pieces of all heads of strapping are completely taken from the "full", processed by CNC machines, ensuring maximum strength and durability. They never use mergers or precision casting, in order to avoid danger of cracks and/or blowholes, and then breakage of parts under stress



### *MS 300 Strapping Head*

**Low TCO:** In every strapping heads model MS or MV series, we guarantee a very low spending of spare parts for about € 300 per year (corresponding to 300000 ligatures). Clearly respecting the minimum conditions of periodic maintenance, which are those of cleaning (with compressed air blowing the dust of the royal palace) and lubrication (in parts as indicated by our Maintenance Manual).



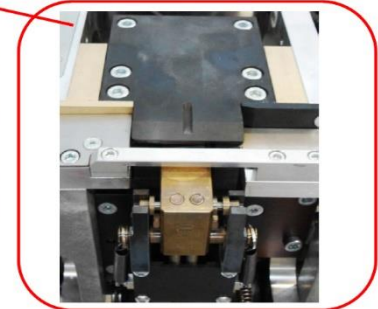
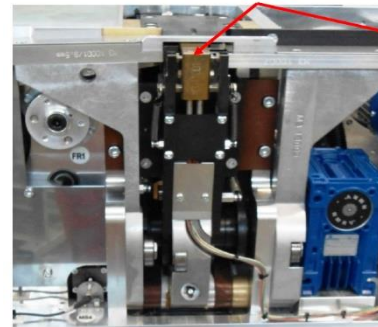


*Feed, Recovery and Tensioning Phases are made only with one belt*

In order to have the most easier system as possible

*Easy cleaning and maintenance of the sealing and clamping unit*

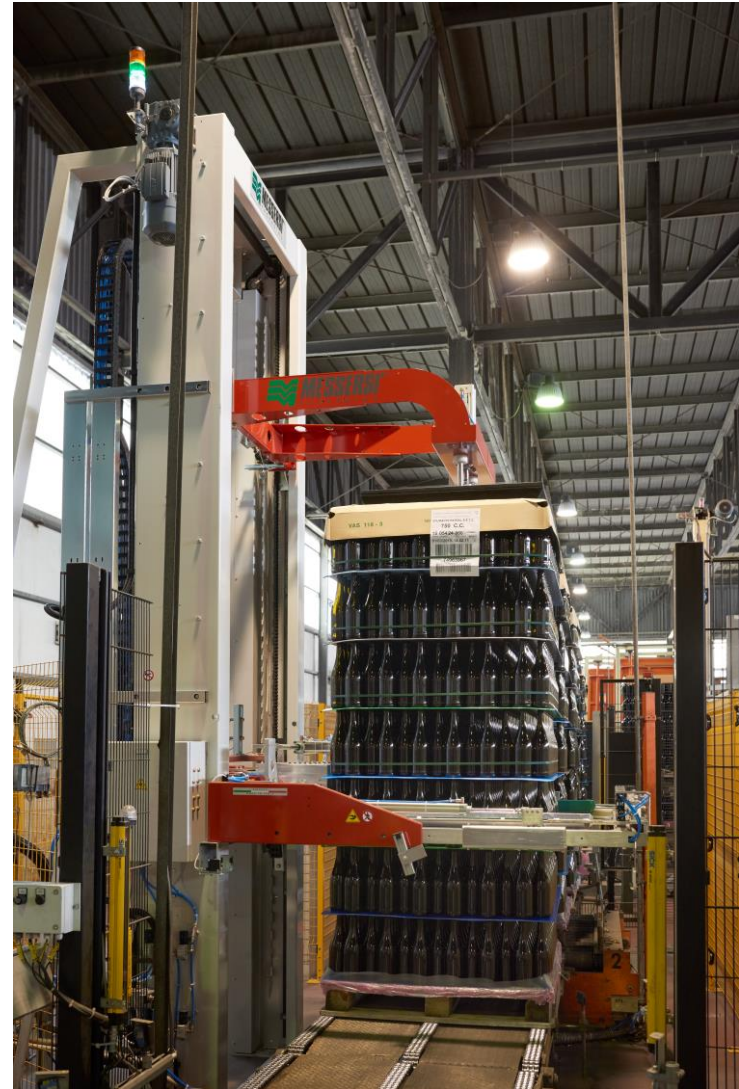
In order to have low downtime for maintenance





The **Horizontal strapping OR60**, is an essential machine to correctly handle the product; it provides stability to the load, ease of warehouse storage and safety during transport.

The strapping head advancing and the opposite movement of the pneumatic strapping centering device allow the package to be compacted on both sides. In addition, the hold down device allows to compact packages on 4 sides before strapping, ensuring greater stability to the load during transport.



The automatic vertical strapping machine is suitable for the vertical compression of palletized loads.

**It can have one or two strapping heads**, one of which movable and completely automatic and carry out automatically one or two strapping operations simultaneously or consecutively. Thanks to a rotating device, **is also possible carry out cross strappings**.

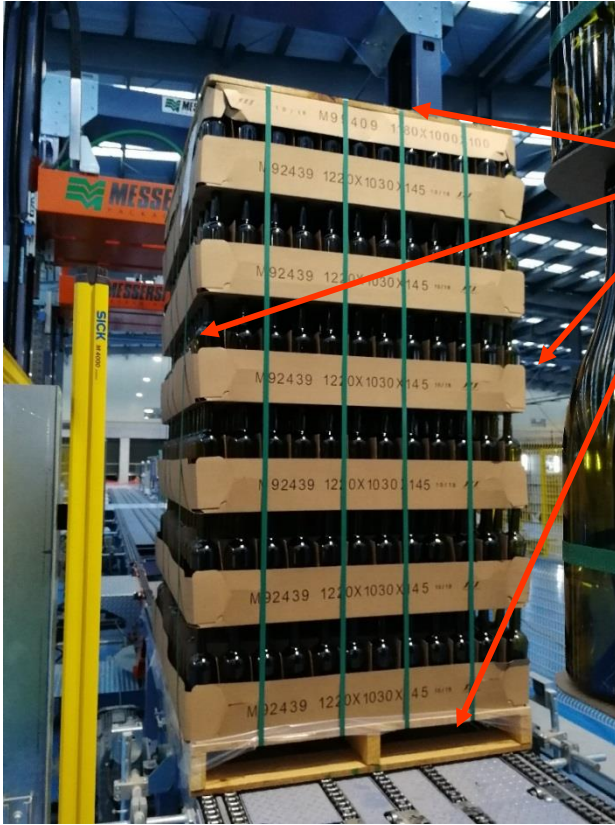
The lower retractable bayonet allows to carry out strappings passing through the pallet to better fixing the load. A special system of **vertical guides with telescopic system enables the strapping machine - at any height – to increase the productivity and reduce the wear of moving mechanical parts**.

**The pressing force can be set up at different pressure values, thanks to an electronic control system**. On the electrical control cabinet there is a touch- screen panel from which it is possible to manage all automatic and manual functions of the machine, such as monitoring the operation and setting the type of strapping band choosing between polypropylene (PP) and polyester (PET). **The strapping machines, are in fact equipped with a strapping head able to use both polypropylene and polyester strapping bands**, is the ideal solution to strap products of any kind and size.

**Currently, it is the only machine which allows to control and regulate the compression through the loading station.**







*Distribution of the strap tensioning force around all the 4 side in the best homoginious way*

**Floating head**  
Compensation system for  
tension force adjustment



***Easy strap reels change at floor level***

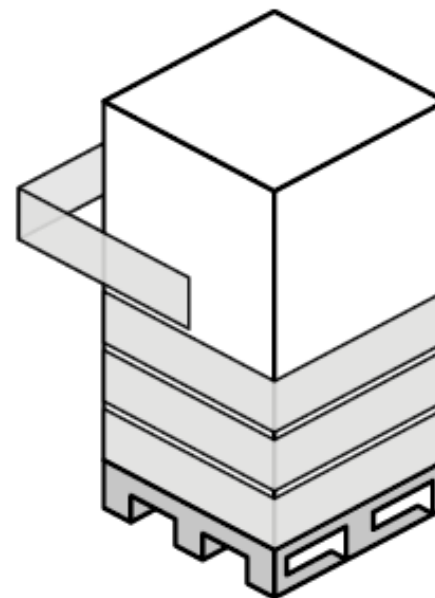
No need to go down with the pressure plate to change the empty reels and insert the new one in the strapping head



***Lowering at the floor level for Head maintenance***



# ***WRAPPING MACHINE***



The machine is designed to process different shapes and sizes of the pallet load, ideal for all kind of packages. The machine is equipped with film gripper, cutting and welding units. All movements, rotating speed, acceleration and deceleration of machine organs are managed by inverter.

This solution reduces significantly maintenance and spare part costs and ensures very low TCO costs on the market.

### ***Smart wrap technology***

variable or fixed pre-stretch

variable or fixed force containment

Corner tension compensation

Carriage equipped with variable pre-stretch (0-400%) from control panel

Carriage equipped with fixed pre-stretch from (mechanically adjustable by gear kit 150—200-250- 300- 350 - 400%)

Variable force containment from control panel

### ***Features and options***

Top sheet cover device incorporated inside the machine. The device is designed to use the optimal quantity of film. Top film thickness starts from 40 up to 100 µm.

Rooping device

Pallet lifting device

Vertical hold down device of pallet load





### ***Design for low maintenance***



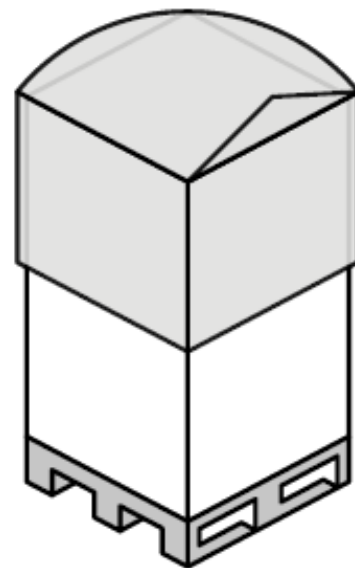
Designed to ensure *zero* transmission belts, *zero* buffer batteries, *zero* wired energy on board. **The electric tension is driven on the ring by using a *magnetic induction system*.** SATURNO is the *only* machine on the market equipped with a *magnetic induction technology*. This unique solution, PATENTED by Messersì Packaging, reduces significantly maintenance and spare part cost and ensures the lowest TCO costs on the market .

### ***Features and options***

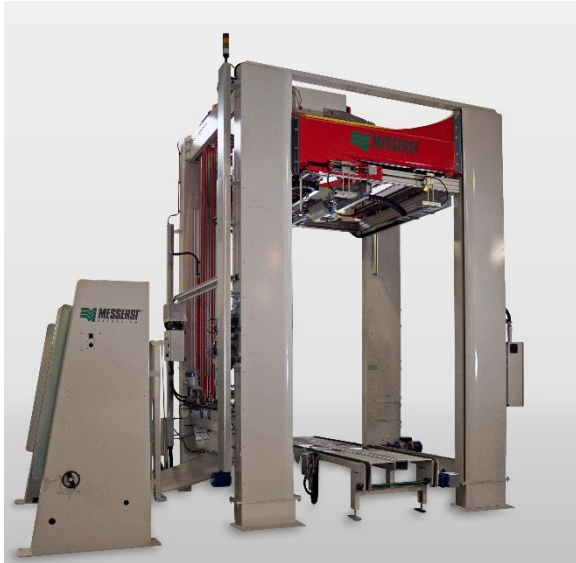
- Carriage equipped with variable pre-stretch (0-400%) from control panel
- Carriage equipped with fixed pre-stretch (mechanically adjustable by gear kit 150—200-250-300)
- Variable force containment from control panel
- Corner tension compensation from control panel
- Top sheet cover device incorporated inside the machine. The device is designed to use the optimal quantity of film. Top film thickness starts from 40 up to 100 µm.
- Automatic reel change device
- Rooping device
- Pallet lifting device
- Vertical hold down device of pallet load
- Vertical corner protection applicator



# ***THERMOSHRINKING MACHINE***



## SH45



## SH77



The combined shrink hooding machines SH45 and SH77 hoods and shrinks palletized products with tubular heat shrinking film.

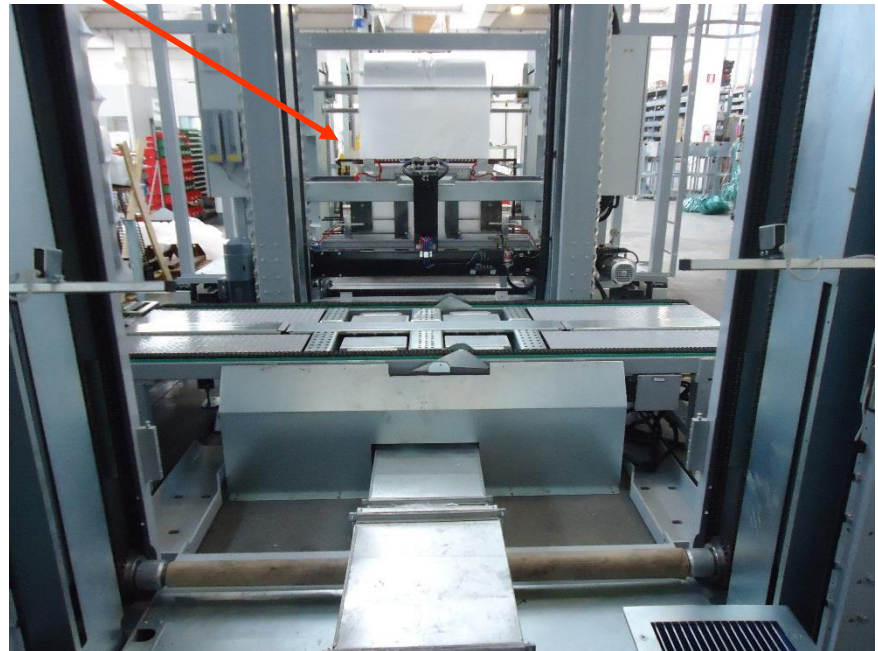
**Both uses a single workstation to perform the hooding and heat-shrinking operations of the product to be packaged**

Messersi offers a single machine as the best solution for the preparation, opening and placement of hoods, made of tubular films, with side folders, together with a gas-powered ring oven.

The system for gripping and handling the tubular film is independent from the heat shrinking system: hence, **the heat shrinking phase not interferes with the gripping phase**, ensuring maximum reliability in terms of wear resistance of the components and wires.

*Easy film's reels change at floor level*

In the both thermoshrinking machine No need to go up or felt down with some part of the machine to change the empty reels and insert the new one



## *Easy maintenance at floor level*

In the both thermoshrinking machine all the gear-motors and operations to do for maintenance are at floor level, to avoid the need to go up for maintenance operations or troubleshooting. The only need is in the SH77 for extra-ordinary maintenance in the translator part of the machine, where we have the appropriate mezzanine for all the operation





## *Reel's dispenser till three different reels*

In the both thermoshrinking machine there are the possibilities to have till three different reels dimension and thickness.

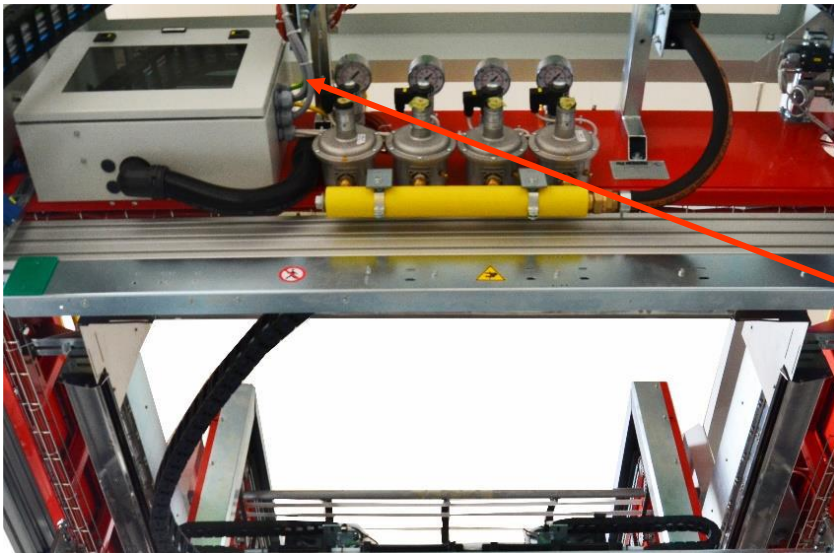


In the SH77 model are also available the possibilities to have a transaltion dispenser to avoid any stop during the production and change the reel empty while the machine is in production. With this optional we could carry on till six different reels in only one machine



## *Air vein Burners*

Our burners are produced by us and is a air vein burners, that convey on the bag only hot air, and not a free flame like what our competitors do. This reduce till zero the risk of fire on the pallet and the product above.



***NO NEED FOR A SMOKE CONTROL CHAMBER***

Heaters equipped with electronic flame control devices to guarantee correct operation; if any anomaly occurs, the oven switches off automatically and the gas supply is immediately blocked, thus preventing the package from being damaged or the unburned gas from escaping into the environment.

## ***THERMORETRACTION CYCLE'S OPTIMIZATION BASED ON THE AMBIENT TEMPERATURE***

The gas consumption for the film's shrinking phase is influenced not only by the characteristics of the film itself (size, thickness and quality of the material) but also by the environmental conditions in which the shrinking takes place.

The differences in temperatures that can be reached inside the plant in summer or winter, in fact, affect the cooking times to have an optimal shrinking and consequently on consumption.

With a view to optimizing consumption, an automatic device is available on our machines that allows you to adjust the shrink cycle according to the ambient temperature in which the machine is located.

Based on the temperature differences that may occur during the winter rather than the summer seasons, it is possible to set parameters from the operator panel that correct the times and speed of the burner arc, and therefore the entire heat-shrinking cycle, to allow the best cooking with minimum consumption in any working condition of the machine.

The possibility of a complete parameterization of this function (temperature thresholds, speed and cooking phases to which the variations are applied) allow this option to be exploited to the full in any working conditions and environment.

***MORE  $T^{\circ}$  => LESS time for cooking => MORE SPEED BURNING ARCH***

***LESS  $T^{\circ}$  => MORE time for cooking => LESS SPEED BURNING ARCH***

**The burners is one of our point of force, that allow us to increase the stability and esthetics of the pallet produced with our machine respect our competitors**



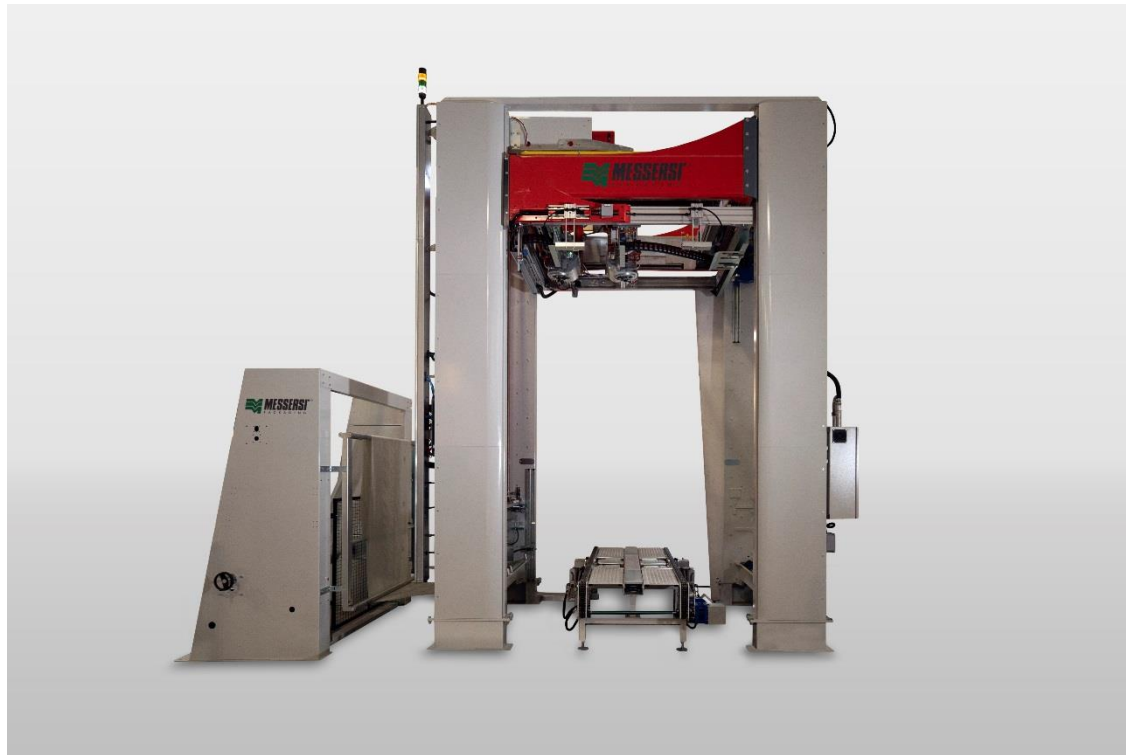


Competitors  
Machine



# *SH45*

## *THERMOSHRINKING MACHINE*

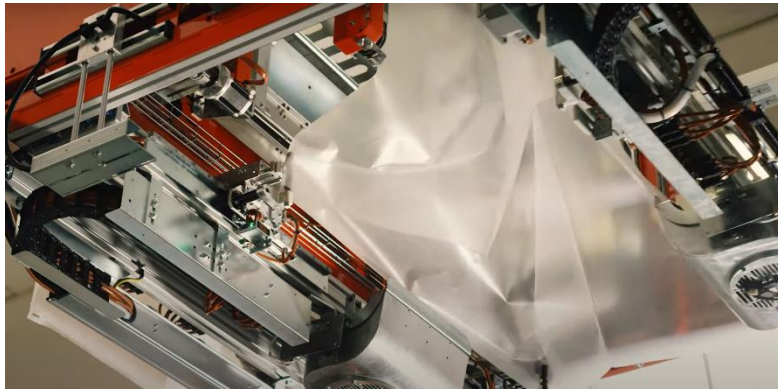




In the SH45, the film's bag is lifted to the top of the machine with grippers that run along a chain channel (PATENT SYSTEM)

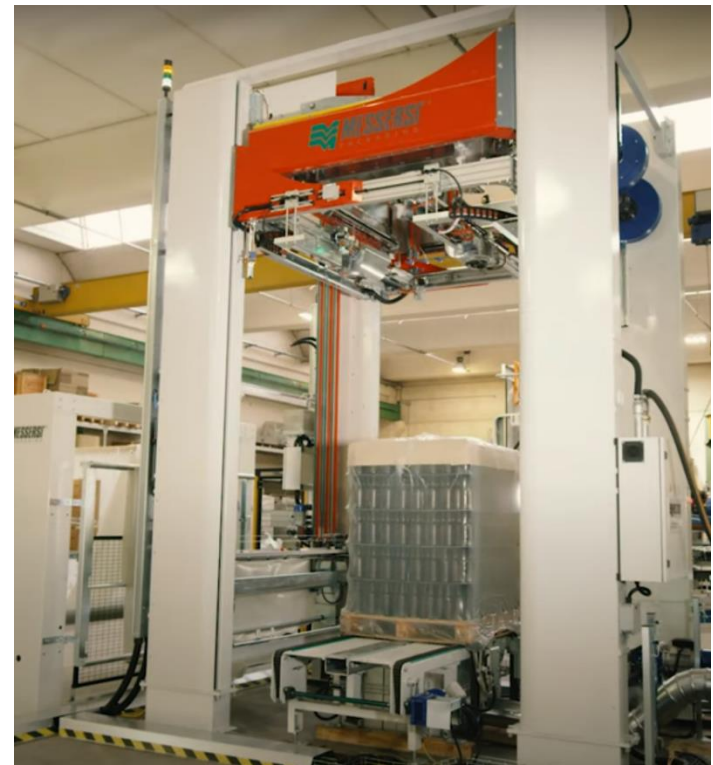


Once the bag is on the top, the hooding arch take the film from the grippers, open it and hood the pallet. The bag is open with 4 stakes, and 2 fan such air inside the bag to avoid detection of the bag with the product



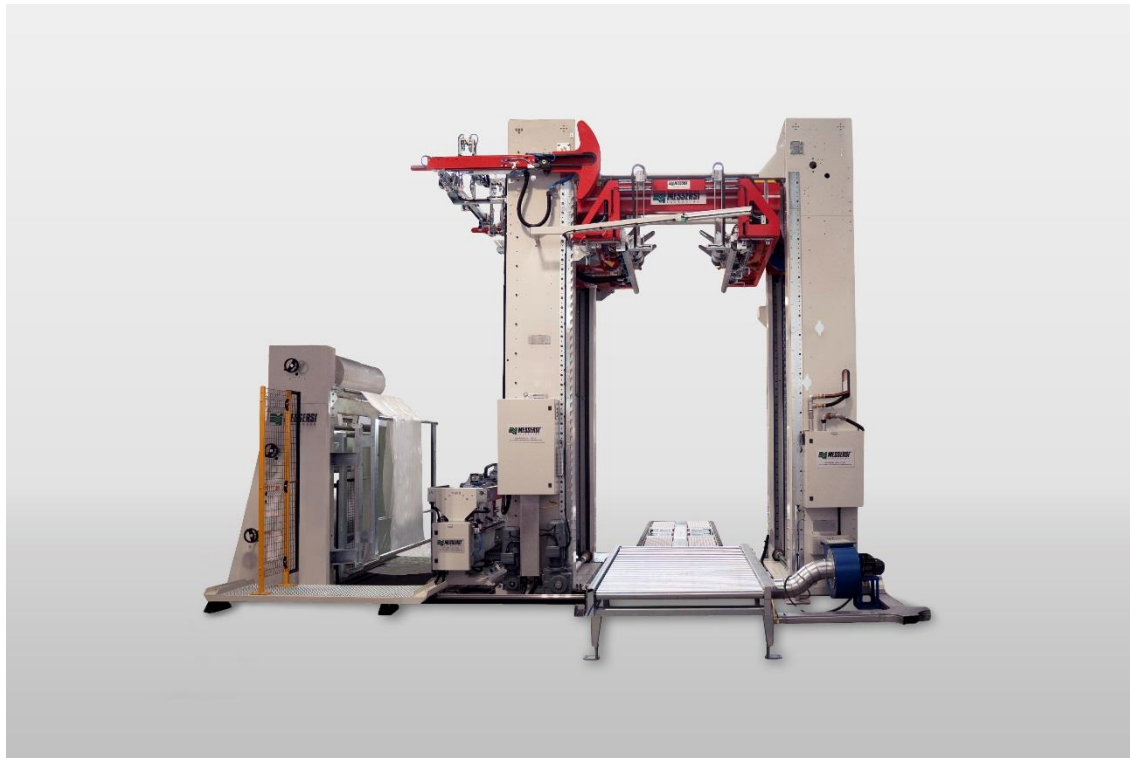


After hooding the bag will be cooked from the Burners arch.  
The complete cycle is suitable from the HMI and adjusted referred to the bag and the type of product.



# ***SH77***

## ***THERMOSHRINKING MACHINE***



The SH77, respect the SH45, **combines and synchronizes three different an independent phases (PATENT SYSTEM):**

- **preparation of the tubular film**
- **transfer and opening of tubular film**
- **hooding and heat shrinking**

mix them together in a single process **minimizing the downtime** of various devices, providing exceptional levels of productivity.



**preparation of the tubular film**



**transfer and opening of tubular film**



**hooding and heat shrinking**



In order to optimizing the consumption of the packaging area, **saving the shrink film is a topic of considerable importance.**

Thanks to our patent, is possible to **hood and consequently heat shrink products, with smaller tubular film dimensions than our competitors.**

In fact, during the hooding phase the bag is stretched, in such a way as to make the most of all the useful opening.

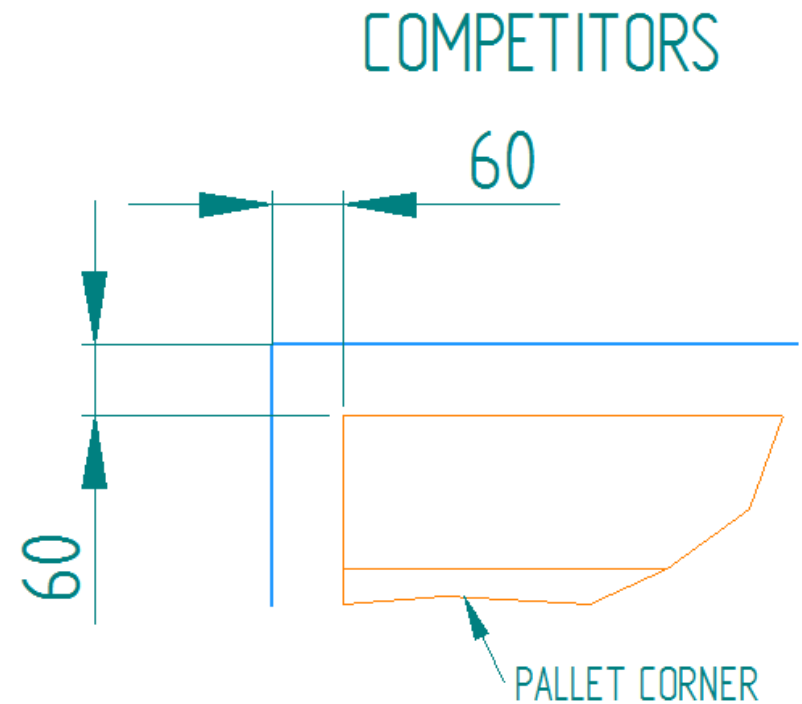
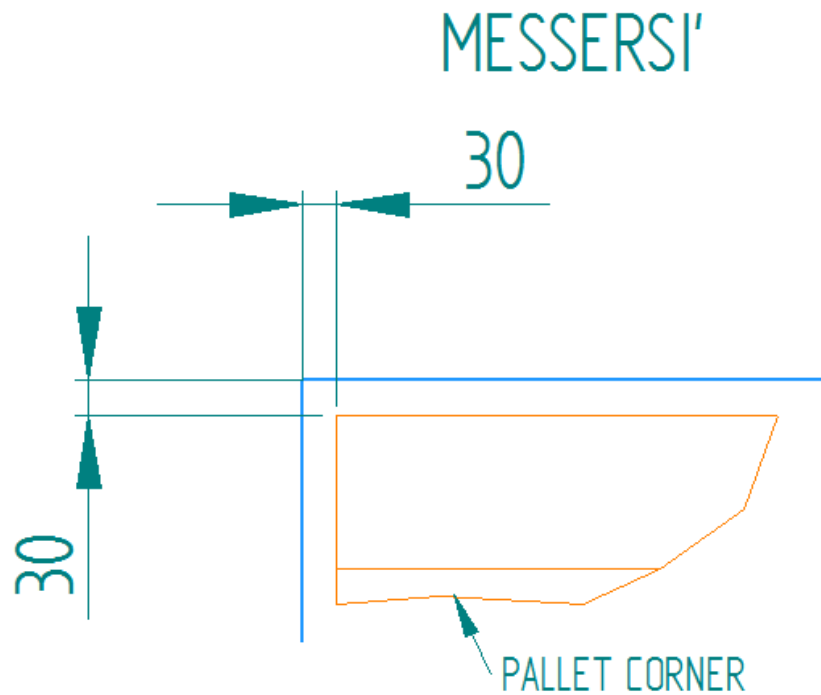


After the hooding phase the pallet will have a sack so tight to the pack, that during the thermoretraction phase need less cooking time therefore less gas's consumption and energy.



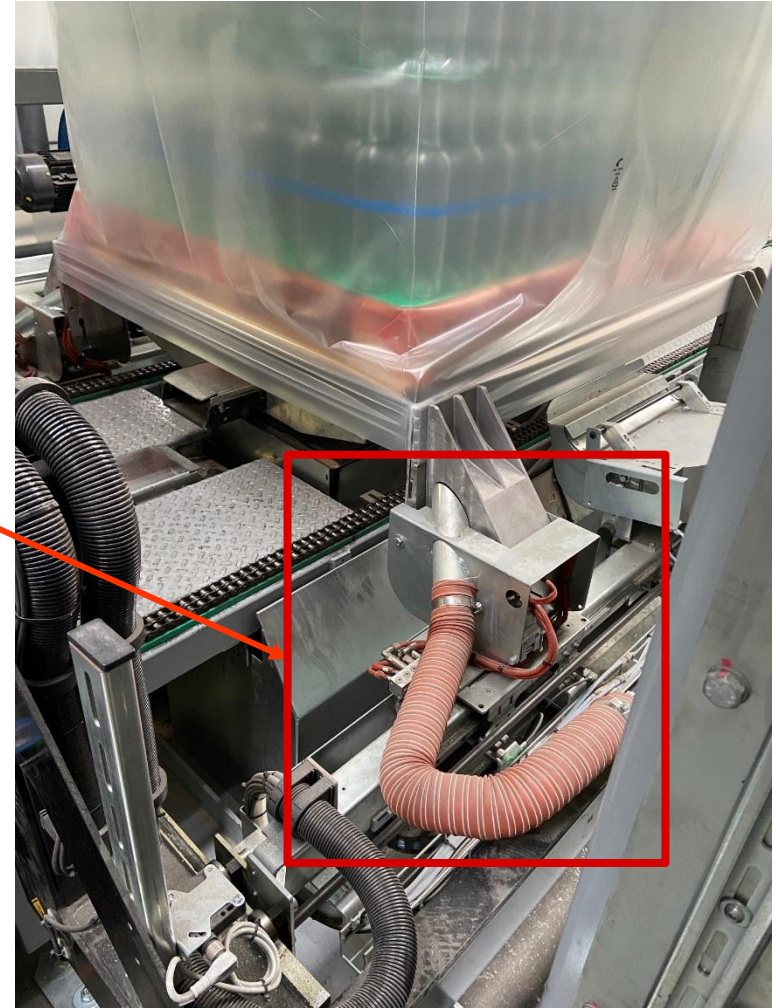
The result is an optimized packaging from the esthetic point of view to the saved film, passing throw the energy and gas consumption, without crease

Compared with our competitors, we reduce by about 50% the distance between the edges of the pallet and the perimeter of the sack to be kept during the hooding phase. The optimization of the shrink film leads to a saving till 10% of film for each bag made.



*The **PATENTED** Grippers in the SH77hooding Arch also allow to:*

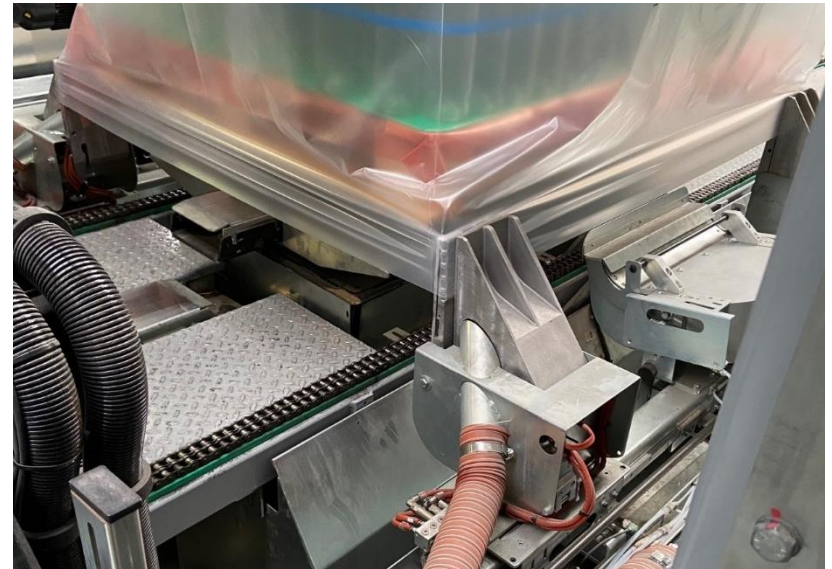
Such air inside the bag during the hooding and refresh the grippers during the cooking of the bag to avoid that some fuse film will rest on the grippers





## *The PATENTED Grippers in the SH77hooding Arch also allow to:*

Fix the film during the cooking cycle, and put it in all the different position respect the pallet that the production required (below the pallet, in the side of the pallet)



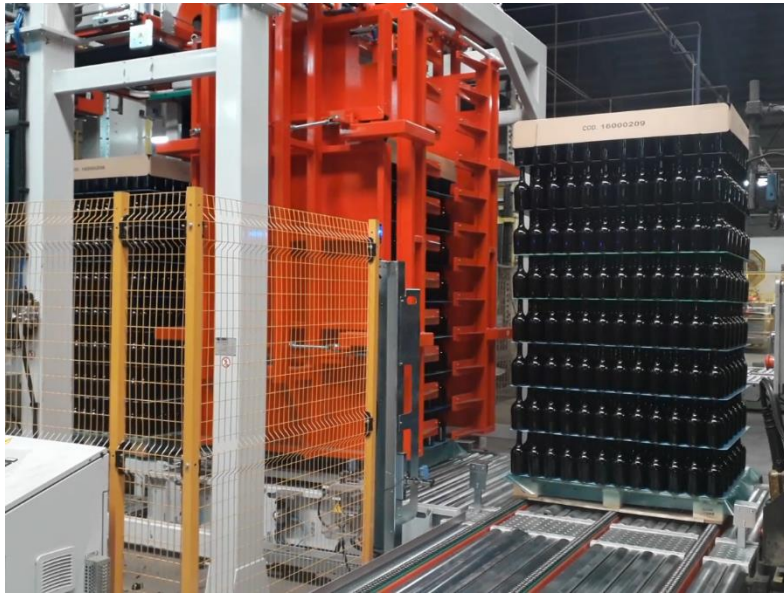
# ***GLASS INDUSTRY ACCESSORIES FOR A COMPLETE SOLUTION***



### *Squaring Devide*

This optional, combined with the centering devide below, allow to precisely square the palletized load before being packaged.

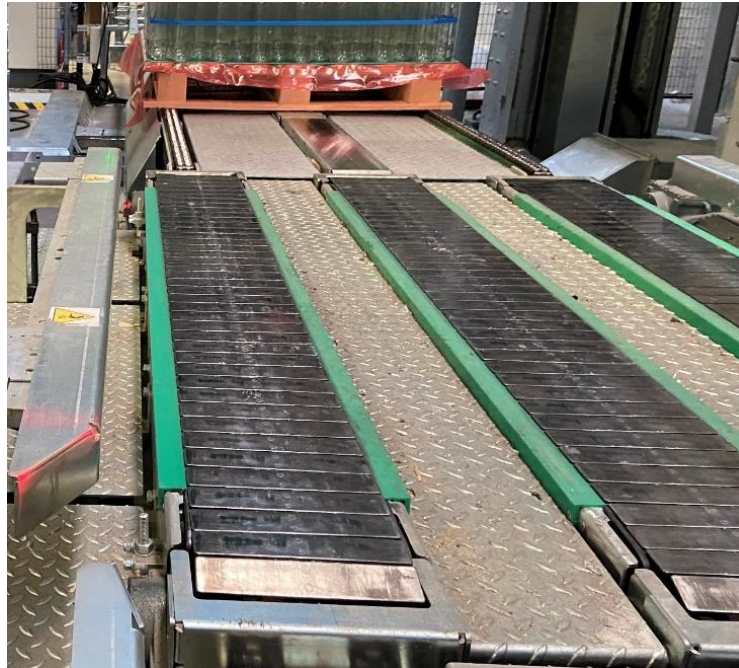
Is an optional very important in the plant where the palletizers are old, or the packaging line are far from the palletizing area, or where the customer whant safe so much film as possible with the thermoshrinking machine





### *Table-Top Centering Device*

**This optional, allow to avoid bottles felt down during the movement of the pack into the line thru the centering device. This optional is important in the plant where the production is not stable and the movement of the pallet on the roller to be centered will be dangerous for the bottle felt down**





### *Top Cover Machine FG100-Top Pal*

This automatic system applies a heat shrinking film sheet on the top of the palletized load to protect the part most exposed to damages during storage, stacking and transport.



### *Complete Line*

**Messersì produce a complete line for Glass Industry, with chain or roller conveyors, depending by the customer, with all the optional required.**



### *Strapping kit for palletizer*

Our strapping head MS20 (only 20kg weight) are the perfect solution for the horizontal strapping in the palletizer's accumulation table.

Thanks to his weight, the MS20 are replace in only one minute and from only one operator.





