



**BOMBI MECCANICA**

**CUTTING MACHINES  
AND ALL OTHER PRODUCTION**

*Since 1964 one nonwoven machine for every need!*

## GUILLOTTINE CROSS CUTTERS



**Extra strong and heavy duty** machine to cut non wovens.

Cross cut, made with a **hardened steel guillotine blade**.

Regulation of the **blade profile** at various points, for perfect cutting at any width.

Regulation of the **blade penetration**, allows optimum action on the product to be cut.

Standard stroke, **up to 250mm**, ideal for high loft wadding production.

Pressing unit, with anti cushion effect on cross cut.

The knife is driven by a 3-phase motor installed on heavy duty gear box driving a large diameter shaft, connected to two eccentrics, one each side of a blade.

The eccentrics drive the blade against the nylon anvil bar, with a cutting cycle from upper point to upper point, of less than one second (for the 250mm stroke model and even less for shorter strokes.) The blade contact with the product is only a fraction of a second, allowing the line to run without stopping and without the need on an accumulator.

## GUILLOTTINE CROSS CUTTERS

Can be equipped with an optional **longitudinal cutting kit**, made with **crush type slitters** or **high speed rotary disks**, in order to cut the nonwoven product in both direction with a single, compact machine. Speed disks are available with **automatic sharpening and cooling system**. Winding machine Available on request



**GUILLOTTINE BLADE CUTTING  
POLYESTER WEB**



**END OF LINE DOING ROLLS**

## MOVING BLADE CROSS CUTTER

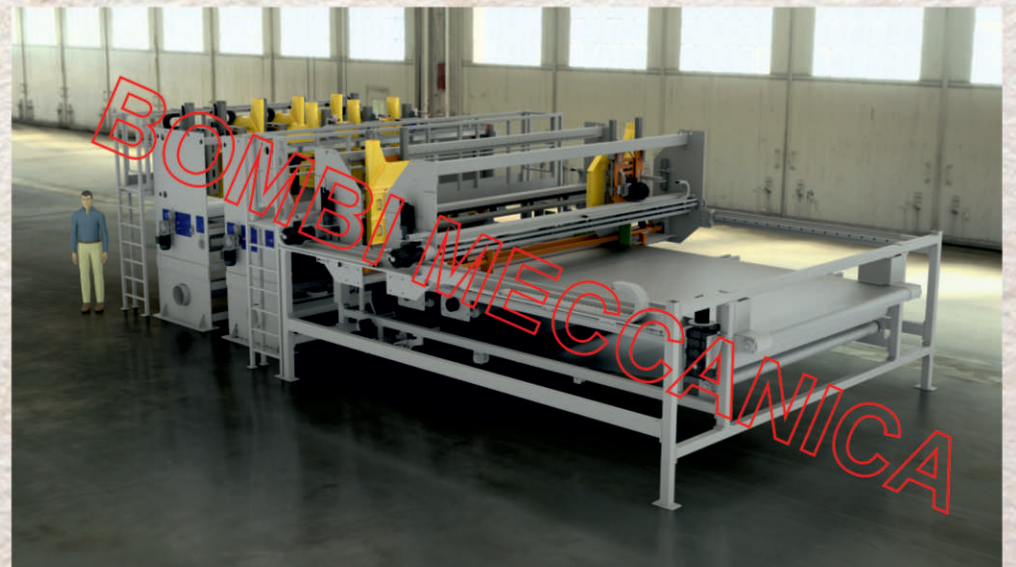


### SPECIFIC FOR HIGH THICK WEBS

When cutting **very thick webs**, the guillotine system is not indicated because the product could be damaged by the compression. **The best solution is the moving blade cutter.**

The cross cut consists in a high speed disk, running on a **traversing carriage that moves across the web**.

During the cutting, the **carriage moves together with the web**, at the same speed, in order to cut the web at right angle without stopping the web. **No accumulation is needed.**



### MACHINE WITH 2 CARRIAGES FOR FASTER CUTS

## LONGITUDINAL SLITTERS

### CRUSH CUT TYPE

The **hardened steel blades work against a hardened roll**, driven by an inverter controlled motor. Each blade is individually pressed against the roller by a pneumatic piston.

**Suitable for hard panels , thin felts, boards.** Reduced maintenance, extreme long life.



### HIGH SPEED BLADES

**Blades are very sharp and driven at very high speed by variable speed motors.**

Special product support, to work in conjunction with the high speed blades.

**Suitable for thick products. The cut is very straight, without damage to the edges and keeps the correct angle.**

Blade are **cooled** continuously during the operation to avoid sticking of the product.

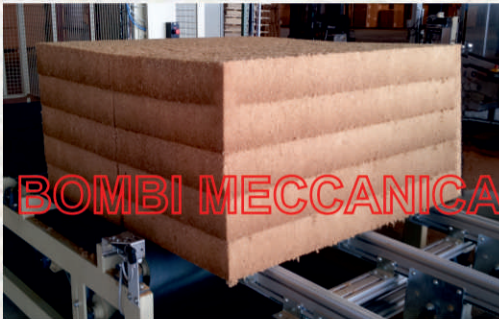
Adjustment of the position of the blades across the width of the wadding can be made either manually or from the control board via motors and encoders, with indication. On request, **automatic sharpening** systems can be installed.



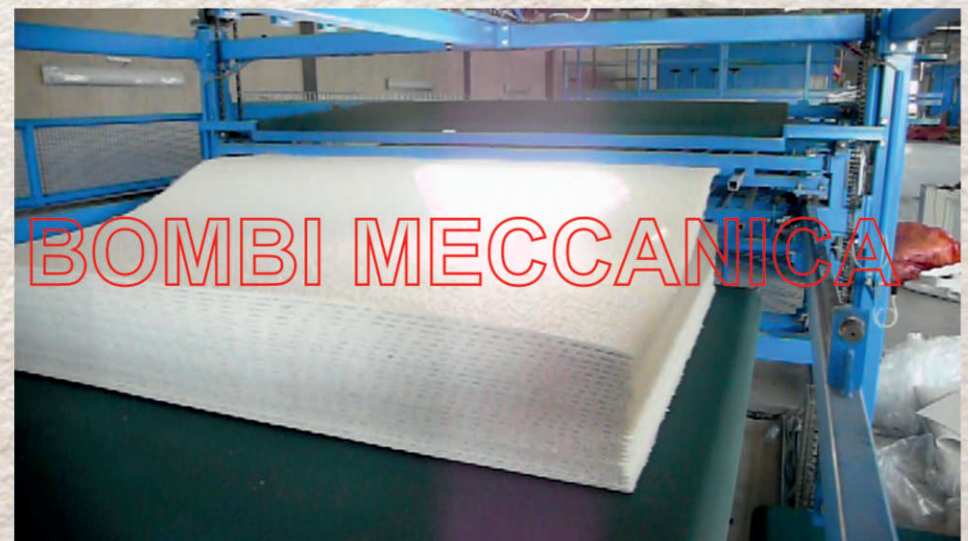
## AUTOMATIC PADS STAKERS

**The pads staker** is the modern end of any line producing thermobonded pads. The machine automatically collects the pads coming from the cutting machine and stacks them onto a movable belt.

Pads are carried via two high speed sets of forks that follow the movement of the pads and deliver them onto the belt. Once the preselected number of pads is reached, the belt starts to move out of the machine the completed stack. During this time, a second set of forks collects the new pads coming in order to assure a continuous production, fully automatic.



At the exit, it is possible to add an automatic packaging machine, that press the stack and wrap it with pet film.



## AUTOMATIC PADS STAKERS - DOUBLE EXIT



**Special version with double exit.** Each pack is formed in a separate belt that deliver it, in automatic way, to a central packagin unit.



## KNIFE COATING HEADS

Main roll is manufactured in hard chromed steel or rubber coated, driven by a frequency converter.

Interchangeable knives are supplied in steel, with electrical adjustment and display of the distance from the main roll.

Lateral blankets that keep the foam/resin/PVC on the fabric are adjustable on the side of the fabric.

Foam/resin/PVC distributor, on board with reciprocating carriage.

Is possible to coat on air or against the roll, with the same machine.

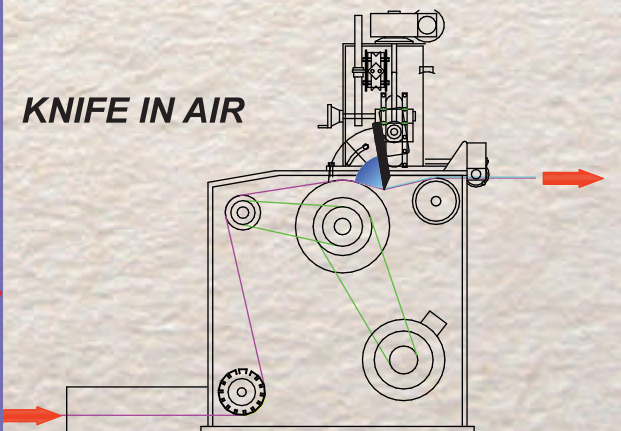
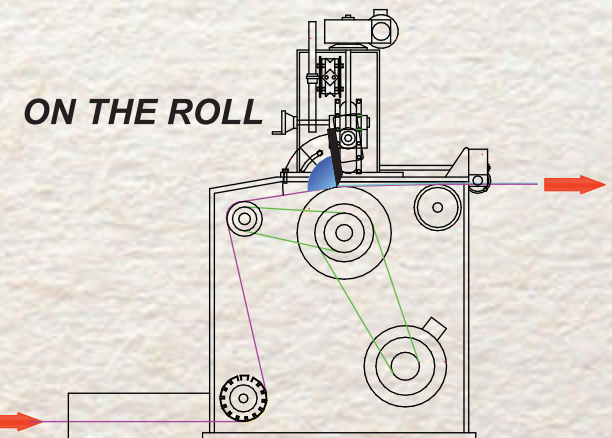
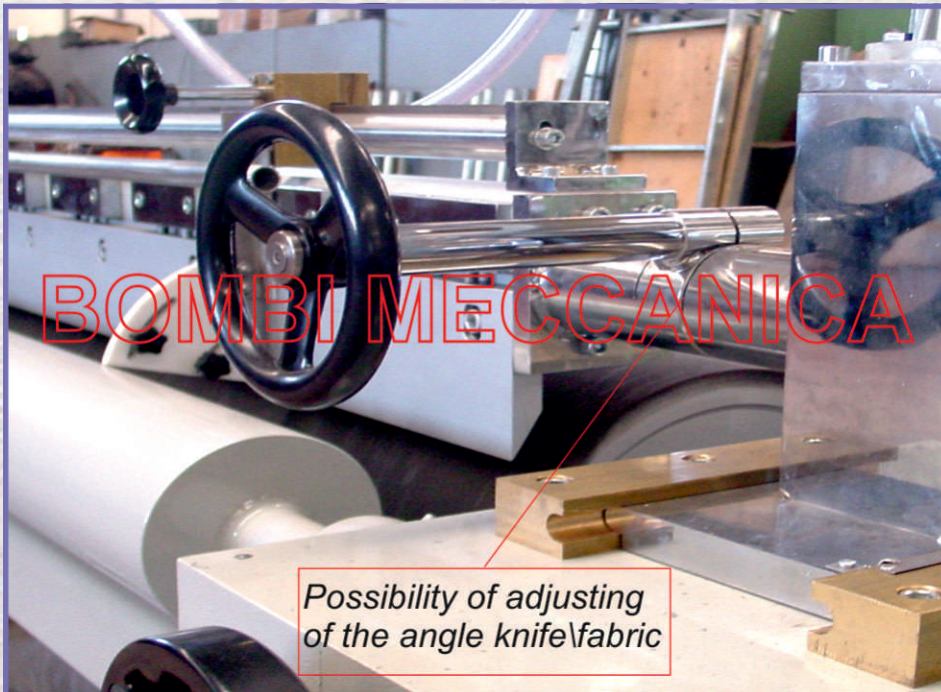
Coating thickness is adjustable from the control board, by mean of Siemens PLC and operator panel that shows all functions of the machine.

Possibility of adjusting the blade profile within the width of the machine, for optimum precision

Possibility of adjusting the blade angle with the fabric to be coated, in order to adapt the process to any different products and material

Possibility of adjusting of the knife\fabric angle.

*Specific knife to help the penetration of the resin into the fabric*



## FOAM- LIQUID FULARD FOR IMPREGNATION

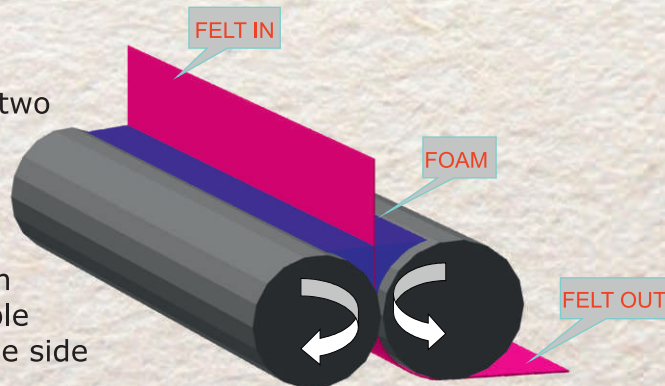


**FOAM FOULARD**

◆ Felt passes vertically between two strong, rubber coated rolls.

◆ Foam is distributed across the full width of the felt via two motor driven carriages, one each side of the felt. It is then possible to apply foam to both or only one side as required.

◆ Foam penetrates to inside the felt as it is squeezed by the rolls



**LIQUID FOULARD - DOUBLE WAY**

✓ Way1: Full dipping. Felt enters in a dipping tank, it is filled with chemist and after it is squeezed by two or three rolls. Liquid fall down in the tank.

✓ Way2 : Kissing roll. Felt touches the superior part of the roll. Roll collect the chemist from the lower tank and gives it back to felt. Quantity could be adjusted via a doctoring roll.

## KNIFE COATING HEADS



Operator panel with indication of the coating thickness Regulation from control board, made with motors.

Regulation of blade position to work in air or on the roll

Foam/resin/pvc distributor with reciprocating carriage

Regulation of blade/fabric angle

## CONTINUOUS FOAM MIXERS

**Foam density** is controlled by the latest generation of PLC, and is automatically adjustable. The operator only has to set the foam density required (E.g. 250 g/l) and to start the machine. The setting and the display of all parameters is made on the working panel, with indication of all the working conditions of the foam process. Foam flow can be set in manual, in Kg\h or in g\m<sup>2</sup> to suit the requirement. **The flow-meter** continuously checks the chemical flow and the system adjusts the air flow in order to achieve the pre-set foam density. The high precision fully electronic flow-meters have no moving parts and are extremely reliable.

**The specific weight** of the chemical to be foamed can be stored within the system in order to compensate the air flow, achieving the required foam density. The system could be linked with the line speed and fabric width so that the foam flow could be adjusted in grams per square meters.

A constant deposit of chemical is ensured at any line speed.



The **sealing system**, made with mechanical seals in hard material, operates in an oil bath and allows for a safe and extremely reliable operation, without the need for regular maintenance.

Exclusive **mixing heads with round pins**, create an extremely fine and homogenous foam, achieved with a gentle action on the product to be foamed. This reduces to a minimum the risk of coagulation and head blocking, even with 100% natural Latex. Heads are equipped with external jacket for cooling. Variable speed in any model.

Possibility to equip each model with one or more **dosing kits**, composed of pump, flow-meter and regulation system. This permits one or more additives to be continuously injected directly into the head, such as gelling, vulcanizer, color, ZnO etc. Additives are regulated by the electronic system, in percentage terms with respect to the main liquid and injected directly into the head.

## CONTINUOUS FOAM MIXERS

### AVAILABLE OPTIONS

- ◆ Detection of entry material specific weight with compensation of air flow
- ◆ Cooling of the interior of the head, via the mixing shaft for high sensitive products
- ◆ Synchronization with the line via electric speed signal or via level sensor, detecting the foam height.
- ◆ Double mixing head
- ◆ Automatic washing system
- ◆ Gel, colour or other agent dosing and injection system
- ◆ Remote control panel
- ◆ Back pressure regulating valve
- ◆ Temperature sensor in the foam



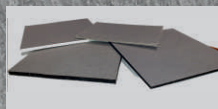
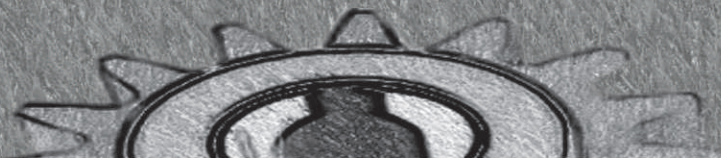
### MODELS MIN - MAX

<b>MB01</b>	<b>30 - 150 Kg\h</b>
<b>MB1</b>	<b>100 - 500 Kg\h</b>
<b>MB2</b>	<b>180 - 900 Kg\h</b>
<b>MB3</b>	<b>240 - 1.200 Kg\h</b>
<b>MB4</b>	<b>300 - 1.500 Kg\h</b>
<b>MB5</b>	<b>500 - 2.000 Kg\h</b>



WE ARE PRODUCERS OF :

- ◆ Hot Calenders for felt
- ◆ Thermo bonding ovens for non woven
- ◆ Continous presses
- ◆ Perforated drums ovens
- ◆ Foam bonding lines
- ◆ Foam generators
- ◆ Foam applicators
- ◆ Cutting machines
- ◆ Pads Stackers



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