BOMBI MECCANICA

OVENS FOR NON WOVEN

Since 1964 one nonwoven machine for every need!

NEW THERMOBONDING OVEN FOR POLYESTER WADDING

3 Sections oven 5,5m wide + Cooling, for polyester wadding

Before entering the **oven**, the web coming from an air lay or a cross lapper is calibrated between two belts to provide the *thickness and stability* required and pre-set by the operator. Adjustment of the **distance between the two belts** is easily and accurately made via digitally controlled motors ensuring precise reproduction of any product whenever required.

To have the optimum and most efficient bonding of any kind of web or web thickness, during processing, the air needs to pass completely through it. To achieve this, each oven section adopts a **combination of positive pressure on one side and negative pressure on the opposite side.** In this way, all the air in circulation is forced to pass down through the web. Within each section the direction of air flow (top to bottom or bottom to top) can be reversed via **manual adjustement or via electronic control from the panel.**

NEW THERMOBONDING OVEN FOR POLYESTER WADDING

Oven followed by hot calender for wadding smoothing and embossing of needled felt

Heating via gas burners reduces warming up and cooling times; due to the flame modulating system driven by a PID controller, it provides high efficiency and very accurate temperature regulation. Also a part of the resulting processing fumes and gases are combusted with the result of less air pollution. Burners are modulating type with high precision temperature controlling and adjusting.
The **air filtering** system is with framed steel nets inserted into the air channels. These are **accessible from the outside** of the oven and can be removed, cleaned and re-inserted with the oven in operation, allowing the oven to work 24 hours\day without stopping.
After the oven, following the needs, a **hot\cold calender, cutting machine, winder or/and pads stacker** can be installed.

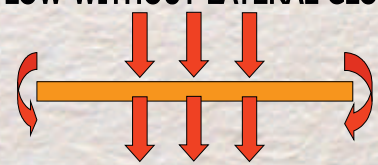
NEW THERMOBONDING OVEN FOR POLYESTER WADDING

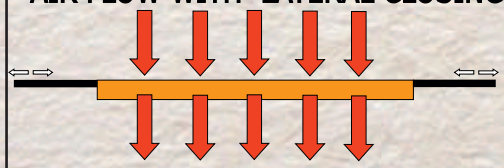
Re-designed and improved, the **new thermobonding oven** finds its application for difficult products : Natural fibers webs with high thickness, polyester wadding high loft, technical products. Ventilation is forced from **top to bottom or bottom to top**, reversible in each section. Lateral closing of the air, from control panel. Heating with industrial **direct gas burners**, **or electric, or diesel or hybrid**. Thermal cycle at high efficiency. Modular construction for production up to **7.000 kg/h, weight up to 15 Kg/m2.**

The possibility to regulate the **volume of air flow** for every section separately via frequency inverters, again allows easy production of any kind of web and weight. Within the oven the web is quickly heated in a well balanced way; uniformly melting the bonding fibres and therefore providing optimal homogeneous bonding. The possibility of inversion of the air flow direction in each section separately allows bonding for thick felt, compensating the weight of the fibres also.

NEW THERMOBONDING OVEN FOR POLYESTER WADDING

2 Sections oven for new polyester wadding after cross lapper

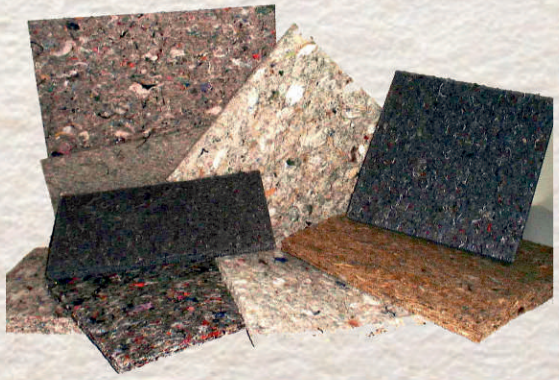




Air closing system: When the web width is narrow then maximum, the air flow pumped may go on the sides, reducing the real efficiency of the oven and the capacity of bonding, specially on thick webs. **A mechanism of movable steel flaps is installed on the sides of the web**, so that ALL air is forced to pass trough the webs. Regulation is manual or electric

MULTIFUNCTION OVEN

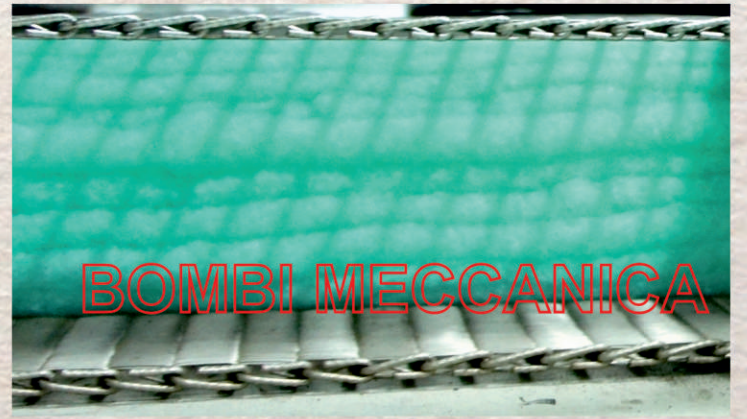
Equipped with **steel belts,** multi functions ovens find application in variety of different products: natural fiber, foam chops, filters dust, rubber tire, wood sawdust, newsprints, etc etc mixed in variable proportion with bonding fiber. Oven is equipped with double belt for calibration. The double **belt also prevents shrinkage of the web** during bonding and setting, consequently the stability of the web is increased.



MULTIFUNCTION OVEN

Conical Entry of the oven

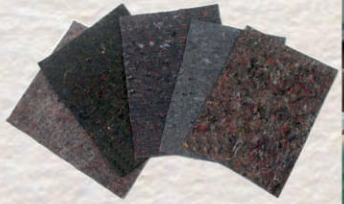
The web is precompressed before to enter into the oven with the two belts and the distance regulated by the operator. In this way, very heavy webs can be easily produced.



Web in exit from the oven, between the belts.

OVEN FOR SHODDY FELT + PP OR PHENOLIC RESIN

Lines specific to produce hard pads from **shoddy and PP fibers or phenolic resin**. The oven is equipped with high flow and high pressure fans which force a large volume of the air through the material, even through very heavy webs. After oven one compressing calender is installed to compact the felt. After calender and air cooler is provided. **Line could produce pads or rolls**.



Working with phenolic resin as binder, oven is equipped **with steaming oven** in stainless steel that fix the powder in the felt before to enter into the termobonding oven. Same line could produce felt with PP or Bicomponent polyester.

ADDITIONAL FEATURES

HEATING WAYS

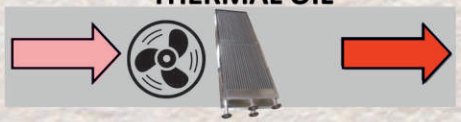
DIRECT GAS

HYBRID (GAS+ELECTRIC) NEW

IN-DIRECT DIESEL NEW

ELECTRIC

THERMAL OIL



Electric heated oven

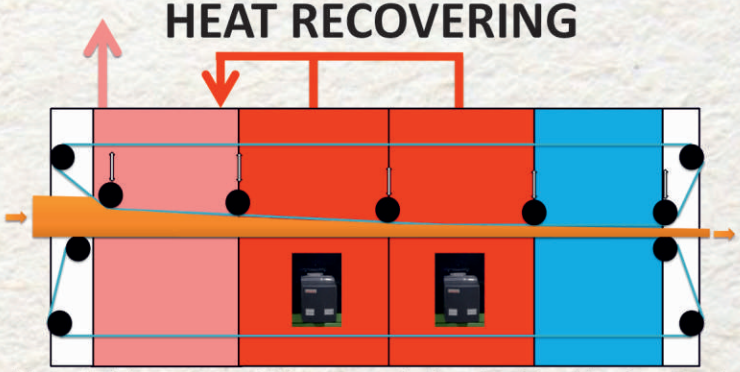
Direct gas: Standard, more widely used.

Hybrid: Gas or electric depending the aivalability (suggested in case of solar panels)

Indirect diesel , Electric, Thermal oil:
If gas is not aivalable

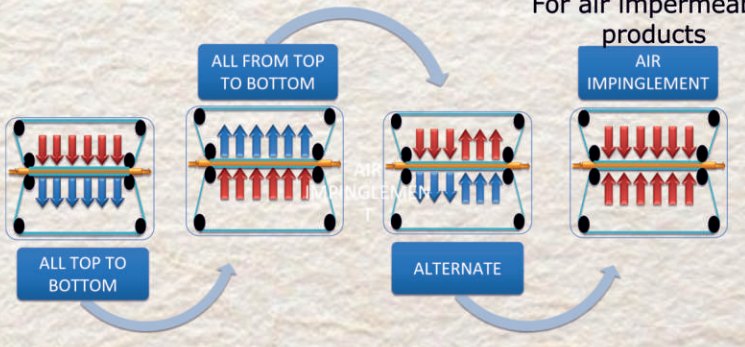
Electric pack

HEAT RECOVERING



Material in entry of the oven is heated by the heat of the smokes with an additional heat recoving section at beginning of the oven

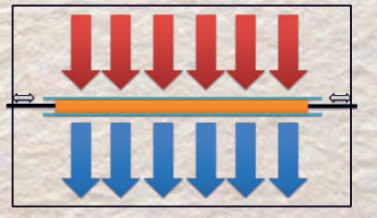
AIR FLOW



For air impermeable products

AIR CLOSING ON THE SIDES

Without closing, air passes on the sides and oven loose efficency



With adjustable lateral damns air is closed on the sides and forced to pass at 100% on the product

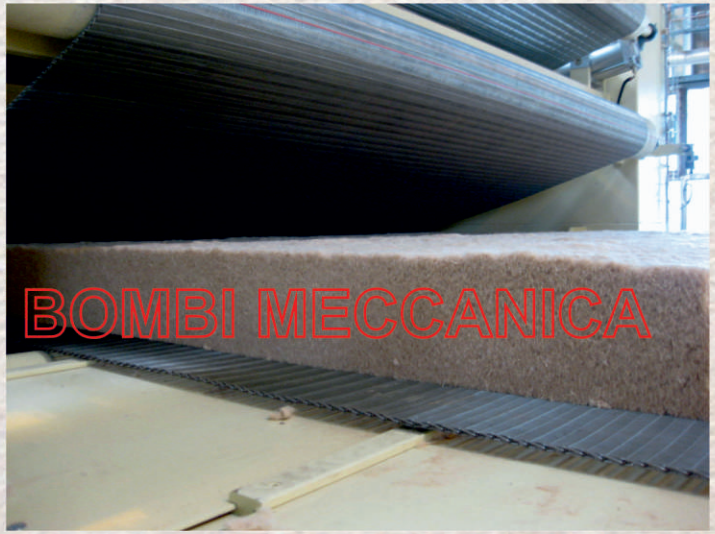
LINES FOR PANELS IN WOOD FIBERS

In cooperation with other companies, we are able to supply **complete turnkey plants** for the production of **insulating panels or rolls for the building industry.**

Panels made out of **wood fibres or kenaf, sisal, hemp, cellulose, flax** or any other natural fiber, in blend also with waste fibers/powder to save cost.

The supply includes **oven, cutter, stacker and**, for the production of rigid boards, **continuous press.**
The complete line includes also the fiber preparation, web forming and pelletising.

- Panel thickness : 40-300mm;
- Weight : 1.000-15.000 gsm;
- Production : 1.000-7.000 kg/h;
- Working width : 2500 mm;
- Size of the panels : 600x1200mm.



LINES FOR PANELS IN WOOD FIBERS

Advantage of panels made in wood fibers

- ♦High performance;
- ♦Low thermal conductivity reduces heat losses in winter;
- ♦Wood's unequalled inertia provides optimal summer comfort;
- ♦Wood is natural, renewable resource;
- ♦It keeps its natural carbon sink properties;
- ♦Wood fibre is dense and resists both air infiltration and settlement;
- ♦Allows water vapour diffusion;
- ♦Acoustic insulation ;
- ♦Easy to install, non-irritant.

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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SCAN ME