

# ECOBELT

TEC MAC

REBONDING / RECYCLING PLANT

# ECOBELT

Ecobelt is an advanced and patented system to recycle industrial wastes in granules, rebounding them with a binder (typically a prepolymer).

The advantages of this process are the following:

Binder saving till 50%, because with Ecobelt its distribution is only on the surface of the granule;

The water needed for the reaction is dispensed to avoid the use of steam and following drying;

Possibility to use catalyst to increase reactivity and, accordingly, shortening the demolding time;

Extremely reduced maintenance compared with the existing plants needing frequent and expensive cleaning operations;

High quality of the final product, because no dry spot or solid parts;

Possibility to industrialize the production plant thanks to the flexibility of the Ecobelt system;

Possibility to process with Ecobelt any industrial waste in granules, as flexible and rigid polyurethane, EVA, latex, rubber, car wastes, wood, cork, etc.

An example of production plant based on Ecobelt is listed below and in the following pages:

## ECOBELT-BF

### PLANT FOR BLOCKS

Industrial production system to get rebounded blocks at **low/medium density** from waste of flexible polyurethane foam, latex and similar materials.

The plant includes the patented process Ecobelt to wet only the surface of the granules with a right quantity of binder and reaction water.

The dispense of the single ingredients is done through an adjustable metered device allowing the maximum productivity or the highest product flexibility.

The plant is completed by a press, rectangular or cylindrical molds, automatic feeding of the granules and cutting units.



**Plant with single tall press for rectangular and round mould**



**Plant with double press**



**Perfect bonding**



**Rebounded blocks: Rectangular and Round**



# ECOBELT-BR

## PLANT FOR BLOCKS

Industrial production system to get rebonded blocks at **medium/high density** from waste or flexible or rigid polyurethane foam, rubber, cork or similar materials.

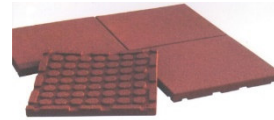
The plant includes the patented process Ecobelt to wet only the surface of the granules with a right quantity of binder and reaction water.

The dispense of the single ingredients is done through an adjustable metered device allowing the maximum production or product flexibility.

The plant is completed by a powerful press, rectangular or cylindrical molds, automatic feeding of the granules.



Mold with motorized demolding



Rubber tile



PUR sandwich panel



Stack of blocks



# ECOBELT-MD

## MOLDING REBONDING PLANT

This basic unit can be easily connected with a carrousel or a molding line for the production of molded rebonded parts starting from waste of flexible or rigid polyurethane foam, EVA, latex and similar materials reduced into flakes.



Molded car arm-rest



Molded seat



Molded sound-proof panel



# ECOBELT-SC

## CONTINUOUS PLANT FOR REBONDING

Semi-continuous production process to get panels or sheets of rebonded granules for waste of flexible or rigid polyurethane foam, rubber, latex and similar materials.

The plant includes the patented process Ecobelt to wet only the surface of the granules with a right quantity of binder and its reaction water in the correct ratio for full curing.

The dispense of the single ingredients is done through an adjustable metered device allowing the maximum production or the highest product flexibility.

The wet granules are dispensed on a flexible or rigid support and covered on top with another support: this allows getting a rebonded foam with integrated external facing.

A sandwich panel is transferred in a press where the polymerization is done.

The following phase is the translation of a new portion of panel in the press, allowing a continuous production.



Plasterboard with moulded rebonded sound-proofing sheet



30mt rebonded sheet



# TEC MAC

## OTHER MACHINES

### Completano la gamma:

- Impianto da blocco mod. Isolblock
- Pantografo a lama mod. TML-A
- Pantografo a filo mod. TMF-A
- Taglierina orizzontale mod. TMO
- Taglierina a carosello mod. TMC
- Taglierina verticale mod. TMV
- Taglierina per peeling mod. TMO-P
- Taglierina orizzontale mod. TMO-2R

Tec Mac si riserva il diritto di variare le specifiche qui riportate senza preavviso

### Our range includes:

- Block foaming plant mod. Isolblock
- CNC blade cutting unit mod. TML-A
- CNC wire cutting unit mod. TMF-A
- Horizontal cutting unit mod. TMO
- Turntable cutting unit mod. TMC
- Vertical cutting unit mod. TMV
- Peeling cutting unit mod. TMO-P
- Heavy-duty cutting unit mod. TMO-2R

Tec Mac reserves the right to amend specifications without notice

### Notre gamme complète:

- Installation de blocs mod. Isolblock
- Coupeuse à contour à lame mod. TML-A
- Coupeuse à contour à fil mod. TMF-A
- Coupeuse horizontale mod. TMO
- Coupeuse à carrousel mod. TMC
- Coupeuse verticale mod. TMV
- Coupeuse pour peeling mod. TMO-P
- Coupeuse horizontale mod. TMO-2R

Tec Mac peut modifier sans préavis certaines caractéristiques techniques dans cette documentation

Rivenditore/Dealer



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