

FOR CORE LAYER Excellence from the core





When it comes to particleboard, perfect core is essential.

Here no particle size separation is required, yet homogeneity and consistency are extremely important, since they are a guarantee for the mechanical strength of panels and, ultimately, for their structural quality.

CMC-TEXPAN's mechanical mat formers spread an uniform, continuous Core Layer particle mat, conferring outstanding mechanical properties to the finished panels.

Mechanical mat formers can also be used to process materials other than wood, such as paper-gypsum, wood-cement or agricultural materials (straw, bagasse etc.).

Glued particles are fed into a Core Layer disc separator, whose function is to remove glue lumps and oversize particles that otherwise could damage the steel belt of the press (this is particularly important in case of production of thin boards).

A disc separator basically includes a bed of shafts with discs rotating at different speeds, with conveniently selected passage clearance between discs, according to the size of the processed furnish.

In this way, particles with suitable size will pass through the discs and be conveyed to the mat former dosing bin, while oversize particles and any possible glue lumps will be rejected above the discs.

The function of the dosing bin is to level the material (by means of a rotary comb unit) and discharge it into the mechanical mat forming chamber as a regular and continuous flow.

Each mechanical forming chamber is equipped with two pinned roller units (called "dividing" and respectively "conveying" pinned rollers), whose function is to loosen the material flow before it reaches the underlying cage roller unit. This latter one is arranged in the lower section of the mechanical forming chamber and consists of four cage rollers: their function is just to throw the material flow on the forming belt conveyor running underneath, without any particle size separation.

The forming chamber may be equipped with a device for cross weight profile adjustment. This device consists of sliding plate sectors, whose aim is convey more or less material to certain areas of the mat, as it may be needed to enable an "inline" correction of cross weight profile, without having to stop production.

Advantages:

- particleboard with excellent mechanical and technological properties (internal bond, bending strength, bolt pull-out resistance);
- optimum cross weight distribution;
- may be used to process a wide range of wood and recycled materials.



