



WOOD

MELAMINE PRESS



MEGADYNE

PANEL BOARD PROCESSING

INDUSTRY

WOOD

APPLICATION

MELAMINE PRESS

PRODUCT

MEGALINEAR ATG10 / TG10
with High Temperature (HT) cover
resistance

SITUATION/APPLICATION

Wood melamine press application refers to the process of applying a melamine-impregnated paper onto a wood-based substrate (such as particleboard, MDF, or plywood) using heat and pressure. This is commonly used in furniture, cabinetry, and decorative panels. Melamine is a thermosetting resin that, when combined with formaldehyde, creates a hard, durable surface. The process is done under very hot environment with heavy press equipment.

THE PROBLEM

The existing belt solution presented several critical limitations that affected process efficiency and reliability. In particular, the system required:

- Consistent grip, to prevent panel slippage and ensure accurate positioning
- High abrasion resistance, caused by continuous contact with plywood surfaces
- High flex fatigue resistance, as belts are subjected to repeated bending under load.

Environmental conditions such as ambient temperature, humidity, and dust further increased mechanical stress on the belt, accelerating wear and reducing operational stability.

MEGADYNE SOLUTION:

MEGALINEAR ATG10/TG10 with High Temperature (HT) cover resistance

To address these challenges, Megadyne proposed the MEGALINEAR ATG10 / TG10 with HT cover, specifically designed for high-performance applications in demanding industrial environments. The HT cover and belt construction provide an optimal balance between grip, thermal stability, abrasion resistance, and flexibility.

THE RESULT

The Megadyne solution proved to be clearly superior to the previous belt system, delivering measurable performance improvements:

- Resolution of delamination issues via cast production process support
- Better grip compared to the existing belt solution, ensuring stable and reliable panel transportation
- Excellent performance within the operating temperature range, with reliable belt behavior between 80°C and 110°C
- High abrasion resistance, significantly reducing surface wear despite continuous contact with wooden panels
- Improved bending flexibility, positively influenced by environmental conditions such as temperature, humidity, and contamination levels
- High flex fatigue resistance, confirmed through surface inspection and operational testing

As a result, the MEGALINEAR ATG10 / TG10 with HT cover increased conveyor reliability, reduced maintenance requirements, and enhanced overall process efficiency in plywood panel transportation, even more once light cycle press application is involved.



Contact our experts
to find out more