



# BUILDING MATERIAL

INSULATION - ROCKWOOL SANDWICH PANEL LINE



**MEGADYNE**

## ROCKWOOL PANEL

### INDUSTRY

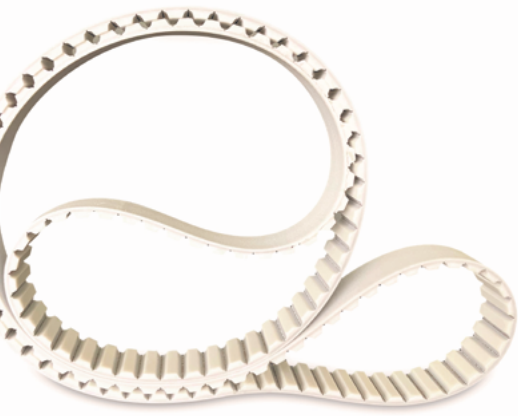
INSULATION

### APPLICATION

ROCKWOOL PANEL

### PRODUCT

MEGAFLEX  
ENGINEERED BELT



### SITUATION/APPLICATION

On a fully automated sandwich panel production line, the section immediately after that in which the mineral wool is cut into strips serves as a critical transition point before adhesive application. Here, the strips are transferred along parallel tracks in a precisely controlled and synchronised manner.

Toothed timing belts drive the movement, guiding the strips toward the gluing station, where adhesive is applied in preparation for bonding with metal facings. This stage is engineered for high throughput, maintaining consistent strip flow and spacing to ensure seamless integration with the lamination process and to minimise any disruptions in continuous panel production.

### THE PROBLEM

One of our customers was experiencing premature wear of their existing timing belts due to the high concentration of mineral wool fibers in the production area immediately after the cutting phase.

These abrasive fibers affected both the back and toothed sides of the belts. As they penetrated between the teeth and the belt's running surface, they caused accelerated wear, leading to frequent required maintenance and unplanned downtime.

## MEGADYNE SOLUTION:

### MEGAFLEX ENGINEERED BELT

Megadyne application engineers supplied a MEGAFLEX timing belt, a high-performance polyurethane solution, engineered with a special compound with a high Shore hardness rating. This advanced material offered outstanding resistance to wear and mechanical stress, while its low-friction properties ensured smooth operation and significantly extended the belt's service life, even in the abrasive environment of the mineral wool cutting area.

Thanks to its precise synchronisation, minimal elongation, and low maintenance requirements, it was well suited for this demanding application. What's more, full compatibility with standard pulley profiles allowed for easy integration and replacement within the existing system.

### THE RESULT

The belt proved to be a reliable and efficient alternative to traditional roller chains, which are noisy and dirty and require frequent maintenance as well as costly metal gears. The change of belts significantly reduced wear and eliminated unplanned downtime caused by premature belt failure. Maintenance intervals were extended, and the production line ran more smoothly and reliably. Improved synchronisation between cutting and gluing phases enhanced overall efficiency, while reduced noise and the elimination of the need for lubrication contributed to a cleaner, low-maintenance process.



Contact our experts  
to find out more