

## CASE STUDY - WOOD COMPOSITE

# A highly efficient release brings reduced downtime and a superior end product.

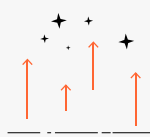
50% DECREASE  
IN RELEASE  
AGENT  
APPLICATION  
RATE



INCREASE IN  
ON-QUALITY  
BOARD  
PRODUCTION



INCREASED  
EASE OF  
RELEASE



### WHAT WE ACHIEVED.

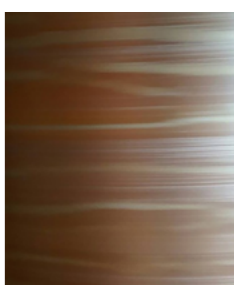
A manufacturer of MDI-based particle board was experiencing issues with a crucial section of their machinery. Wood particles were repeatedly sticking around the edges of their lower press belt. They also observed several dark stripes on the belt. To compensate for these problems, they were required to change their process to increase the amount of spray on the belt — especially the edges — to prevent stickiness. When we helped them make the switch to a Chem-Trend product, they were able to decrease release agent use volume by 50%, eliminate striping on the belt, and produce smooth finished panels with a lighter and more natural appearance.

### HOW WE GOT THERE.

Understanding the customer's need for greater efficiency, we began experimenting with new high-performance formulations that could release effectively at low application rates and without constant reapplication. The solution had to prevent rapid buildup of wood particles on the belt's edges and eliminate discoloration while improving production efficiency. To make this happen, we experimented with dilution rates, using any reappearance of belt discoloration as an indication of the correct volume solution needed to overcome production efficiency challenges. Creating new technology was essential, and our chemists tailored a formulation that allowed us to meet all of the customer's criteria.

### OUR SOLUTION.

Through our careful trialing process, together we discovered the precise amount of Chem-Trend release agent required to deliver high-quality results. Our formulation offered a simple solution that reduced sticking issues around the edge of the belt that were rampant with the previous competitor product while considerably minimizing dark stripes. Not only did this solution produce an increase in meeting on-quality targets for board production, but it also resulted in an easier production process that didn't require special attention to the edges of the bottom belt.



Before



After



### HANDPRINT IMPACT.

At Chem-Trend, we pride ourselves on our long history of sustainability efforts. However, it is our effect on our customers' processes that provides the greatest impact. It goes beyond our global Footprint; it is our even wider Handprint.

### Here, we achieved the following:

- Reduced waste with less release agent required to produce an efficient release.
- Reduced energy use in production and transportation of release agent due to lower product volume use.
- Reduced energy use due to reduced maintenance and cleaning downtime.



Waste



Energy

For more information about our wood composite capabilities, our innovations, or other stories, visit [CHEMTREND.COM](http://CHEMTREND.COM)