CASE HISTORY

Building Products



RECORDED BENEFITS

- Conversion to 100% NAF plywood panels
- Elimination of carcinogenic UF adhesive from manufacturing process
- Equivalent bond quality as UF
- CARB Phase 2 compliance
- TSCA title VI compliance

Plywood Producer Goes 100% NAF

Soyad™ Adhesive Technology

Customer Challenge

A North American producer of decorative hardwood plywood wanted to begin producing no-added-formaldehyde (NAF) panels and was tasked with converting from a urea formaldehyde (UF) adhesive to Soyad adhesive technology without disrupting the supply of plywood to its customers.

Recommended Solution

Solenis personnel surveyed the mill's system and proposed a multi-step path towards conversion utilizing Solenis pilot facilities and trial mixing system to demonstrate that Soyad was a viable alternative. Solenis also proposed modifications to the mill's existing glue mixing system to accommodate the higher viscosity Soyad adhesive while still allowing the mill to run urea-formaldehyde during the conversion.

Results Achieved

Over the course of six months the conversion plan was implemented with excellent results. Dry bond and 3-cycle soak performance with Soyad was equal to the UF control. Slight modifications to stand time and press pressures were required to maintain the same production rates. Additional optimizations were completed during the following year, including the installation of new spreader rolls and a better piping system to deliver glue. Solenis also conducted operator training on the proper use of Soyad adhesive technology.

Ultimately the mill was able to produce and sell NAF panels while improving the working environment for mill personnel by eliminating the use of urea formaldehyde.



Solenis Trial Mixing System

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