

PARTICLEBOARD PROJECTS

Particleboard Mill Conversion Study

Evergreen conducted a study for an integrated wood products company to determine the feasibility of converting an existing particleboard plant in Oregon to an MDF plant for a confidential client. We used plant layout and process flow diagrams provided by our client in order to determine the initial equipment required for conversion to MDF. Using information from our own files and knowledge from previous MDF work, we determined the economic viability of converting the plant to MDF.

Particleboard Screening Upgrade

Evergreen provided preliminary engineering to install a set of new Acrowood Disk Screens at the SierraPine particleboard plant in Martell, California. The existing screening system continued to operate during the installation. After visiting the site to collect measurements and gain a more complete picture of the overall project needs, Evergreen generated the general arrangement layout drawings and updated the plant flow diagram.

MACT Compliance Assistance

Evergreen developed strategies, scopes of work, Class 20 capital estimates, and annual operating cost estimates to bring the Collins Companies particleboard and hardwood mills in Klamath Falls, Oregon into compliance with the PCWP MACT standard. We designed a separate biofilter system at both the particleboard and hardboard mills, ducting emissions to them to provide 90% destruction of formaldehyde. We also assisted with permitting and air emissions. Evergreen provided detail design for duct sizing, the press enclosure, and provided the concrete structural design for the biofilter itself, in addition to providing construction management for the project from start to finish.

Flakeboard Plant Expansion

Evergreen provided the engineering required to help Flakeboard expand its particleboard operations in St. Stephens, New Brunswick from 500+ m³/day to 1,200 m³/day of 670 kg/m³ (42 pcf) board. The existing raw material storage area and milling and drying operations were expanded to accommodate the required flows. The heart of the plant is a 10'-wide continuous press, sized to meet the 1,200 m³/day production goal on 8'-wide board in 22.8 hours. An automated panel handling system provides in-process storage of master panels, and manages their processing through sanding and sawing operations. Much of the board is laminated with a new large melamine line. The 24' long laminating press processes up to 490 m³/day of 5'-wide, or 410 m³/day of 4'-wide panels, 5/8" basis.



EVERGREEN ENGINEERING

Eugene, Oregon (541) 484-4771 • Atlanta, Georgia (404) 267-1471

www.evergreenengineering.com