

Cost saving opportunity by dry-resination system

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The performance of the resin used for Medium Density Fiberboard (MDF) is negatively affected by the Flash Tube Dryer that follows the conventional resin addition point – the blow-line. This fact has been known to the industry since its beginning dating back in time to the 1960s. Before the invention of the blow-line, which became the industry standard, many systems have been tried and used in commercial operation where the resin has been added after the drying process. Even though the resin usage has been reduced with these alternatives to blow-line blending, they have been known to cause some operational issues. Resin spots have caused some of the MDF produced with this process to be classified as less than premium. Some systems have had limitations on resin addition rate, therefore requiring some of the resin to be added in the blow-line. Production has suffered as periods between cleaning of the system have been short.

Flakeboard has put forth a lot of effort to develop a system that has overcome these issues. This paper describes the patented Flakeboard process providing substantial resin savings, some of the work that transpired before its current design and trials made with various resins.

The cost for the resin is a substantial component for all composite panelboard plants. It is typically the largest variable cost for MDF manufacturing. It is, therefore, self explanatory that the profitability of a plant is highly dependent on as low resin use as possible. The system provides for a reasonable short time for payback of equipment installed.

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Abstract:

The performance of the resin used for Medium Density Fiberboard (MDF) is negatively affected by the Flash tube Dryer that follows the conventional resin addition point - the blow-line. This fact has been known to the industry since its beginning dating back in time to the sixties. Before the invention of the blow-line, and while it has been the industry standard, many systems have been tried and have also been used in commercial operation, whereas the resin has been added after the drying process. Even though the resin usage has been reduced with these alternatives to blow-line blending, they have been known to cause some operational issues. Resin spots have caused some of the MDF produced with this process to be classified as less than premium. Some systems have had limitation on resin addition rate, therefore requiring some of the resin to be added in the blow-line. Production has suffered as periods between cleaning of the system have been short.

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