PROBLEM SOLVED™ PAPER

SOLUTION: System Analysis by Martin Engineering
Martin® Transfer Point Products
INDUSTRY: Pulp & Paper

LOCATION: Weyerhaeuser, Pine Hill, Alabama

To improve bark-handling efficiency, the Weyerhaeuser Pine Hill containerboard mill employed MartinPLUS® Services to rebuild the transferpoint on its conveyor system.

The upgrade project on the bark conveyors at Weyerhaeuser Pine Hill included Martin® Belt Support Cradles and Martin® ApronSeal™ Single Skirting.

A Martin® Tail Sealing Box was field-fabricated on each of the bark conveyors at Weyerhaeuser Pine Hill.

PROBLEM

Bark and wood waste are used as fuel to produce heat and steam for this containerboard plant. A series of belt conveyors—36-to-48 inches (914-to-1219 mm) wide—carry bark to the powerhouse.

The Pine Hill Mill began a program to improve its materials-handling operations and eliminate fugitive materials. The bark conveying system was the first system to be upgraded.

SOLUTION

Martin Engineering provided a detailed engineering study that listed a number of recommendations. They included: moving the head pulley of one conveyor and the tail pulley of a second conveyor, lowering the overall height of a third conveyor, changing three conveyors to a picking-idler style to improve cargo capacity, installation of training devices to improve belt tracking and upgrading the belt cleaners on all conveyors to improve cleaning performance.

Martin® Services installed new transfer point components on the six conveyors in the bark-handling system during the plant's spring outage.

On each conveyor, installation crews removed old skirting and chute sections. They installed Martin® Support Cradles with Center Rolls on each conveyor, with the number of cradles installed matched to the length of the conveyor's skirted area. The cradles stabilize the belt path, preventing sag, entrapment and spillage.

Each conveyor had Martin® ApronSeal™ Single Skirting installed on both sides to keep material on the belt. To prevent material roll back from the back of the loading zone, a Martin® Tail Sealing Box was field-fabricated for each conveyor.

To make sure the belt is properly centered as it enters the loading zone on each conveyor; a lower unit of the Martin® Tracker was installed.

RESULTS

The plant is pleased with the performance of the Martin® products installed in its bark-handling system, and the work of the MartinPLUS® Services installation crews. The plant is now reviewing Martin Engineering proposals to upgrade additional conveyors, including the plant's coal-handling system.

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