



DIAMOND[®]

CHAIN COMPANY

Case study: Oriented Strand Board

ISSUE:

Chain length matching

GOAL:

Decrease costs and improve chain synchronization

SOLUTION:

Replace current chain with Diamond Series chain with class II matching

The Challenge:

A large scale producer of oriented strand board (OSB) was experiencing several problems with the roller chain used in their manufacturing process.

Production of oriented strand board requires matched sets of roller chain to run in parallel as wood chips are placed onto a forming line in a uniform layer. Uneven wear meant the chains were running out of sync resulting in product quality issues.

In addition, the chain attachments were not strong enough to support the grids used to deposit chips onto the forming line. When the attachments would break, production had to be stopped.

The Choices:

To address the length matching issue, Diamond Chain offered two solutions – Class I and Class II length matching. Class I matching insures the chains within a given set will not vary in overall length by more than .006"/ft.

Class II matching is a more stringent standard assuring that both the longest and shortest chain in a given set will not vary in overall length by more than .002"/ft.

To manage the weight of the chip depositing grids, Diamond recommended the Diamond series ANSI 120 riveted roller chain with wide-contour bent attachments.

The Solution

The manufacturer selected Diamond's Diamond series ANSI 120 riveted roller chain with wide-contour bent attachments and Class II length matching. Ordering attachment chains as a matched set ensured that the flights would travel in sync, eliminating the chip placement production issues. The upgraded attachments were better able to support the weight of the grids eliminating production downtime due to component failure.

The Results

After six years of use, during which no attachments broke and no matching failures occurred, the chain was replaced as part of a routine maintenance program. Because of the performance, all the machines were then converted over to Diamond Chain. This company enthusiastically endorses Diamond products for any wood product industry applications.



Scan the QR code for more information on the performance of Diamond chain.



Scan the QR code for more information on Diamond series chain.

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