

DRIVES[®] EXTENDED LIFE CHP[®] CHAIN OUT-PERFORMS COMPETITORS IN SAWMILL APPLICATION

CHALLENGE ▼

A sawmill manufacturer was experiencing chain elongation and pin wear on their lumber transfer drive. The live roller system allowed the wooden boards to be moved along the conveyor line at an extreme bend-radius, leading to accelerated chain wear. Having utilized chain from two competitors on this application in the past, with wear life lasting three to four months, the sawmill manufacturer wanted to extend service life beyond that of the competitive chain.

SOLUTION ▼

To solve this issue, Drives experts recommended replacing the competitors' chain with Drives[®] Extended Life CHP[®] chain. Extended Life CHP chain features chrome-hardened pins (CHP), measured by the Rockwell scale.

The Rockwell scale is used to quantify the hardness of steel components. In this application, the competitors' pins measured at 52-53 HRC while Drives Extended Life CHP pins surpassed these ratings at 70 HRC.

Chrome-hardened pins provide an extremely hard, durable surface to decrease the wear between the pin and bushing. This reduces chain elongation, extending wear life as a result.

RESULTS THAT MATTER ▼

Drives Extended Life CHP chain exceeded both competitors' chain life as it was taken out of commission at 18 months. Upon inspection, Drives Extended Life CHP chain showed no signs of elongation despite removal from the drive. Drives experts identified issues with proper lubrication, sprocket misalignment and increased roller contact, offering recommendations to increase wear life for Extended Life CHP chain beyond 18 months in the future. Considering total replacement costs, maintenance costs and downtime, the switch has saved the sawmill manufacturer \$84,000 per year.



Chain Life
+14 Months
Total Savings
\$84,000

Drives[®] chains are part of The Timken Company's growing portfolio of engineered bearings and industrial motion products.

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