

Cutting Downtime in Lumber Application

Certified Bearing Specialist (CBS) Adapts Bearing Solution for Mill Operation

Ernest Head (Arnie), CBS and technical sales representative at Motion Canada helped save a lumber industry customer time and money by adapting a bearing solution for another client. Here's how:

According to Statistics Canada, the Canadian lumber industry has experienced significant economic pressure starting most recently in 1999, but has managed to rally in large part through plant closures and restructuring, resulting in financial gains in production.

Though the industry has seen some signs of recovery since 2010, the forecast today remains unclear. This is why it is so important that mills run efficiently, with as little unplanned downtime as possible. Motion Canada understands the pressure lumber customers face and consider their challenges one of its top priorities.

One particular mill was experiencing breaking motor mounts on a C-face flange reducer used to guide rolls for chip-n-saw production, a process where trees are cut into lumber, and then the waste material is converted into chips for fuel or paper production.

Continued breaking motor mounts could lead to expensive damage to the motor or the reducer. Many mill maintenance crews are fully capable of maintaining day-to-day issues and ensuring production continues to flow. However, at this particular mill, each time a motor mount on a C-face flange reducer breaks, it can potentially shut production down completely—an extremely time consuming and expensive situation.

The mill knew they needed a permanent and sustainable solution to ensure their production line ran efficiently. Head knew his customer was right to be concerned. The C-face flange reducer is a key element to the system because it increases adaptability and allows the reducer to be mounted to any industry standard motor. However, if the mount-

ing is off even just a little, the mobility of the system is hindered and the production rolls will temporarily slow or stop. When the rolls don't work, downtime can be substantial.

Thankfully, Head had recently viewed a similar challenge at a different mill. Though not exactly the same issue, with a little creativity and over 30 years of experience in the industry, he was able to quickly adapt the previous solution to the current issue and share his proposal with the customer. Because the application is very rough, the motor needed to be slightly separated from the reducer to increase mobility, which would solve the breaking problem, according to Head. The customer agreed, and Head went to work.

First, Head worked with the Motion Canada Alberta service team to mount a stationary motor above the drive and design the proper drive shaft to connect the motor to the reducer. The challenge was in making sure the drive shaft had enough float to properly run the reducer without any problems. With the motor stationary, the drive shaft needed to be flexible enough to still run the reducer properly while it moved around with the feed rolls to position the logs.

That's where Motion Canada's Alberta engineering team came into play. Head shared the drive information from the application and the rough range of the feed roll with the engineering team so they could help identify how much movement the drive shaft would require to be truly successful. After a few tests to ensure the system was perfect, the team completed the drive shaft with enough flexibility and enough horsepower rating to do the job.

The updated system was installed at the mill on time and on budget. The chip-n-saw production line ran smoothly and Head's customer was satisfied with the quality, cost and effectiveness of the solution. **PTE**



Certified Bearing Specialist

BSA's Certified Bearing Specialist (CBS) program is the only bearing industry-specific program that identifies and quantifies the specific skill sets to certify an industry professional as a bearing specialist. The CBS program is all about developing the expertise to help customers and end users make the best bearing decisions. Take advantage of this complimentary access to a Certified Bearing Specialist. Please email your question to info@bsahome.org. An expert CBS will respond to your inquiry and it may appear in this article.

For Related Articles Search

bearings

at www.powertransmission.com

Ernest Head (Arnie) joined the BC Bearing Engineers family at the British Columbia Prince George branch in August 1987 as a shipper receiver. He has held several positions including inside sales representative, outside sales representative, branch manager and office manager. He became a technical sales representative when BC Bearing was acquired by Motion Canada in 2010. He will soon become a quotation specialist with Motion Canada in Kamloops, British Columbia.

© 2016 Bearing Specialists Association