Customer Testimonial

Almasol® Syntemp® Lubricant (9901)

Mid-West Steel Mill – East Chicago, Ind.

Bearings

- ***Reduced grease consumption from 2,000 lbs per year to 200 lbs per year***
- ***Reduced bearing temperatures by 20-40°F***
- ***Increased bearing life***
- ***Increased production***

Customer Profile

A Mid-West Steel Mill manufacturing galvanized steel was experiencing repeated Hearth Roll bearing failures due to harsh thermal environment exposure.

Challenge

Due to extreme high thermal exposure, the commercial grade grease would harden. If not caught in time, it would carbonize, blocking the supply lines of the automatic lubrication system. This would cause the bearings to fail and shut down the entire production line.

They wanted to reduce bearing failures, expensive unplanned line downtime resulting in associated production loss, excessive grease consumption, and eliminate grease carbonization.

LE Solution

V.C. Vasisth, LE lubrication consultant recommended Almasol® Syntemp® Lubricant (9901), which is a high temperature, extreme pressure, synthetic, NLGI #2 grease, designed to be water resistant and not melt or separate in low speed bearings.

Results

As the steel travels along the production line it passes through a large Hearth (heating) system which is comprised of 72 rolls, each of which contain one water cooled bearing per side. These bearings are constantly exposed to high temperatures ranging from 175-450°F (79-232°C).

Unfortunately the water system is not very reliable which makes the bearings run hot. A Farval automatic lubrication system is also utilized, but as mentioned earlier, was not properly functioning because the commercial grade grease hardened in the supply line due to the extreme heat.

The maintenance engineer chose to conduct a test on a select number of hearth rolls to determine if Almasol 9901 would perform better than the commercial grade grease they were utilizing. In order to closely monitor the performance of Almasol 9901, it was applied to the bearings manually rather than utilizing the Farval auto lubrication system.

The test was conducted for approximately 11 months with the following results:

No bearing failures were reported during the test period. Grease consumption reduced from 2,000 lbs to about 200 lbs per year. Most importantly, the bearing temperature was reduced by 20-40°F, increasing the bearing life which has resulted in major cost savings and increased production. In a post performance follow-up, it was found that there has been no Hearth roll bearing failures in two years due to lack of lubricant and or lubricant related failures.

Thank you to the Mid-West Steel Mill, and to V.C. Vasisth, LE lubrication consultant (pictured), for providing the information used in this report.

Based on actual user experience. Individual results may vary. Not intended to supersede manufacturer specifications.

SIC 3312
LI70590 12-06

300 Bailey Avenue ❁ Fort Worth, TX 76107 ❁ Fax: 800-228-1142
LE operates under an ISO 9001 Certified Quality System.

www.LElubricants.com
800-537-7683