4622 MONOLEC® MULTIPLEX LUBRICANT MID-WEST STEEL MILL, East Chicago, Indiana

Bearings • SIC 3312 Blast Furnaces and Steel Mills

- ⇒ Reduced unplanned line downtime
- ⇒ Reduced grease consumption
- ⇒ Increased bearing life

CUSTOMER PROFILE

A Mid-West Steel Mill manufacturing galvanized steel, was experiencing repeated Brush Roll and Back-up Roll bearing failures on their chemical cleaning system due to harsh alkaline chemical and water exposure.

AREA OF INTEREST

They were using a commercial grade grease that would quickly wash-off resulting in premature bearing failures. These failures, in most cases, would cause the production line to completely shut-down, necessitating the very time consuming and expensive change of the entire Brush or Back-Up roll effected. The production line staff works very hard to keep these bearings lubricated by greasing them manually 3-time per week in addition to the grease applied by the Farval auto-lube system.

They wanted to reduce bearing failure, expensive unplanned line downtime resulting in loss of production, and excessive grease consumption.

LE SOLUTION

LE Lubrication Consultant V.C. Vasisth, in consultancy with LE's Technical Department, recommended 4622 Monolec® Multiplex Lubricant. This lithium-complex extreme pressure grease meets NLGI GC-LB specifications and is designed for plain and anti-friction bearings. LE's 4622 NLGI #2

grease offers excellent low temperature pumpability, good mechanical stability, high dropping point and corrosion resistance.

CUSTOMER COST SAVINGS

This company conducted a 3-month test with the following parameters to determine if the LE 4622 would work in this application: 1). follow existing procedure for grease amount applied and greasing intervals; 2). gradually reduce the grease amount applied and extend greasing frequency to every 4 hours; 3). time to bearing failure after only one grease application. At the conclusion of this test the following results were observed: 1). by reducing the grease amount and extending the greasing intervals, grease consumption was reduced by 6-7 times. 2). the bearings that received only one application of grease lasted an amazing 4 weeks. Based on the results of this test, it was conservatively projected that the material savings alone would be nearly \$ 6,000; unplanned line down time would be reduced by 2-3 hours, not to mention other benefits such as a reduction in environmental and safety costs.

In post follow-up this company has only lost one bearing in the last TWO YEARS vs. the planned two bearing failures per year. Actual savings for this company are much more then projected earlier.

They now use this product in many other similar applications.

Lubrication Engineers would like to thank the Mid-West Steel Mill and LE Lubrication Consultant, V.C. Vasisth, (pictured) for the information provided to prepare this report.



Based on actual user experience. Individual results may vary. Product used not intended to supersede manufacturer's specifications





