



Pyroshield® Syn Open Gear Grease (5180)

Eaton Corporation – Belmond, Iowa

700 Ton Maxi-Press

- Reduced lubricant consumption
- Lowered noise level

Customer Profile

The Eaton Corporation, located in Belmond, Iowa, is the manufacturer of a wide variety of engine components. They have been an LE customer over 10 years.

Application

A wide variety of equipment is used to manufacture the various and intricate engine components.

Challenge

One area of concern was in the 700 ton Maxi-Press. This unit has been in operation for more than 20 years and is used to forge engine valves. The equipment operates 16 hours a day, five days a week. The normal operating ambient temperature is between 70°F (21°C) and 80°F (27°C) year-round. The operating speed of the Maxi-Press is approximately 30 strokes per minute, representing an estimated load factor of between 90,000 and 100,000 lbs. The large bull and pinion gear assembly which has been on the equipment approximately 8-1/2 years, requires considerable attention to lubrication. The life expectancy of the assembly is approximately 10 years. While using a commercial grade open gear lubricant, the lubrication operation required two people. One operator would operate the press motor and cycle the machine, while the other operator would pour the commercial grade open gear lubricants on the bull gear. This process was very messy and the motor had to be reversed so the

commercial grade open gear lubricant would contact the pinion gear and distribute itself. Then when the unit was started up the lubricant would sling off and create a hazard.

LE Solution

It was recommended that Eaton Corporation convert to LE's Pyroshield® Syn Open Gear Grease (5180) NLGI Grade 0. This revolutionary lubricant is ideal for open gears which operate in the most severe service conditions. LE's Pyroshield provides extreme pressure protection and is ideal for open gears in continuous operation.

Results

Because of the superb adhesiveness of Pyroshield 5180, lubricant consumption has been reduced. In addition, because of the ease of application, it no longer requires two operators to apply the lubricant. One operator states, "This lubricant is very good; hardly any sling-off has been observed. It is real easy to use and it sticks great." Another observation was that the noise level lowered noticeably after converting to Pyroshield 5180, and the gear assemblies are operating smoother.

Thank you to the personnel from Eaton Corporation, and to the local LE lubrication consultant, for the information provided for this report.



Pyroshield® is a registered trademark of Lubrication Engineers, Inc.

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

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