

**9001 PYROSHIELD® SYN-GEAR LUBRICANT**

**ESSROC CEMENT CO., Frederick, MD**

**Ball Mills • SIC 3241 Cement, Hydraulic**

**CUSTOMER PROFILE**

Essroc Cement Company is a cement manufacturer in Frederick, Maryland. They have been an LE customer since 1996.

**APPLICATION**

Essroc Cement uses Ball Mills to pulverize the clinker into cement powder.

**AREA OF INTEREST**

While using a black asphaltic open gear lubricant, the cement dust was mixing with the asphaltic lubricant causing a build up in the roots of the gears. This was causing the pinion gear to push away from the bull gear and resulting in excessive wear to the outer edges of the pinion gear teeth. Due to the tooth wear, pinion gear changes were common. Each pinion gear costs approximately \$20,000, plus labor and downtime.

**LE SOLUTION**

The local LE Representative recommended 9001 PYROSHIELD Syn-Gear Lubricant. LE's 9001 is an extremely heavy synthetic fluid open gear lubricant for ball/grinding mill applications. It contains extreme

**Lubricant consumption has been reduced by approximately 50% while maintaining cooler gear temperatures**

pressure additives, and is non-asphaltic.

**CUSTOMER COST SAVINGS**

Since the conversion of all five ball mills to LE's 9001, the build-up in the roots of the teeth has been eliminated. Lubricant consumption has been reduced by approximately 50% while maintaining cooler gear temperatures. To this date, there have been no lubricant related pinion gear failures while using LE's 9001.

The Maintenance Engineer is very pleased with LE's 9001 because of the reduced maintenance and man-hour savings.

**OTHER PRODUCTS USED**

6404 MONOLEC® R & O Compressor / Turbine Oil is used in the secondary crusher. They were having a problem with overheating while using a major oil company oil. When LE's 6404 was put in the gearbox, a 30°F temperature reduction was immediate.

We would like to thank Maintenance Engineer, Roy Kinna and the local LE Representative 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.

**LUBRICATION ENGINEERS, Inc.**

**Leaders in Lubricants**



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