Pyroshield® Syn Hvy Open Gear Lubricant (9000)

Tenn-Luttrell Lime Company – Luttrell, Tenn.

Kennedy Van Saun (KVS) 15’x170’ Rotary Kiln

Customer Profile

Tenn-Luttrell Lime Company has been in business for 18 years, manufacturing quicklime, hydrated lime, and crushed and pulverized limestone products. They have been an LE customer for 11 years.

Application

A KVS rotary kiln, which has a rated 800 tons per day of lime production, is used in the manufacture of these lime products. The KVS kiln is driven by two General Electric 100 hp electric motors. The lubricant is dipped out of a common sump and placed on the pinions by fiber oiling pinions.

Challenge

The environment of the lime quarry is very dusty and hot. While using a commercial asphaltic-type lubricant, they were experiencing premature gear tooth wear, heavy contact point spalling and fires caused by volatile lubricant components. The temperature on the shell of the kiln is 500°F (260°C). This rotary kiln operates 330 days per year, 24 hours a day.

LE Solution

Pyroshield® Syn Hvy Open Gear Lubricant (9000) was recommended as it is a unique, extremely heavy, synthetic fluid developed specifically for large open gears that are closely shrouded and that call for an EP, lead-free, nonasphaltic lubricant.

Results

At the time Tenn-Luttrell was introduced to Pyroshield 9000, they were preparing to replace the open gear at a cost of $150,000 plus $30,000 labor. However, eight years later, after converting to Pyroshield 9000, they have been able to continue to use this same gearset.

Other Products Used

- Almagard® Vari-Purpose Lubricant (3752) – throughout the entire plant
- Pyroshield® Syn Open Gear Grease (5100) aerosol – slides on overhead cranes
- Pyroshield® Syn Open Gear Grease (5180) – KVS 9’x13’ ball mill

Thank you to Tom Yarberry, purchasing agent, and to the local LE lubrication consultant, for providing the information used in this report.