

# Customer Testimonial



## Pyroshield® Syn Open Gear Grease (5180)

**Tenn-Luttrell Lime Co. – Luttrell, Tennessee**

**Kennedy Van Saun Ball Mill**

- Lowered operating temperature by 30 degrees
- Reduced annual lubricant consumption by 50 percent
- Doubled the estimated life of the gear set

### Customer Profile

Tenn-Luttrell Lime Company has been in business since 1979, manufacturing quicklime, hydrated lime, and crushed and pulverized limestone products. It has been an LE customer since 1986.

### Application

Tenn-Luttrell uses a KVS ball mill to manufacture lime products. The KVS ball mill is a 450-hp, 9x13-foot, single-pinion-driven mill. The mill operates at 21 rpm, grinding coal to fire the KVS rotary kiln. Lubrication is sprayed on the gears with a pneumatic pump system. The mill operates 330 days per year.

### Challenge

The environment of the lime quarry is very dusty and hot. The gearset on the KVS ball mill was showing premature gear face wear and there was vibration caused by the build-up of the asphaltic product in the gear teeth. The gear teeth were badly worn, but Tenn-Luttrell needed to keep the mill in production to meet sales demands.

### LE Solution

The local LE lubrication consultant, recommended LE's Pyroshield Syn Open Gear Grease (5180), a heavy-duty,

lead-free synthetic lubricant. For the conversion process, he recommended that LE's Almasol® Vari-Purpose Gear Lubricant (609) – now Duolec® Vari-Purpose Gear Lubricant (1608) – be used to clean the gear set. The mill was able to continue operating during this time. After the asphaltic product had been cleaned completely from the gear set, the Pyroshield was applied.

### Results

Prior to the conversion, Tenn-Luttrell had been using 25 drums of the asphaltic product per year. With LE's Pyroshield, the company's annual lubricant consumption was cut to just 12 drums. A 30°F temperature drop was measured on the pinion face after converting to Pyroshield. The maintenance personnel at Tenn-Luttrell estimate that Pyroshield has doubled the expected life of the gear set on this mill, providing the company with significant savings on parts, labor and lost production time.

*Thank you to Joe Felango, owner; Willy Thiels, mechanic and operator; and the local LE lubrication consultant, for providing the information used in this report.*

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