1605 DUOLEC™ VARI-PURPOSE GEAR LUBRICANT

LAFARGE N.A. CEMENT PLANT, Calera, Alabama

Gearbox • SIC 3272 Concrete Products

⇒ <u>Reduced Operating Temperatures</u> ⇒ <u>Eliminated Foaming</u>

CUSTOMER PROFILE

Lafarge North America is the world's leader in building materials with top rankings in cement, aggregates, concrete and gypsum. The plant and limestone quarry has been in operation for over 50 years.

APPLICATION

Lafarge has a SEW-Eurodrive model K167AD8 helical right angle

gearbox ,driven by a 200 hp electric motor. It is a separator gearbox that sits on top of the raw mill and is exposed to the elements. It can be very dusty, wet, cold, hot and has medium to heavy vibration when operating. This mills runs at least 6 days a week, 50 weeks per year.

AREA OF INTEREST

While using a competitors synthetic hydrocarbon gear oil, they were experiencing high operating temperatures, 180°F to 205°F (82°C to 96°C), depending on the ambient temperature and load. They were also having problems with foaming and some seal leakage.





LUBRICATION ENGINEERS,® Inc.



LE SOLUTION

Lubrication Consultant Bill Briand recommended 1605 DUOLEC™ Vari-Purpose Gear Lubricant. LE 1605 is a highperformance gear oil acceptable for use in any industrial gear or bearing application that requires a high thermal stability, pressure lubricant. 1605 extreme DUOLEC™ is fortified with a shear stable tackifier to provide adhesion to metal during use.

CUSTOMER COST SAVINGS

The gearbox was partially drained of the synthetic product, filled with 1605 DUOLEC™ Vari-Purpose Gear Lubricant

and run for one month. Then they fully drained it and installed a Des-Case Hydroguard disposable breather, and refilled with LE 1605. After running production for two weeks they observed temperatures of 169°F to 178°F (76°C to 81°C) with no foaming.

Maintenance Inspector Derek McIntyre stated, "I am pleased and a bit surprised to see such a temperature drop."

OTHER PRODUCTS USED

9011 PYROSHIELD® XH Syn-Gear Lubricant is used on the kiln girth/pinion gear.



Maintenance Inspector Derek McIntyre

Lubrication Engineers Inc. would like to thank Maintenance Inspector Derek McIntyre, Methods Engineer Matt Padgett and Lubrication Consultant Bill Briand for providing the information to prepare this report.



Bill Briand