Duolec® Vari-Purpose Gear Lubricant (1604)

A.C. Miller Concrete Products – Blairsville, Pa.

Wiggert Concrete Mixer

- Extended oil drain intervals
- Energy reduction of 21%

Customer Profile
A.C. Miller Concrete Products in Blairsville, Pennsylvania, is a concrete casting company, specializing in the manufacturing of box culverts, retaining walls, bridge sections and prefabricated tunnel systems. They have been an LE customer since 2001.

Application
An essential piece of equipment in the manufacturing process is the Wiggert HPGM 2250 countercurrent concrete mixer. This machine mixes the concrete components in batches for each casting. The Wiggert mixer is rated at 75 HP driven through a planetary drive reduction box. The gearbox requires an ISO 150 EP gear oil.

Challenge
The mixer requires wash down following each day’s production run. Condensation and wash down water would find its way into the planetary and emulsify with the gear oil forcing replacement of the oil at times on a weekly basis. Oil analysis indicated water content to exceed 20%.

LE Solution
John Hayes, LE lubrication consultant, recommended Duolec® Vari-Purpose Gear Lubricant (1604), which is a high performance gear oil acceptable for use in any industrial gear or bearing application that requires a high thermal stability, extreme pressure lubricant. Duolec 1604 separates readily from water and is fortified with a shear stable tackifier to provide adhesion to the metal during use. It contains Duolec®, LE’s proprietary temperature activated, dual acting, liquid additive that increases film strength and EP characteristics.

Results
The customer installed Duolec 1604 in the gearbox. With its exceptional demulsibility characteristics, maintenance is able to routinely drain separated water from the bottom of the gearbox. Oil is now changed twice a year. An unexpected benefit was a realized drop in energy requirements to run the mixer. Upon changing to Duolec 1604, amperage dropped from 24 to 19 amps. A significant energy savings of 21%.

Other Products Used
- Wirelife® Almasol® Coating Grease (451)
- Duolec® Vari-Purpose Gear Lubricant (1606)
- Monolec® Multiplex Lubricant (4622)
- All Purpose Hydraulic Oil (4933)
- Monolec® Hydraulic Oil (6520)
- Multilec® Industrial Oil (6802)
- Monolec® Power Fluid (7500)
- Monolec® GFS Engine Oil (8430)
- Monolec Ultra® Engine Oil (8800)

Thank you to John Hayes, LE lubrication consultant (pictured), for providing the information used in this report.