Customer Testimonial

Duolec® Vari-Purpose Gear Lubricant (1606)

Occidental Chemical Co. – Augusta, Ga.

Falk Gear Reducer

- Extended drain intervals
- Reduced oil usage from 240 gallons to 30 gallons

Customer Profile
Occidental Chemical Company (Oxy Chem) is located in Augusta, Georgia, and has been in operation for 40 years. Oxy Chem produces sodium silicate glass, which is dissolved to make a sodium silicate solution.

Application
A Falk gearbox driven by a Reliance 7.5 hp 550/1 motor pulls a casting conveyor from the ground floor glass furnace up five stories high. At the top of the conveyor the glass castings are then dropped into a bin for processing. The ambient temperature is between 150°F (66°C) to 160°F (72°C).

Challenge
Mr. John Graham, plant manager, wanted to save money and downtime by finding an oil that could handle the load and the heat, as well as safely extend the drain intervals. The gearbox required oil changes every 2,500 hours. Changing the oil in the gearbox requires a boom truck for lifting tools and 55 gallons of oil safely to the roof. This procedure takes an average of eight hours to complete.

LE Solution
Mark Jones, LE lubrication consultant, recommended Duolec® Vari-Purpose Gear Lubricant (1606), ISO 320, 6EP for this hot and heavily loaded application. Lubrication Engineers Analysis Program (LEAP) was recommended to monitor the oil condition to safely achieve the maximum drain interval possible.

Results
Using LEAP to monitor the oil condition, the gearbox was drained after two years, 16,000 hours. Oxy Chem also saved on boom truck rentals, oil cost, and downtime.

- Boom Truck rental @ $75 per hour x 8 = $600
- 30-gallon oil reservoir x 8 = 240 gallons of oil
- 8 hours downtime (changing oil) x 8 = 64 hours downtime

Other Products Used

- Almaplex® Industrial Lubricant (1275) is used in all bearing and grease applications throughout the plant.
- Duolec® Vari-Purpose Gear Lubricant (1605) is used in conveyor gearboxes.
- Oil Safe containers

Thank you to Gary Herndon, maintenance manager, Tony Nappier, maintenance technician, and to Mark Jones, LE lubrication consultant (pictured), for providing the information used in this report.