Quinplex® Synthetic Food Grade Oil (4046)

Sara Lee Bakery – Oklahoma City, Okla.

Quincy Air Compressors

- Eliminated varnish problem
- Extended oil drain intervals
- Reduced costs for oil, filters and separators

Customer Profile
Sara Lee Bakery is a commercial bakery. They produce a varied line of premium products.

Application
Four Quincy air cooled compressors, three 50 hp and one 100 hp, provide air for the plant equipment. The units are outdoors and experience the extremes of Oklahoma temperatures (-10°F to 110°F, -23°C to 43°C) and are exposed to airborne contaminants.

Challenge
Sara Lee was experiencing heavy varnishing in the compressors. Gene Merz, engineer manager, was using an expensive varnish remover to keep the compressors clean.

LE Solution
The local LE lubrication consultant recommended Quinplex® Synthetic Food Grade Oil (4046), which is NSF and USDA H1 for food processing equipment. It contains Quinplex®, LE’s proprietary additive that enhances lubricant performance. Quinplex 4046 has superior low temperature performance characteristics.

Results
In the fall of 2004, the decision was made to convert the compressors to Quinplex 4046. With proper flushing and monitoring, using LEAP (Lubrication Engineers Analysis Program), it was determined that Quinplex 4046 was not varnishing at 2,000 hour change intervals as compared to the previous commercial grade oil. Later, the decision was made to extend oil, filter and separator changes out to 3,000 hours vs. the previous 2,000 hours.

Since the time of conversion to Quinplex 4046, all four compressors have worked properly in all temperatures with no varnishing problems.

By extending the oil drain intervals to 3,000 hours, Sara Lee has reduced their costs for oil, filters and separators:
- 3 - 50 hp units = $2,029
- 1 - 100 hp unit = $1,198

Quinplex 4046 saves $3,227 annually.

This savings helped in a plant wide cost reduction to keep the Oklahoma City plant in the top 2 or 3 Sara Lee plants for efficiency.
Other Products Used

- Almaplex® Industrial Lubricant (1275) is used as a general purpose grease.
- Duolec® Vari-Purpose Gear Lubricant (1605) is used on the proofer chains.
- Duolec® Vari-Purpose Gear Lubricant (1607) is used in most gear reducers.
- Quinplex® Food Machinery Lubricant (4025) is used everywhere that an H1 grease is needed.
- Syntemp® Synthetic Lubricant (9102) is used on chains and open gears.
- Almasol® Syntemp Lubricant (9901) is used in the proofers due to the high heat.

Thank you to Gene Metz, engineer manager, and to Michael Kidder, LE lubrication consultant (pictured), for providing the information used in this report.