Customer Testimonial

LEAPSM Oil Analysis Program

Cup Manufacturing Company in the Southeast U.S.

Cone Drive Gearbox

- Identified wear metals and problematic oil mixing
- Taught customer how to read and understand results, providing helpful analysis rather than just a stack of reports
- Saved $26,552 in labor and equipment during first four months

Customer Profile
A cup manufacturing company located in the Southeast U.S. produces single-use products for beverages in the retail and food service markets.

Application
The manufacturer uses Cone Drive gearboxes to turn the cup-making machine.

Challenge
The company was losing the main Cone Drive gearboxes at an average rate of one per month at a cost of $6,500 per gearbox, resulting in an annual equipment loss of $78,000. In addition, it took two men six hours to take an old gearbox out and replace it with a new Cone Drive. The new maintenance manager wanted to reduce his equipment downtime and increase his plant’s production.

Solution
The maintenance manager asked Mark D. Jones, LE lubrication consultant, if he could help. Mark’s first recommendation was to pull oil samples on nine Cone Drive gearboxes and a new sample of the Chevron HiPerSYN® 320 Oil. Mark explained to the customer that – using LEAP Oil Analysis – the samples would report viscosity, wear particles, additive package, water and ISO cleanliness level. The next step would be to check the manual and ensure that the correct lubricant was being used.

A significant aspect of the LEAP Oil Analysis Program is the LE consultant walking the customer through the report, explaining the results and teaching the customer how to read the report. When the customer’s reports came back within a week, Mark showed the maintenance manager that two different types of oils were being used, and that the oils were being mixed. Cone Drives require either an ISO 460- or 680-grade synthetic oil due to the constant heat used during production. The customer had been using an EP gear oil and a Chevron ISO 320-grade synthetic oil. The Chevron oil could not hold up to the load and heat, and was breaking down by itself. When the two oils were mixed, the oil collapsed completely.

Armed with this information from the LEAP Oil Analysis, Mark recommended to the customer that all the gearboxes be flushed with LE’s Monolec® R&O Compressor / Turbine Oil (6405) at no load, and then drained. After the flushing, he recommended the use of LE’s Monolec Synthetic Industrial Lubricant (9460) in the Cone Drive.

Results
In the first four months after switching to the LE oil, the manufacturer lost no more cone drives. This saved the company $26,000 in cone drives and $552 in labor ($23 per hour), for a projected annual savings of $78,000 in equipment and $6,624 in labor.

The customer is pleased with the results and has made additional reliability improvements, including the installation of Esco oil sight glass levelers and gearbox adapter kits for the addition of desiccant breathers and off line filtration.
Thank you to the management and maintenance team, and to Mark D. Jones, LE lubrication consultant (pictured), for providing the information used in this report.

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Based on actual user experience, individual results may vary. Not intended to supersede manufacturer specifications.

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