

Lubrication Solves Slurry Pump Failure

Power
Chesterton Lubri-Cup™ EM and 635 SXC
Case Study 036 LMRO

Challenge

Background

Slurry pumps operate continuously at this power plant. Moisture, corrosive chemical, and abrasives contaminate bearings. The plant typically uses lithium complex grease which separated/liquefied due to heat and shear. Re-greasing was required monthly to keep adequate grease in the bearing.

Over greasing created heat and bearing failure in 8-14 months.

Solution

Product

Chesterton 635 SXC was selected due to thermal, moisture, and corrosion resistance. Bearings were surveyed and the correct volume and frequency for re-greasing was determined by the Chesterton lubricant specialists. The grease was applied using the Chesterton Lubri-Cup™ EM Automatic Lubricant Dispenser. It applies the right amount of grease at specific intervals.

Results

Six slurry pumps were fitted with Lubri-Cup™ EM and 635 SXC. Service kits are installed every six months. No oil separation or excess heat was noted.

After 36 months of use, no slurry pump bearings have failed. Vibration monitor/trending indicates MTBR is exceeding the life of the casing.



Bearing failed frequently in slurry pumps.



Chesterton Lubri-Cup EM applied the new, high-performance grease.



After three years there was still no bearing failure.