METALS (USA) STEEL MINI MILL

Castrol Molub-Alloy® GM 969 Leak Resistant Gear Oil* ANNUAL SAVINGS: \$55,740

THE SITUATION

A major steel mill was using a competitive oil in 3 shaker gear boxes. Due to the heavy vibration, seals were leaking and oil was being lost. In order to maintain the proper oil level, they had to add 40 gallons per week to keep the gears lubricated. It was taking one maintenance person about 1 1/2 hours per week to keep the boxes full. One out of 3 gearboxes was replaced last year due to significant gear wear from lack of lubrication. Gear box replacement costs totaled over \$4,000.

BEFORE

- Gear box replacement cost \$4,000
- Lubricant used per year 2080 gal
- Lubricant cost for one year \$55,120
- Oil make-up labor per one year \$5,070 (78 hours @ \$65 per hour)

Total annual cost of maintenance: \$64,190

AFTER

- Gear box replacement cost \$0
- Lubricant used per year– 260 gal
- Lubricant cost for one year \$7,850
- Oil make-up labor per one year \$650 (10 hours @ \$65 per hour)

Total annual cost of maintenance: \$8,450

THE SOLUTION

- After through investigation of the problem, Castrol engineers introduced Castrol Molub-Alloy GM 969 Leak Resistant Gear Compound to these gear boxes to see if it's leak resistant qualities would enable oil to stay in the gear boxes better.
- Castrol Molub-Alloy GM 969 Leak Resistant Gear Compounds are specially formulated to help control leaks in gear cases where repairs cannot be immediately performed to eliminate the cause(s) of leakage. The synthetic thickener forms a mat-like matrix at the points of leakage to minimize the flow of oil.

Castrol Molub-Alloy GM 969 Leak Resistant Gear Compound is the right lubricant for steel mill shaker gear box applications which are working in a very heavy vibration environment.



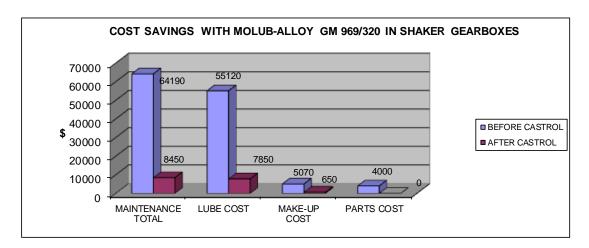
RECOMMENDATIONS

Castrol Molub-Alloy GM 969 Leak Resistant Gear Compound has proven to be the right product not only for the steel mill shaker gear boxes but for all other gear applications where control of leaks in gear cases is required because repairs to eliminate the causes of leakage cannot be immediately performed or are not economically feasible.

These applications may include but are not limited to overhead crane gear boxes and many other steel mill applications.

CONCLUSION

- The use of Castrol Molub-Alloy GM 969/320 Leak Resistant Gear Compound has reduced annual usage of gear oil to 260 gallons from the previous 2,080 gallons with a competitive gear oil.
- No shaker gear box failures and no related parts and labor costs since change to Castrol.
- Total savings per one year: \$55,740 (\$64,190 \$8,450 = \$55,740)





OTHER POTENTIAL APPLICATIONS

Castrol Molub-Alloy GM 969 Leak Resistant Gear Compound can be used in all other gears applications where control of leaks in gear cases is required because repairs to eliminate the causes of leakage cannot be immediately performed or are not economically feasible.

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