

METALS (USA)

CONTINUOUS CASTERS

Castrol Optigear[®] BM

ANNUAL SAVINGS: \$137,054



THE SITUATION

High failure rates on the upper and lower caster withdraw gearboxes meant lost production time, increased labor needs, and high component replacement costs of \$154,175 annually.

BEFORE

- Inspections by Castrol Engineering determined the gearbox failures were due to extreme conditions in the Continuous Caster area.
- Recommendations for Castrol Optigear BM high-performance gear oil were made.

AFTER

- Implemented the Castrol Optigear BM gear oil which drastically reduced gearbox failures.

THE SOLUTION

- After a full evaluation of the application was completed, a Castrol offer was made utilizing the high-performance Microflux Trans technology within the Optigear BM gear oil.
- A service program was also implemented with routine condition monitoring of the equipment and oil analysis program.

- Right oil for the right application
- Superior Microflux Trans additive technology
- Experienced engineering services

RECOMMENDATIONS

- Castrol Optigear BM gear oils were recommended for this application to overcome the harsh conditions of the equipment such as extreme pressures, vibration, shock loads, and potential high temperatures.
- Through the use of routine oil analysis and condition monitoring, extended drain intervals can be achieved with the assurance that the equipment and lubricant are in good operating condition.

CONCLUSION

- Gearbox failures were reduced by an average of 73% over the next two years, even though production increased by 67%.
- **Annual cost savings added up to \$137,054.**



OTHER POTENTIAL APPLICATIONS

Castrol Optigear BM gear oils are designed to reduce wear caused by surface fatigue, pitting, spalling, scuffing, scoring or irregularities during running-in period and where conventional EP gear oils fail.