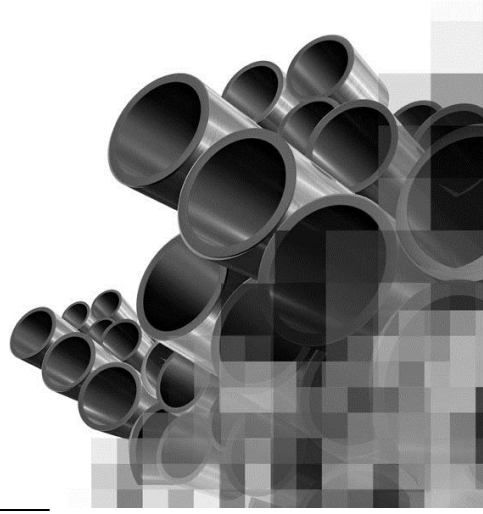
METALS (USA)

SEAMLESS TUBE MILL

Castrol Molub-Alloy® 860 ES

ANNUAL SAVINGS: $219,688



THE SITUATION

A leading steel producer was experiencing unscheduled downtime due to bearing failures in its piercing operations.

Castrol was challenged to reduce the bearing failures which would then reduce the unscheduled downtime.

BEFORE

- 25 unscheduled outages per year to replace failed bearings at a cost of $5,000 per hour.
- 150 bearings and 17 shafts were replaced per year.
- 200,000 gallons of oily wastewater sent off-site for treatment per year .

AFTER

- Unscheduled outages due to bearing failures were eliminated.
- Bearing replacements were reduced to seven per year.
- Shaft replacements due to bearing failures were eliminated.
- Grease usage reduced by 75+%
- Oily wastewater for off-site treatment was reduced by 104,000 gallons.

THE SOLUTION

- The high-performance characteristics of the Castrol Molub-Alloy 860 ES grease enabled the product to withstand the high temperatures and heavy water wash conditions resulting in increased protection for the bearing.
- Reduction of grease consumption by over 75% resulted in significant environmental impact to the wastewater.

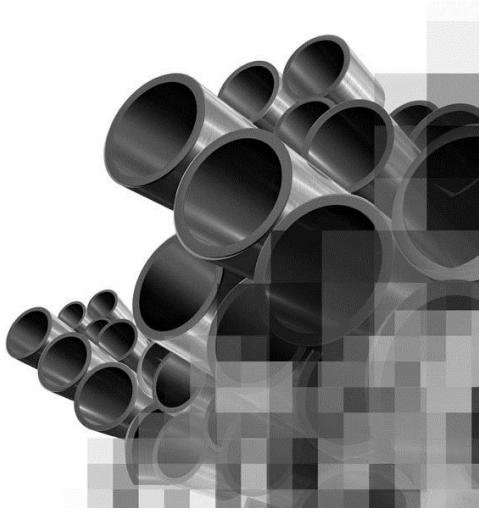
- **Right product for the right application**
  Castrol Molub-Alloy 860 ES was found to have better water wash resistance and compatibility with the process water as well as an increased temperature range to handle the difficult environment of the application.

RECOMMENDATIONS

Castrol Molub-Alloy 860 ES was recommended due to its ability to handle the extreme working conditions of steel mills.

CONCLUSION

- Total documented annual savings of $219,688
- Bearing loss reduced from 150 to 7 per year
- Shaft replacements due to bearing failures reduced from 17 to 0 per year
- Grease consumption reduced by 75% resulting in a reduction of 104,000 gallons



OTHER POTENTIAL APPLICATIONS

Castrol Molub-Alloy 860 ES greases are designed to extend the service life of bearings in heavy-duty applications under extreme conditions such as high temperatures, heavy loads, and high water wash.