

# METALS (USA)

## CONTINUOUS CASTER

### Castrol Molub-Alloy® 6040/460-1.5

## 3-YEAR SAVINGS: \$569,034



### THE SITUATION

The descaling operation after continuous casting requires high volumes of water and is performed under the intense heat of the newly cast metal. A major steel manufacturer was using a “premium” lithium-based grease to protect entry table roller bearings from this harsh environment. The high volume of water caused the grease to wash out, and the residual lithium soap thickener would bake onto the rolling surface, resulting in bearing failure from lack of lubrication.

### BEFORE CASTROL

- On down days, which occur once every three weeks, one set of entry table roller bearings would need to be replaced.
- Bearing replacement and associated labor and equipment rental costs totaled \$11,000 for each occurrence.

### AFTER CASTROL

- Since implementing the change to Molub-Alloy 6040 grease, there have been no entry table roller bearings failures in 3 years.

### THE SOLUTION

- After a full evaluation of the application was completed, a recommendation was made to use the high-performance Castrol Molub-Alloy 6040 grease.

- Right lubricant for the right application
- Superior grease technology
- Experienced engineering services

## RECOMMENDATIONS

- Castrol Molub-Ally 6040 is a calcium sulfonate-based grease designed for severe environments like that of the descaling operation.
- Specially formulated materials in Molub-Alloy 6040 result in grease properties that provide resistance to water wash-out and degradation due to high operating temperatures, making it the perfect choice for steel mill applications.

## CONCLUSION

- Bearing failures were reduced from 51 to 0 over a 3-year period.
- Three-year cost savings of \$569,034.
- Production uptime increased.

	Previous Grease	Molub-Alloy 6040/460-1.5
Grease cost	\$34,632	\$26,598
Bearing failures	51	0
Total bearing replacement cost @ \$11,000 per occurrence	\$561,000	\$0
<b>Total maintenance cost</b>	<b>\$595,632</b>	<b>\$26,598</b>
<b>Total 3-year savings:</b>		<b>\$569,034</b>



## OTHER POTENTIAL APPLICATIONS

Castrol Molub-Alloy 6040 is a calcium sulfonate-based grease designed for severe environments. Any corrosive environment where conventional grease may fail could utilize the increased protection of Castrol Molub-Alloy 6040 grease.

Castrol, the Castrol logo and Molub-Alloy are trademarks of Castrol Limited, used under license.