

Molub-Alloy OG 936 SF Greatly Extends Gear Life

SUGAR MILLS (BRAZIL)

TANDEM MILL – OPEN GEARS

Castrol Molub-Alloy® OG 936 SF Heavy*

ANNUAL SAVINGS: \$21,925



THE SITUATION

A large sugar cane mill in Brazil was using an old technology, asphaltic type open gear lubricant for their juice extraction tandem mill (24" x 84", 3-roll mill) pinion gears. The usage on the lubricant was high and the gears had to be replaced every 3 seasons.

Castrol was challenged to reduce lubricant usage and extend the gear life.

BEFORE

- **Old technology**, asphaltic open gear **lubricant**
- Gear life: 3 seasons
- Lube usage: 9,504 lbs/season

AFTER

- Molub-Alloy OG 936 SF **high performance** open gear lube
- Gear life: 10 seasons (**over 3X improvement!**)
- Lube usage: 2,534 lbs/season (**a 73% reduction!**)

THE SOLUTION

- Castrol technical representatives identified that the mill was using a very old technology lubricant.
- Testing of Molub-Alloy OG 936 SF showed that a much lower amount could be used to achieve good lubrication of the gears.
- In addition, the high performance formula protected the gears better leading to much longer life.

- **Improved gear condition**
- **Less waste to reduce environmental impact**
- **Lower inventory handling costs**
- **Easier juice extraction**

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RECOMMENDATIONS

Asphaltic type open gear lubricants use a heavy asphalt base, which adheres well to gears but does not provide optimum lubrication. The high performance formula of Molub-Alloy OG 936 SF utilizes the latest high viscosity base oils, advanced lubricating solids (moly & graphite), and a thickener optimized for open gear adherence. Together these qualities provide low usage and excellent gear protection.

CONCLUSION

Castrol Molub-Alloy OG 936 SF Heavy actually improved the condition of the gears to greatly extend their life, while providing other benefits of significant usage reduction (73%), reduced environmental impact, easier juice extraction (through more constant pressure in the superior roll), and lower inventory handling costs.

The result was a savings of \$21,925 per season plus other benefits enjoyed by the customer.



OTHER POTENTIAL APPLICATIONS

Molub-Alloy OG 936 SF series open gear lubricants are ideal for medium and heavily loaded gear sets in sugar, cement, mining, and other heavy duty manufacturing segments.