

# Optigear OG 4 Delivers Large Usage Reduction

## SUGAR MILL (CENTRAL AMERICA)

### TANDEM MILL

Castrol Optigear® OG 4\*

**ANNUAL SAVINGS: \$14,176 per season**



#### THE SITUATION

A sugar mill was using a high viscosity mill lubricant for their bushings on the Tandem Mill. Operations were pretty good, but the customer challenged Castrol and our distributor to further improve operations.

#### BEFORE

- High viscosity (12,500 cSt) sugar mill lubricant from company "T"
- Lubricant consumption (77.1 kg/day)
- Cost per ton (\$0.0567/ton)

#### AFTER

- Optigear OG 4, very high viscosity (16,000 cSt) mill lubricant
- Lubricant consumption (33.7 kg/day)
- Cost per ton (\$0.0335/ton, 41% reduction)

#### THE SOLUTION

- Optigear OG 4 was specifically developed for the heavy loads and slow speeds of sugar mill bushings.
- The extremely high viscosity, high load carrying capacity, and superior adhesiveness allow it to stay in place and protect the bearings longer.
- Castrol's distributor monitored temperatures of the bushings to ensure lubrication cycles were correct.

- **High load capacity**
- **Adhesiveness**
- **Low usage**
- **Significant cost reduction**

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## RECOMMENDATIONS

Temperature monitoring of the bearings is important to optimize lube cycles and maintain low lubricant usage. Temperatures when using the Optigear OG 4 were much lower than the previous grease, allowing for longer re-lube intervals. In addition, lubrication systems must be regularly checked to ensure proper operation.

## CONCLUSION

Due to the higher viscosity and greater lubrication properties of Optigear OG 4, lubricant consumption was greatly reduced, leading to substantial cost savings per ton of production. Support from Castrol and their distributor ensured success of the conversion.

**The result was a 56% reduction in lube consumption, 41% reduction in cost per ton, and \$14,176 savings per season.**



## OTHER POTENTIAL APPLICATIONS

Castrol Optigear OG 4 was developed specifically for sugar mill applications including bushings, open gears, and beds. It excels under the high loads and slow speeds found in sugar mill bushings, typically lowering temps, reducing bearing failures, and lowering lubricant consumption.

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	Competitor	Castrol Optigear OG 4	Savings
Days evaluated	66	54	
Consumption (barrels)	28	10	
Consumption per day	77.1 kg	33.7 kg	43.4 kg / day
Cost per barrel	\$1,500	\$2,050	
Total lubricant cost	\$42,000	\$20,500	
Grinding tons	740,656 tons	611,038 tons	
Cost per ton	\$0.0567/ton	\$0.0335/ton	\$0.0232 / ton (41% reduction)