

# TIRE MANUFACTURING (USA)

## STOCK PREP AND MIXING

### Castrol Optigear® BM 460

## SAVINGS: \$114,390 over 8 years



### THE SITUATION

A major tire manufacturer had significant costs associated with regular gear oil change-outs on 63 gear reducers in the Stock Prep and Mixing department.

The conventional EP gear oil in use would only last for 1-2 years. This resulted in frequent oil changes and significant manpower commitments.

Castrol was challenged to greatly extend the oil life and reduce maintenance time and cost.

### BEFORE CASTROL

- Conventional EP gear oil
- Oil changed every 1-2 years
- Total volume for 8 yrs: 46,435 gal
- Labor required: 1,386 man-hrs

### AFTER CASTROL

- Castrol Optigear BM 460 high performance gear oil
- Oil life extended to 8+ years
- Total volume for 8 yrs: 5,900 gal
- Labor required: 176 man-hrs
- 87% reduction in both oil volume and labor requirements

### THE SOLUTION

- Castrol engineers recommended Optigear BM 460 gear oil due to its highly refined base fluid and anti-oxidant additive package which allows for extended drain intervals.
- Oil analysis was performed regularly on each gear reducer to ensure the oil was suitable for continued use.
- Castrol reviews detailed oil analysis results with the department to ensure any abnormalities are corrected, thus preventing premature degradation of oil and equipment.

Castrol Optigear BM reduces oil usage and labor costs by 87%!

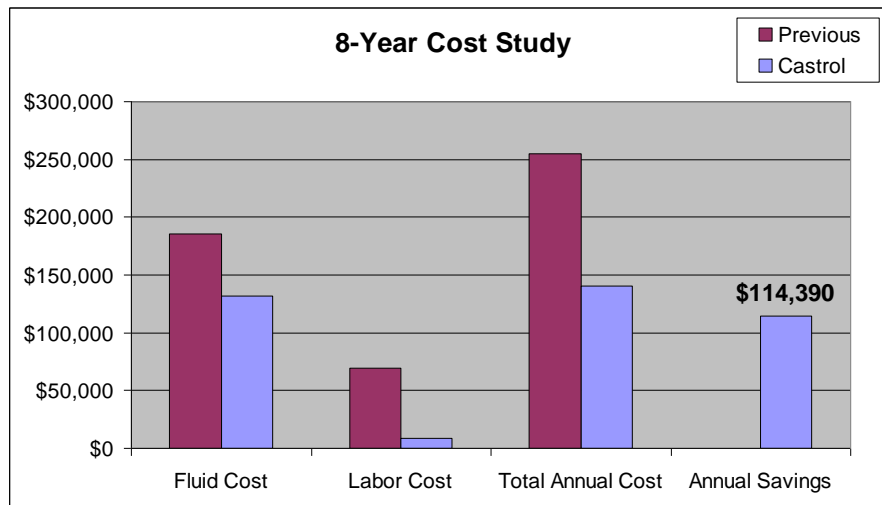
## RECOMMENDATIONS

Gear reducer manufacturers typically recommend bi-annual or annual oil changes when running conventional EP gear oils. These frequent and costly time-based oil changes can be replaced by condition-based changes with the use of a high performance gear oil and detailed oil analysis. The expertise of the oil supplier is key to managing this process correctly and cost effectively.

## CONCLUSION

Castrol applied the knowledge and experience necessary to convert the customer to condition-based oil changes using a gear oil designed for long life.

The result was significant reduction in oil usage & waste and a great impact on maintenance labor and cost.



## OTHER POTENTIAL APPLICATIONS

Castrol Optigear BM series high performance gear oils are suitable for all industrial gearboxes where long oil and equipment life is desired.