

# EXTRUDED PRODUCTS (USA)

## PLASTIC EXTRUSION

### Castrol Molub-Alloy® 860/220-2 ES

## ANNUAL SAVINGS: \$17,160



### THE SITUATION

A plastic extrusion company had significant problems with bearing failures on their pre-heater feeders. The general purpose grease in use could not handle the bearing temperature of 220°F. The grease would cook in the bearings, harden, and lead to frequent failures.

- 11 extrusion lines, 2 preheater brgs per line
- 1 brg per line fails every 2-3 yrs
- \$150 cost per new bearing
- 8 man-hrs to replace pair of brgs @ \$35/hour
- 4 hours of lost production @ \$2,000 per hour

### BEFORE CASTROL

- General purpose grease
- 22 bearing failures in 3 years
- 88 labor hrs to replace bearings
- 44 hours of downtime
- Total 3-year cost of \$94,380 in maintenance and lost production

### AFTER CASTROL

- Castrol Molub-Alloy 860/220-2 ES
- 10 bearing failures (many already damaged from previous grease)
- 40 labor hours to replace bearings
- 20 hours of downtime
- Total 3-year cost of \$42,900 in maintenance and lost production

### THE SOLUTION

- Castrol was challenged to reduce bearing failures and the related high costs of maintenance and lost production time.
- Castrol engineers quickly identified that the wrong grease was being used in this difficult, high temperature application.
- Molub-Alloy 860/220-2 ES was chosen for its known performance in high temperatures and proven ability to extend bearing life.
- The customer noted that many of the bearings that failed after conversion to the Castrol grease were already damaged from the previous grease, indicating that the savings listed here are conservative.

Over 50% reduction in bearing failures in high temperature bearings utilizing Molub-Alloy 860/220-2 ES grease!

## RECOMMENDATIONS

The pre-heater feeder bearings in this facility are in an extremely hot environment and require a grease capable of handling this condition. Evaluation by Castrol lead to the use of Molub-Alloy 860/220-2 ES grease with moly. Significant bearing life extension was achieved due to the high dropping point, oxidation stability of the base oil, and solid lubricant additive package.

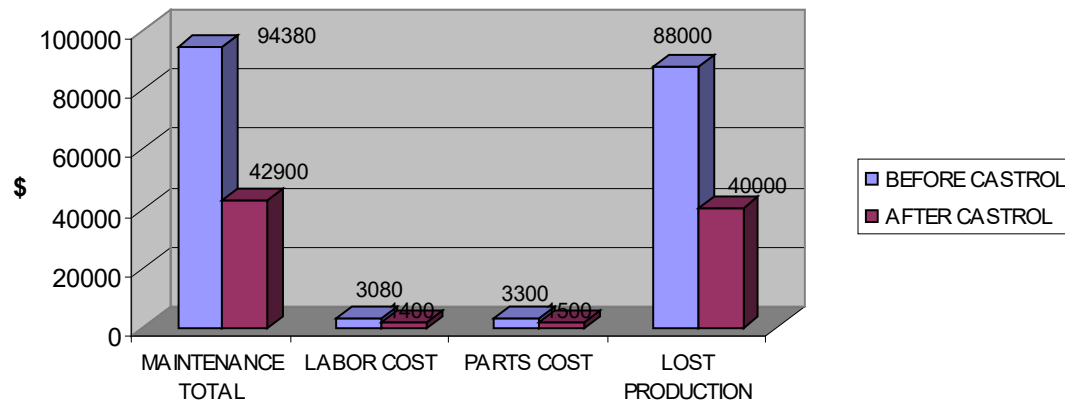
## CONCLUSION

Even with many of the bearings prematurely damaged from the old grease, Castrol was able to reduce failures by over 50%.

**The final result was \$51,480 in savings over three years or an annual reduction of \$17,160.**



**COST SAVINGS CASE STUDY WITH MOLUB-ALLOY 860/220-2ES IN PREHEATER FEEDER BEARINGS**



## OTHER POTENTIAL APPLICATIONS

Castrol Molub-Alloy 860 series of greases have proven performance in a wide variety of heavily loaded, shock loaded, and high temperature applications in all industries.