



# Value Recognition Report

## Worlds Largest Brick Manufacturers

**History:** One of the largest brick manufacturers in the world was experiencing lubrication failures in the wheel bearings in their kiln cars that affected efficiency. Kiln cars operate in extremely heavy load, high heat & heavily contaminated conditions. Each car has 8 wheel bearings to support the load of the tens of thousands of pounds placed on it. When a wheel bearing fails, the wheel locks up and the kiln car is pushed through the remainder of the process. In addition to requiring more energy to push the car; the wheel, the shaft, and the bearing all have to be reworked/replaced.

- Needs:**
- Increase Kiln Car Reliability by Reducing Bearing Failures.
  - Extend Lubrication Intervals.
  - Reduce Overall Maintenance Costs.
  - Provide Lubricant Training to Maintenance Staff.

**LubeMaster Objective:** To determine and develop a lubricant that will minimize the annual costs associated with the purchase, use and downtime as they relate to kiln car wheel bearings and to provide a reliability partnership to drive proactive maintenance.

### Kiln Car Wheel Bearing Grease

**2001: A Popular Brand's High Temperature Grease**

**2002: Premalube Xtreme Heat Shield**

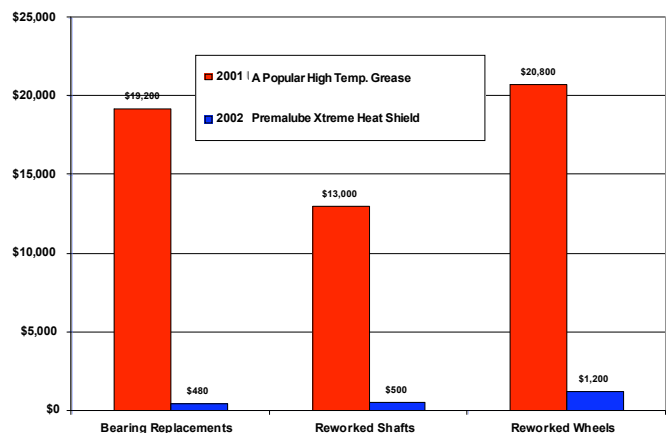
Results:	2001	2002
Bearing Replacements	\$19,200.00	\$480.00
Reworked Shafts (\$250 ea.)	\$13,000.00	\$500.00
Kiln Car Wheels Reworked	\$20,800.00	\$1,200.00
Grease Usage (120# kegs)	59	34

**Total Value & Savings for 2002: \$64,560.00**

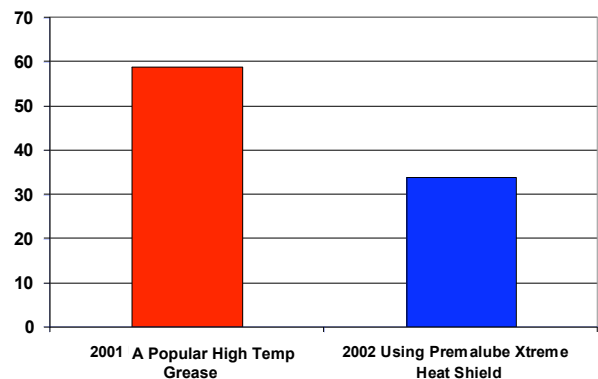
**Total Savings Using Premalube Xtreme Heat Shield**

**\$64,560**

**Replacement and Rework Costs**



**Annual Grease Usage (120# kegs)**





# Value Recognition Report

## Worlds Largest Printing Facility

**Account Information:** Worlds largest printing facility prints a wide variety of materials including advertising media and newspaper inserts. The gearbox of the folder was susceptible to annual repairs costing over \$80,000.00 annually.

**Certified Labs' Objective:** Provide a performance gear oil (CERTOP INDUSTRIAL) that reduces oil changes and labor costs as well as provide superior wear protection while producing a recognizable savings.

### Reduced Gearbox Replacement and Repair Cost

Prior to using CERTOP INDUSTRIAL gear oil, the folder unit would experience failures on an annual basis. The oil used was Mobilgear from Exxon Mobil. The following are the actual costs due to oil failures:

	Prior to CERTOP (Mobilgear)	Using CERTOP Gear Oil
Annual Costs:		
Gear Replacements	\$30,000.00	0
Bearing Replacements	\$3000.00	0
Labor / Repairs	\$60/hr, 72hrs x 3 Men = \$12,960	0
Downtime	<u>72 hours at \$500/hr = \$36,000</u>	<u>0</u>
Annual Cost	\$81,900.00	0
Annual Savings	0	\$81,900.00 annually \$491,400.00+ (6+ years)

**Total Annual Savings = \$81,900.00**  
**Savings Over 6 Years = \$491,400.00**

**Recognized Savings from Reduced Part Repair and Replacements = \$491,400.00**  
 Additional Savings Will Increase Through a Reduction of Additional Parts Replacement, Oil Use, Labor Costs and Downtime.







# 2006 Value Recognition Report Cascade Steel Rolling Mills, McMinnville, OR

## ***Cost Reduction Calculations***

### **Annual Lubricant Consumption Reduction in Melt Shop**

**Reduced grease consumption 66% - savings \$2,179 per year:**

- Switched from Synthetic Grease @ \$4.00/Lb to Premalube Xtreme Heat Shield @ \$7.76/Lb.  
(2640Lbs @ \$4.00 – 1080Lbs @ \$7.76 = \$2,179)

### **Annual Parts Repair and Replacement Cost Reduction in Melt Shop**

**Caster bearings, shafts, housings – savings \$109,200 per year:**

- Before Certified, replaced an average of 52 bearings per year at a cost of \$600 per bearing (52 x \$600 = \$31,200) Each bearing replacement required shaft & housing repair at a cost of \$1500 each (52 x \$1500 = \$78,000). Since switching to Premalube Xtreme Heat Shield there have been no lubricant related bearing replacements or shaft & housing repairs. An annual savings of (\$31,200 + \$78,000 = \$109,200 savings).

**Auto Cutting Torch Cam Following Bearings – savings \$1440 per year:**

- Before Certified, replaced all 24 cam following bearings per year at a cost of \$1440 (24 x \$60.00) Since switching to Premalube Xtreme Heat Shield there have been no lubricant related cam following bearing replacements.

### **Value Added Contributions - \$9,525 in 3 years supplied at no charge**

- Lubricant Seminars 2004, 2005, 2006 valued at \$1,375 each.
- 6 On-Site Technical Support Visits for Lubrication Problem Areas valued at \$1,800 each.
- On-Site Service Visits every 10 weeks

### **Annual Lubricant Related Downtime Reduction In Melt Shop**

**Downtime Reduced 91.4%**

Before 2005 the Melt Shop Downtime averaged 28%. Since switching to Premalube Xtreme Heat Shield this downtime has been reduced to an average of 2.4% which is a 91.4% reduction. According to plant management, a good part of this reduction can be attributed to the introduction of the new grease. **Accurate savings are very substantial but are not available.**