



# *Proof of Performance*

## **Gear Shield NC<sup>®</sup> In The Cement Industry**





# *Proof of Performance*

## **Background Information**

**Industry: Cement**  
**Equipment: Raw Mills**

**Application: Open Gear Lubrication**  
**Lubricant: Petron Gear Shield NC®**

### **Previous Condition:**

- 1) Customer used a low viscosity residual product to lubricate the open gears of two raw mills.
- 2) Insufficient lubricant film due to low lambda value.
- 3) Consumption of open gear lubricant for both applications approximately 9,261 pounds per year.

### **Current Condition:**

- 1) Gear Shield NC® currently lubricates the open gears of these two raw mills.
- 2) Lubricant lambda film thickness now exceeds AGMA recommended standard of four or greater.
- 3) Current consumption of Gear Shield NC® estimated at 4,762 pounds per year.

### **Benefits:**

- 1) Higher lubricant lambda value provides greater viscosity film strength on pinion and girth gear.
- 2) Annual open gear lubricant consumption for both mills reduced 4,499 lbs (49%).
- 3) Annual hard cost savings for both mills estimated at \$10,000.00.





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# Previous Consumption

### Per Mill:

**3.5 ounces every twenty minutes**

**10.5 ounces per hour**

**252 ounces per day**

**110.25 lbs per week**

**4,630.50 lbs per year (based on 80% mill run time)**

### Two Mills:

**4,630.50 lbs. x 2 = 9,261 lbs per year**



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# Current Consumption

### Per Mill:

**1.35 ounces every fifteen minutes**

**5.4 ounces per hour**

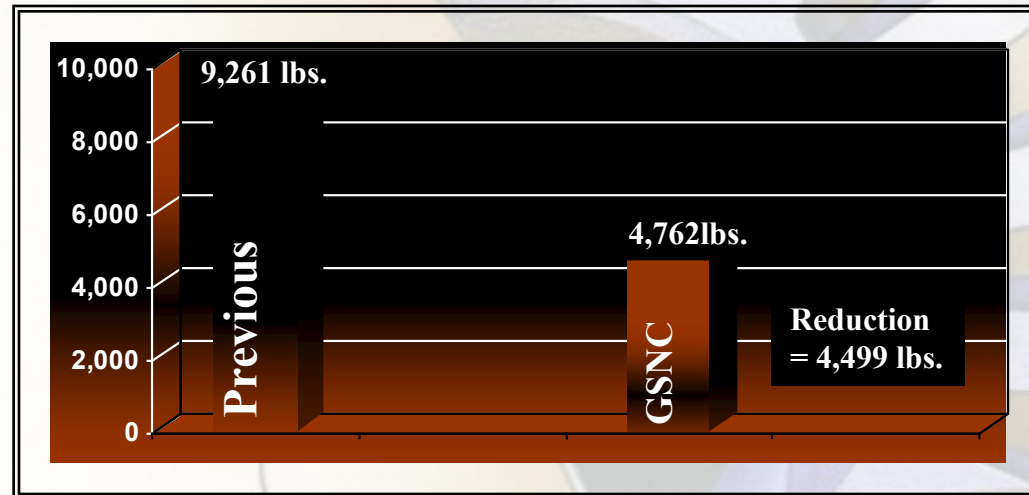
**129.6 ounces per day**

**56.7 lbs per week**

**2,381.40 lbs per year (based on 80% mill run time)**

**2,381.40 lbs. x 2 mills = 4,762.80 lbs per year**

## **Raw Mills #1 And #2 Lubricant Consumption Reduced 49%**



### Benefits

- Superior EHD Lubricant Film Protection
- Extended Gear Life
- Hard Cost Saving Due To Reduced Consumption

**Based On 42 Week Duty Cycle**