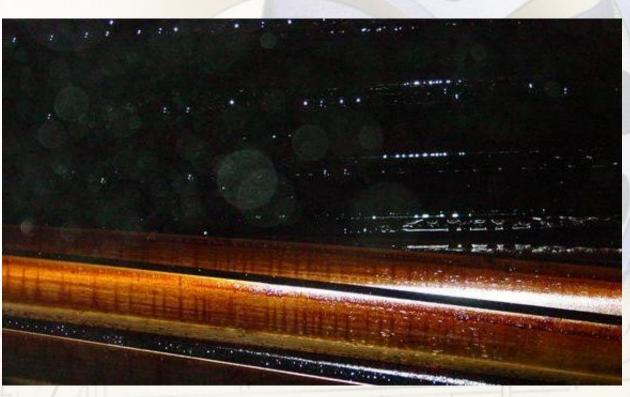


Gear Shield NC® In The Cement Industry





Background Information

Industry: Cement

Equipment: Finish Mills

Application: Open Gear Lubrication

Lubricant: Petron Gear Shield NC®

Previous Condition:

1) Customer used a grease type product to lubricate the open gears of two finish mills.

- 2) Lubricant build up evident on inspection door and inside gear guard.
- 3) Drainage of lubricant from gear guard not evident.
- 4) Previous timing of automatic lubrication was eight counts every twelve minutes.

Current Condition:

- 1) Gear Shield NC® currently lubricates the open gears of both finish mills.
- 2) Lubricant build up eliminated.
- 3) Drainage of lubricant from guard of gear established.
- 4) Current timing of automatic lubrication system is four counts every twenty minutes.

Benefits:

- 1) Extended gear life through higher viscosity film thickness.
- 2) Automatic lubrication system timing reduced 70%.
- 3) Cost for lubricant reduced 75% (timing reduction + lower cost per pound).



Higher Viscosity Film Strength Evident







Drainage Established



Gear Shield NC ® (Drainage Established)



Previous Product (No Drainage)



Automatic Lubrication System Count And Timing Comparison (Over Sixty Minutes)



System Timing



Comparison Of Consumption

Previous Setting = 8 counts/12 minute cycle:

.15 cu. in. x 8 counts = 1.20 cu. in. per nozzle.

6 nozzles x 1.20 cu. in. = 7.2 cu. in. every 12 minutes.

7.2 cu. in. x 5 cycles every 60 minutes = 36 cu. in. every 60 minutes.

Current Setting = 4 counts/20 minute cycle:

.15 cu. in. x 4 counts = .60 cu. in. per nozzle.

6 nozzles x .60 cu. in. = 3.6 cu. in. every 20 minutes.

3.6 cu. in. x 3 cycles every 60 minutes = 10.8 cu. in. every 60 minutes.

70% Reduction In Rate Of Application