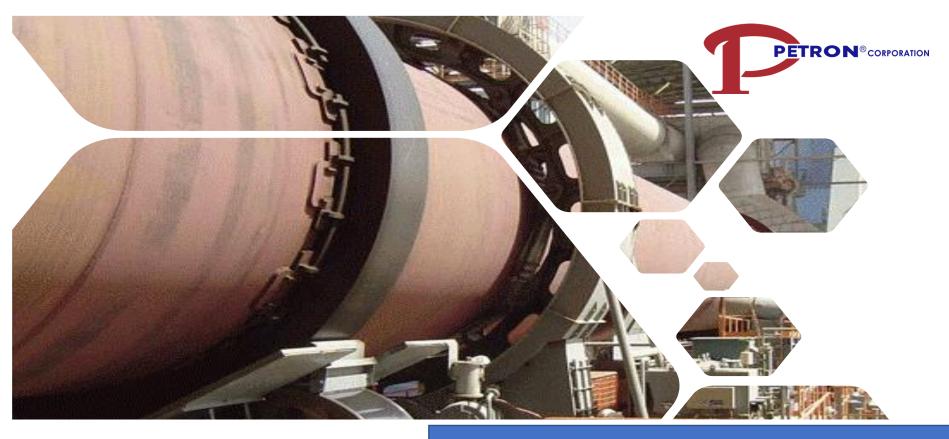
PETRON[®] corporation

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PETRON CORPORATION, New Berlin, Wisconsin, USA



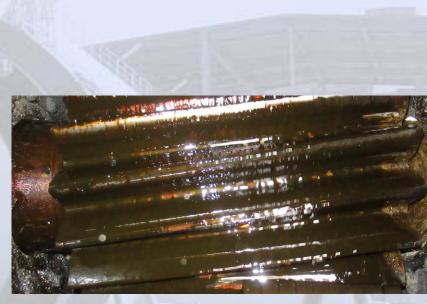
Cement Industry - Proof of Performance using Petro Kleen 140 and Pensolv L945 on a Wet Sump Kiln



Objective: On-site service to clean the open gearing and guarding of a wet sump kiln using a combination two Petron Products, Petro Kleen 140 and Pensolv L945.

Executive Summary: Petron Corporation provided the open gear & sump cleaning service for the Kiln. Service was completed during (1) site visit over (3) consecutive days.

- 1. Integrate the Petro Kleen 140 into the sump as well as manual application to allow product be applied to the pinion and bull gear during normal operation.
- 2. Manual application of Pensolv L945 to finish removing any residual debris and OGL after the kiln was shut down and in cool down process before parked for maintenance.



Original pinion gear condition before cleaning.





During the first 24 hours of use, Petro Kleen 140 penetrates to the bare metal surface underneath the hardened debris. By forming a lubricant film in-between the gear surface and the debris it greatly reduces the debris ability to adhere to the gear. Centrifugal force will typically dislodge any remaining debris from the gear face and gear root.

Applying Petro Kleen 140 for a longer duration will promote additional softening and cleaning. After 48 hours of soaking, typically the entire gear is free from debris and spent lubricant and some of the guarding will start to clean.





Pensolv L945 cleaning

Final Pensolv L945 cleaning

By using the Petro Kleen 140 first, the final cleaning takes much less time and generates much less mess from over-spray.



Benefits of Petro Kleen 140 cleaning process:

- > No lost production during cleaning process, done under normal load and throughput
- Contains high levels of Extreme Pressure and Anti-Wear additives to protect the gearing until the scheduled shutdown, while softening gear mesh debris
- Petro Kleen 140 is applied directly into sump
- High flash point > 300° F
- User friendly / no irritating odor
- > Forms a protective lubricant film on the gearset to prevent damage when operating the Kiln
- Greatly reduces the amount of solvent cleaning solution needed for complete bare steel gear mesh



Benefits of Pensolv L945 cleaning process:

- Pensolv L945 is manually applied to the open gear to quickly dissolve all debris and lubricants down to the bare metal surface
- Superior cleaning compared to mineral spirits
- Safer for user than most solvent cleaners
- Pleasant odor
- Safe on all metals
- Low vapor pressure
- Free of chlorinates
- Fast cleaning to improve productivity
- User friendly compared to kerosene and mineral spirits





Benefits of using Petro Kleen 140 and Pensolv L945 cleaning process:

- By softening all debris and spent OGL first with Petro Kleen 140 and then applying Pensolv L945 the amount of solvent required to clean to bare metal is greatly reduced
- The lost production time is greatly reduced as the initial cleaning is conducted under load during normal operation
- The duration of Petro Kleen 140 usage can be adjusted if plant operation requires it without issue, allowing for more flexibility prior to the equipment being taken offline. Please note that Petro Kleen 140 can be used only up to 48 hours of kiln operation





