HOW CORIUM Z157 WORKS:

All conventional lubrication systems must contend with boundary or thin film friction. Ideally, the system, when under pressure operation, should maintain this high fluid film thickness, and some do, with varying degrees of success. The bearing, when under normal operation is usually in a fully fluid state, and no frictional wear occurs between the moving parts.

However, during deceleration and when the machine or journal is put to rest, a different situation exists. As pressure in the system drops or ceases, the fluid film on the bearing decreases, and a dangerous situation develops. The minute high spots on the moving parts begin to rub against each other creating a condition known as boundary friction.

Local pressures reach high values with subsequent deformation of the metal. Shearing forces, exceeding the elastic limits of the metal, and accompanied by high local temperatures, develop at the rubbing spots. The excessive heat that develops, attacks the lubricant. This lead to the progressive loss of lubrication efficiency, the formation of oxides, sludge, gummy residues, and finally the occurrence of wear.

Corium Z157 is a new dry lubricant based on a black/gray powder of exceedingly small particle size, known as molybdenum disulphide. In addition to scientifically eliminating harmful boundary friction, Corium Z157 withstands very high temperatures and severe chemical exposures. (Withstands temperatures up to 1112°F (600°C)

Corium Z157 produces a fine lubricating, molecular film, interdispersed with the base material that is unaffected by heat and any inherent weakness of the lubrication system. Corium Z157 never wears out, nor is it contaminated by foreign matter.

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CORIUM Z157 DOES ALL THESE THINGS FOR YOUR MACHINERY:

- 1. Lubricates chains, gears, slides, toolways, without slinging off. Virtually any moving part made of any material can be protected.
- 2. Retards the formation of gummy residues and oxides.
- 3. Cuts wear on any surface.
- 4. Is easily applied with aerosol package. Waste is eliminated.
- 5. Mixes with present lubricants, eliminating harmful boundary friction.
- 6. Will not contaminate or stain any metal or lubricant.
- 7. Never wears out, and is not contaminated by any material.
- 8. Won't rub off, just rubs in. It's resinous base assures maximum utilization of material.
- 9. Eliminates break-in problems on new or rebuilt machinery.
- 10. Resists high heat, acids, alkalis, all chemical exposure.
- 11. Is an excellent anti-seize compound.
- 12. Serves as a machining tool lubricant and coolant.

Corium Z157 is the answer to effective chain and drive protection with positive lubrication in the most adverse conditions.

Following are two methods of lubricating chains which are not running in an oil bath.

1. LUBRICATION WITH GREASE

Grease plastered over the chain may be reassuring, however it is only effecting part lubrication. The area where lubrication is most needed is in the pins and bushes, where the grease cannot be easily applied.

2. LUBRICATION WITH AN OIL CAN

This method is not very satisfactory either, thick oil cannot penetrate pins and bushes, light oil flings off very easily leaving the vulnerable pins and bushes without adequate lubrication.

Corium Z157 is the answer to your chain lubricating problems. Corium Z157 is a unique combination of a volatile carrier liquid and micronized molybdenum disulphide. The advantages of this product are:-

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- a. Corium Z157 penetrates extremely well. The light, highly liquid base penetrates readily into the bearing, clearances of links, pins, bushes and rollers.
- b. The use of Corium Z157 results in reduced maintenance Downtime, by easy aerosol applications through inspection holes and guards while the machinery is running. This obviously speeds up maintenance schedules and alleviates the problem of awkward-to-reach chains.
- c. Corium Z157 stays put and gives satisfactory lubrication at High Temperature. The dry film of solid lubricant left on the bearing surfaces after the eventual evaporation of light carrier medium provides a low friction coating which lubricates from room temperature up to 1112°F (600°C).
- Even under the most adverse conditions, Corium Z157 will give efficient lubrication. Corium Z157 resists water and extremes of temperature where most conventional lubricants will fail.

The durable lubricating film of Corium Z157 is maintained even under dusty and abrasive conditions. Most oils and greases pick up dirt and dust and drop or throw it off on to machinery and product. Corium Z157 does not creep or drip. The thin lubricating film provided by Corium Z157 adheres to the chain and does not attract dirt or dust.

- e. The use of Corium Z157 maintains the flexibility in chains.
- f. Rollers rotate more freely when Corium Z157 is used. "Flats" due to the wear of stiff rollers by the track are avoided because there is no formation of sticky carbonaceous deposits caused by the breakdown of mineral oils.
- g. Corium Z157 is extremely economical. Only a small amount is required for efficient lubrication. The interval between applications is increased many times.

Corium Z157 can be used in many and varied applications, some of which follow.:

Furnace Door Lifting Chains, Chains of Bottle Washing Machines, Driving Chain on Roller Hearth Furnace, Tin Printing Equipment, Foundry Core Drying Machinery, Ingot Casting Machines, Paper Dryers, Textile Dryers.

For best results, Corium Z157 should be applied to the joints and rollers of the chain at the coolest part of its cycle.

This allows maximum penetration of the low viscosity carrier oil before it evaporates to leave a dry film of solid lubricant on the bearing surfaces. Under

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relatively slow running conditions of high temperature conveyor chains only infrequent replenishment of the lubricant is required.

Prior to application of Corium Z157, it is preferable to remove residues of liquid lubricants and other contamination. A good choice for cleaning would be Corium 123.

MUNICIPALITIES:

Fire Hydrants Fire Hose Threaded Connections Water Meter Parts and Valves Gas Valves & Meters

PRODUCTION MACHINERY AND TOOLS:

Collectors Guides and Machine Ways Lathe Steady Rests & Centres Broaches Gear Shaper Cutters Milling Cutters Taps Drills

Reamers Punches Chucks Conveyors such as monorails and drying ovens Textile stentor frames and bakery oven conveyors Stone Crushers Presses (run in for heavily loaded gears, eccentrics, spindles, etc.)

CHEMICAL, PETRO-CHEMICAL AND REFINING INDUSTRIES:

Threaded Connections for All Types.

Valves of All Types: Pumps, such as transfer, vacuum, mixing and rotary types.

PACKING-SEALS - O-RINGS:

Valve Pumps Compressors Motors and accessories Snorkels Periscopes Boiler Soot Blowers Hydraulic Systems Shafts, Windows, Doors,

ENGINES-TRANSPORTATION-AUTOMOBILES:

Threaded Connections Gaskets Seals Press Fits

CF

Packings Cams Guides Gears

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Fuel Injector Lines Railroad Pins and Centre Plates Fly Wheels

MARINE APPLICATIONS:

Threaded Connections

Automatic Steam Valves Manual Valves Soot Blowers Oil Separator Spindles and bearings Deck Booms Winches and Windlasses Steering Gear & Telemotor Hatch Covers Flexible Couplings

PRINTING PLANTS:

Linotype Space Bands Threaded Connections Elevator Solenoids

Vertical Guides Binding Machines Paper Cutting Presses Embossing Presses

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HOW TO APPLY

Corium Z157 withstands high pressure & temperature, severe chemical exposure and never wears out or becomes contaminated. It lubricates chains, sprockets, gears, slides, toolways, machinery and equipment of all type and is applicable for lubricating any and all types of moving parts.

APPLICATION:

- 1. Remove all residue grease, oils and contaminants. Corium 123 is recommended in this application.
- Apply Corium Z157 to joints, rollers and moving parts on the coolest part of their operating cycle/range to ensure maximum penetration of the low viscosity carrier oil.
- 3. Shake can thoroughly.
- 4. Hold can 100-150 mm. (4"-6") from area to be lubricated and spray to provide complete coverage.
- 5. Invert can and spray until a clear gas appears to prevent nozzle clogging.

IMPORTANT:

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Strictly observe all safety precautions relevant to the use of an aerosol product and/or printed on the can's label.

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