



2700

ALMASOL[®] OVEN CHAIN LUBRICANT

An oven chain lubricant that penetrates completely into the pins and bushing of the chain and has the ability to withstand heat without oxidizing.

The lubrication of oven chains presents more of a challenge than is commonly recognized. If oven chains are to operate freely and efficiently, the lubricant must penetrate clearly into the pins and bushings of the chain to properly lubricate and to prevent corrosion.

There are many costly side effects of improper lubrication. Links and strands may become inflexible, causing rough operation, chains jumping off of the sprockets and even breakage. Rough operation increases power consumption. Premature pin and bushings wear shortens the chain life and causes rapid "stretching", a critical

failure in machines where equipment or machinery synchronization is a chain function.

Since LE's 2700 ALMASOL[®] Oven Chain Lubricant is highly water resistant, moisture and steam does not tend to wash of the lubricant. Rust and corrosion are controlled because of the thorough penetration and coating of the water resistant lubricant, plus a tenacious microscopic layer of ALMASOL. ALMASOL is LE's exclusive wear-reducing additive which not only protects against premature wear, but also shields metal against corrosive attack. In addition, ALMASOL has the ability to withstand heat without oxidizing in excess of the operating temperature of most ovens.

USER BENEFITS:

- **Reduced wear** – oven chain wear is greatly reduced because of the penetration of the lubricant into the pin and bushing area. The oil is supplemented with ALMASOL, LE's exclusive wear-reducing additive to control premature wear.
- **Quieter and smoother operation** – middle joints and strands move freely because all surfaces are thoroughly lubricated.
- **Resistance to corrosion** – water resistant lubricant seals out damaging moisture. Microscopic layer of ALMASOL shields against acid attack.
- **Reduced friction** – ALMASOL will reduce friction, thus less drag will be present on electric motors.
- **Less lubricant will be used** – because of the humidity involved in the baking process, water resistant characteristics allow this lubricant to stay in place in the presence of steam and moisture for long chain life.
- **Self cleaning** - ALMASOL will penetrate into the pin and bushing area and will not carbon up in operation.
- **Wide temperature range** – lubricant can be used up to 900°F once the carrier has evaporated.

TYPICAL APPLICATIONS:

- Bakery chains in the food processing industry.
- Other chain lubrication applications where cleanliness is required
- Tortilla oven chains.

WHAT IS ALMASOL?

ALMASOL is LE's exclusive wear-reducing additive which has an affinity for metal similar to polar attraction. It attaches itself to working surfaces in a single microscopic layer, yet it will not build on itself or affect clearances. This microscopic layer possesses tremendous load-carrying capacity, resists all types of acid wear, and minimizes metal-to-metal contact and the resulting friction and wear. When added to LE lubricants, it gives an extra dimension of protection available in no other lubricant.



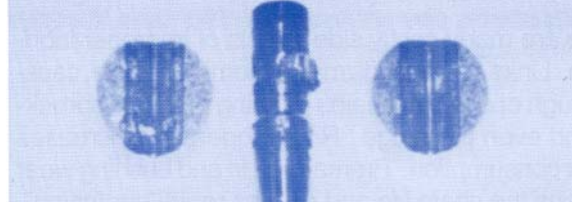
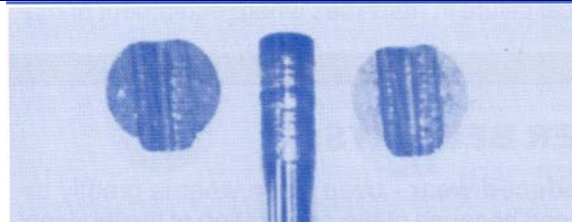
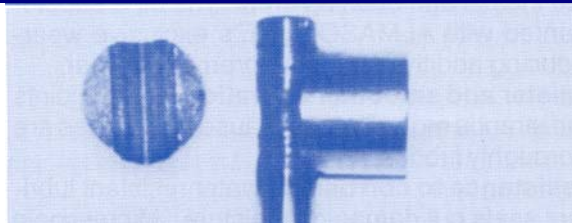
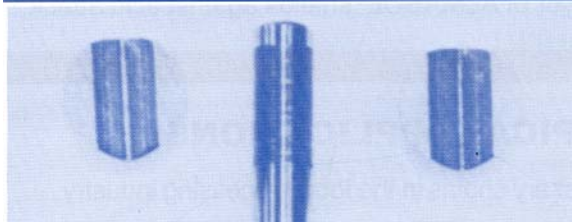
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LE'S 2700 ALMASOL® OVEN CHAIN LUBRICANT DEMONSTRATES FAR SUPERIOR WEAR-REDUCING ABILITY vs COMMONLY USED OVEN CHAIN LUBRICANTS

One of the primary characteristics of an oven chain lubricant is to reduce wear. The wear preventive characteristics of LE's 2700 ALMASOL® Oven Chain lubricant and three commonly used oven chain lubricants were evaluated according to ASTM D-2670: "Measuring Wear Properties of Fluid Lubricants (Falex Pin and Vee Block Method)."

This test utilized a rotating steel journal compressed between two stationary V-blocks. Load is applied to the V-blocks and maintained by a ratchet mechanism. Wear is determined and recorded as the number of teeth of the ratchet mechanism is advanced to maintain a constant load during the test. To maintain the lubricating solids in suspension, the lubricant is applied to the journal and V-blocks at 75°F with a syringe at the rate of one milliliter per five seconds. The break-in period consists of applying a 250 lb. load for five minutes. The load is then increased to 1,150 lbs., from the 250 lb. load applied during the five minute breaking period, the following results:

Product	Test Results: Length of Time at Test Load	Picture of Test Specimens At End of Wear Test
A	0 Seconds Immediate Seizure, High Frictional Heating	
B	0 Seconds Immediate Seizure, High Frictional Heating	
C	0 Seconds Immediate Seizure & Welding High Frictional Heating	
LE's 2700 ALMASOL Oven Chain Lubricant	3 MINUTES	

Photographs of the "other" chain lubricant test specimens all show evidence of immediate seizure and high frictional heating. In the case of Product C, one of the V-blocks actually welded to the steel journal. LE's 2700 ALMASOL Oven Chain Lubricant was the only product not to immediately seize, not have frictional heat and run three minutes.

The results of these tests demonstrate that LE's 2700 ALMASOL Oven Chain Lubricant provides far superior wear prevention characteristics than the commonly used oven chain lubricants. This superiority can be attributed to the presence of ALMASOL in LE's 2700 Oven Chain Lubricant.



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