

Customer Testimonial



Almasol® High Temperature Lubricant (1251)

Triangle Brick Co. – Wadesboro, N.C.

Tunnel kiln

Customer Profile

Triangle Brick Co. is one of the leading manufacturers of brick in the USA. The Wadesboro, North Carolina facility has two plants, each producing approximately 120 million bricks a year. The first was opened in 2000, and the second in 2005. This complex is one of the most modern brick manufacturing facilities in the US. The company also has manufacturing facilities in Moncure, NC. Triangle Brick has been an LE customer since the plant was first opened in 2000 and the other location in Moncure for many years before that.

Application

The Tunnel kiln, manufactured by Lingl, has 99 kiln cars in the system's loop, with 12 transport bearings per car. Each kiln car cycles through the kiln every five to seven days. The total weight of the kiln cars with green (raw) brick is 127,008 pounds. Weight per bearing is 10,524 pounds. They run 24 hours a day, 7 days a week.

Challenge

Commercial grade lubricant would melt out of the transport bearings causing downtime and reduced production. The extreme temperatures of the kiln reaches 3000°F (1560°C) at the top of the kiln. To help eliminate the extreme temperature at the track level, pea gravel, car insulators and fans reduce the temperature down to 300°F (148.9°C). The managers were looking for a grease that would stay in, not melt, and lubricate the bearings with no unplanned downtime. In other words, be reliable.

LE Solution

Nathan Wallace, kiln supervisor, uses Almasol® High Temperature Lubricant (1251) as recommended by personnel at Triangle's Moncure plants where it has been used successfully for several years. Almasol 1251 is only applied to the bearings once a year and has minimal



Wadesboro plant office



Kiln car with dried bricks waiting to be unloaded

cleanup. Almasol 1251 (a non-melt grease) is used where a high temperature grease is required, such as kiln car bearings, oven conveyors, asphalt plants, soot blowers and similar applications. It contains Almasol®, LE's exclusive wear reducing additive which has an affinity for metal and attaches itself in a single microscopic layer that possesses tremendous load carrying capacity, minimizes metal-to-metal contact which significantly reduces friction and wear.



Results

Any cost savings would be difficult to calculate since they do not have a prior product to compare against. Nathan and his superiors want performance and reliability in the products they use. That's what Almasol 1251 has given them. Keeping the kiln running 24 hours a day, seven days a week is the reason for using the best product available. Any unplanned downtime is very costly and unacceptable. Almasol 1251 for kiln car bearings is their product of choice. No other product can compare. Since the plant started in 2000, there have been no lubricant related failures, problems or downtime with the kiln car bearings.

An unplanned or hidden cost savings that has occurred or additional cost that Triangle Brick has avoided by using Almasol 1251 rather than using a lower performing product is they only have to lubricate the kiln car bearings once a year. Other products would not last and would have to be applied more than once a year resulting in additional cost in labor and lubricant.

Nathan stated, "Keeping my kiln on line with minimal downtime is what makes Triangle Brick Co. stay one of the leading manufacturers of brick in the USA. LE 1251 keeps our kiln up and running."

Other Products Used

Triangle Brick uses Almasol® High Temperature Lubricant (1250) in the kiln exhaust systems. Almasol 1250 is a NLGI #2½ grease whereas Almasol 1251 is a NLGI #1 grease.



Thank you to Nathan Wallace, kiln supervisor, and to Jeff Boyles, LE lubrication consultant (pictured), for providing the information used in this report.



Hot air exhaust fan



Kiln car wheels during assembly (above and below)



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Based on actual user experience. Individual results may vary. Not intended to supersede manufacturer specifications.