

A Change in Grease for Applications in Extreme Conditions Can Lead to a More Productive Work Environment

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CONSHOHOCKEN, Pa., Dec. 2, 2015 /PRNewswire/ -- When selecting the right grease, users must take into consideration the variety of applications and operating conditions in their metallurgical processes. The biggest challenge is selecting the right blend of characteristics for the best lubrication performance over the longest period of time. When choosing a grease in the metallurgical industry, it is important for it to withstand extreme conditions, including the presence of metal particles, water contamination, high temperatures and high loads. Additionally, it is essential that the grease chosen performs adequately for the application used, to reduce the instance of machinery components breaking.

In the hot mill area of a large steel mill, slabs at extreme temperatures were accumulating on the output tables, causing the bearings to work under high loads and extreme temperatures. As a result, the output table rolls were constantly locking and breaking. On average, there were four roll breaks per month, which was interrupting production and increasing the risk of not meeting delivery dates. Additionally, workers had to change the rolls while the machines were still in operation, creating an unsafe environment.

Quaker Chemical Corporation ("Quaker") assessed the challenges the customer was experiencing with their output machine application. After the evaluation, Quaker suggested a conversion to QUAKERTEK[™] UX 4615-EP, a polyurea grease, for lubrication of the roll necks. This recommendation was based on the following qualifications of the grease:

- Formulated with a special combination of additives that provide excellent corrosion protection and oxidation
- A high dropping point, so it does not melt away, and remains at the application site to provide excellent lubrication properties

The mill decided to trial QUAKERTEK[™] UX 4615-EP, and throughout the trial period, the grease did not melt away, and remained at the application point on the roll neck. Due to the positive results of the trial, the mill decided to apply QUAKERTEK[™] UX 4615-EP to the output tables and swivel as well. Since converting to QUAKERTEK[™] UX 4615-EP there have been no more crashes on roll breaks. Additionally, the mill was able to achieve **cost savings of over \$27,000** from reductions in lubrication cycles, monthly roller replacements, and elimination of labor costs.

Through collaboration with the customer, Quaker offered a technology that was able to improve the steel producer's operation and decrease costs.

"Taking care of a customer's operation doesn't just mean keeping the mill rolling, but also means finding ways to lower costs, improve performance and extend the life of their machines," says Nilton Barbosa, Business Development Manager – Grease at Quaker Chemical. "A cornerstone of competitive advantage in manufacturing today are suppliers that can provide solutions to keep Total Cost of Ownership at a minimum. Grease manufacturers need to provide sustainable product solutions that require less volume and reduce energy during use, to bring real value to the customer."

For more information on this trial visit: http://www.guakerchem.com/expert-experience/resource-center/case-studies/steel/guakertek-ux-4615-ep-2/

About Quaker Chemical Corporation:

Quaker Chemical Corporation is a leading global provider of process fluids, chemical specialties, and technical expertise to a wide range of industries, including steel, aluminum, automotive, mining, aerospace, tube and pipe, cans, and others. For nearly 100 years, Quaker has helped customers around the world achieve production efficiency, improve product quality, and lower costs through a combination of innovative technology, process knowledge, and customized services. Headquartered in Conshohocken, Pennsylvania, USA, Quaker serves businesses worldwide with a network of dedicated and experienced professionals whose mission is to make a difference. Visit <u>guakerchem.com</u> to learn more.

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SOURCE Quaker Chemical Corporation

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