Hydraulic Seals and Kits for Mining Trucks

Industry

Mining

Application / Products

Metal face seals used on AC wheel motors on haul trucks.

The Challenge

In the mining industry, success is measured by the ton and one of the largest manufacturers of mining equipment in the world is helping mining operators achieve a ton of success through top-quality engineering and a relentless pursuit of excellence. It is this commitment that drives this manufacturer to find ways to maximize the performance, efficiency and safety of their haul trucks, putting them even further ahead of their competition.



Also differentiating them from their competition is the most comprehensive line of AC drive mining trucks in the industry. Reliable operation of these drive systems is critical, so anything that can be done to improve the performance and MTBO (mean time between overhauls) will have significant impact on production costs and total mine productivity. The metal faces seals used in the AC drive systems are an item that has demonstrated issues with premature wear, so extending the life of these seals was of high priority.

The Solution

ERIKS was approached by this manufacturer based on ERIKS reputation in the market for providing advanced technical services to help determine the cause of the seals failure. Their team of engineers partnered with the ERIKS Technology Center team who generated a full failure analysis on the seal using ERIKS in-house testing facilities. The ERIKS team determined that the premature failure of this critical component was caused by a combination of the specialized lubrication used and excessive heat that was generated during the operation of the AC drive systems. Taking all these factors into consideration, ERIKS engineers not only recommended a new material, but went the extra step of working with ERIKS Pioneer Weston division to produce these large diameter seals (over 4 feet). This is unique, in that few manufacturers have the capability of producing a metal face seal of this size.

The Results

The customer was thrilled with the expertise and forward thinking that ERIKS brought to the table. They were further impressed that ERIKS didn't just stop at identifying the problem, but also presented them with a cost effective solution as well.

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knowledgeable

ERIKS Midwest New Berlin, WI ERIKS Southwest Grapevine, TX Houston, TX

responsive

ERIKS Technology Center Rocklin, CA

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Turpen & Associates Turpen Gasket Tulsa, OK

innovative