Customer Testimonial

Almasol® Syntemp® Lubricant (9901)


Lima Model 2400 Dragline

- Reduced grease consumption

Customer Profile
Sky Haven Coal Company, located in Penfield, Pennsylvania, operates a very efficient, open pit coal mining operation. To accomplish this, they use a wide variety of equipment.

Application
One particular piece of equipment that is of vital importance to Sky Haven Coal is the Lima model 2400 dragline. This dragline operates 20 hours a day, five days a week, and removes the overburden (topsoil) so that coal can be extracted. Since they mine year-round, all equipment is subjected to a wide variety of environmental conditions. The temperatures can range from -20-120°F (-29-49°C). In addition, rain, snow and high humidity are critical factors in the operation of the equipment. One of the areas to be lubricated on the Lima dragline is the jack shaft pinion gear, which is the most severe open gear application on this dragline. All machine movement is powered through this gear. Failure of this component results in equipment downtime, which is valued conservatively at $300 per hour. It is not unusual for replacement of a jack shaft pinion gear to take from one to two weeks.

Challenge
The jack shaft pinion gear was being lubricated with a commercial grade open gear lubricant. This open gear lubricant was an asphaltic type and the oiler (the person responsible for lubrication of equipment) observed that it would sling off the gears when the weather was foggy (humid) or hot. The lubricant was especially bad about slinging off when the weather was rainy. Heat and humidity are common weather conditions in this Pennsylvania area. When the gears began to run dry, which was a common occurrence with the commercial grade lubricant, they would emit a high-pitched squealing noise.

LE Solution
John Hayes, LE lubrication consultant, recommended Almasol® Syntemp® Lubricant (9901) for this particular application.

Results
Almasol 9901 was easier to use, and consumption was dramatically reduced because running, melting and sling-off were eliminated. Almasol 9901, which is far superior in adhesiveness and tackiness, is now applied to the jack shaft pinion gear once daily. Compared to the commercial grade lubricant which had to be applied every one to two hours, it is obvious that a considerable reduction in consumption has been recognized by Sky Haven Coal. Consumption has been reduced to ordering a 50 lb pail every three months in comparison to ordering the same amount of the commercial grade lubricant every two to three weeks.

Thank you to the personnel at Sky Haven Coal, and to John Hayes, LE lubrication consultant (pictured), for providing the information used in this report.