

28 August 2018

Press Release

Slew and swing bearings need grease in optimal condition: Techenomics

To ensure efficient, trouble-free operation of vital components such as slew and swing bearings, it is a must to have grease in optimal condition and lubrication specialists Techenomics ensures this is the case.

Any issues with grease can be recognised in advance with a good grease analysis program, according to Sahar Nazari, the supervisor at the Techenomics Australia laboratory in Newcastle, the traditional hub of coal mining and transport in Australia.

She says slew and swing bearings should be lubricated at regular intervals with heavy-duty, extreme-pressure grease.

"Generally, slowly-rotating equipment or oscillating applications such as backhoes, excavators and cranes should be re-lubricated about every 100 hours of operation.

"More frequent lubrication may be needed on equipment that moves rapidly or rotates continuously, such as trenchers and boring machines."



Chris Adsett, CEO of
Techenomics International



Techenomics Australia laboratory supervisor Sahar Nazari

Tribological issues pertaining to grease are not easy to detect but Techenomics' independent, specialised sampling, testing, analysis, reporting and advisory services makes this possible.

When combined, these factors provide equipment operators with the ability to predict maintenance issues before they arise and keep on top of grease management.

Techenomics CEO Chris Adsett says this is particularly important in the coal industry where slew and swing bearings are vital and where coal dust exacerbates issues caused by ineffective grease management practices.



He says lubricating greases are semi-solid materials used in many applications, including bearings, gears and rail operations.

"Lubrication of metal components with grease reduces friction, which leads to less wear and heat transfer in mechanical systems.

"The sticky and adhesive properties of grease also enhance sealing to prevent water ingress and prevent contaminant particles entering a system to reach the lubricated contacts.

"Once the rubber seals are compromised then contamination will accelerate wear and corrosion."

Techenomics has a lot of experience dealing with the coal industry in its Indonesian and Australian operations.

The fluid management experts recommend that slewing bearings are filled with an NLGI class 2 mineral oil based EP-grease containing a lithium soap thickener. This grease provides extremely good corrosion inhibiting properties and excellent mechanical stability.

Sahar Nazari says occasionally, grease with calcium sulfonate complex thickener is used in slew bearing systems.



SOLVE YOUR LUBRICATION PROBLEMS

We will test your oil with an appropriate WS2 additive to provide you with the relevant information to reduce your fuel consumption and lower your engine wear! [Click here for more...](#)

"Although, it possesses inherent antioxidant, rust-inhibiting properties, high dropping points and EP/anti-wear properties, experimentally it is proven that this kind of grease accelerates the formation of internal contaminants in slew bearings."

Chris Adsett says Techenomics comprehensive tests and analysis by trained experts in accredited laboratories using relevant software allows the company to effectively test grease samples.

"Over time we outline trends which can be used by equipment operators to predict maintenance issues and prevent them arising before they lead to costly downtime and loss of productivity," he adds.



For more information about Techenomics contact: Chris Adsett, c.adsett@techenomics.com; in Indonesia Teguh, teguh@techenomics.com; in Singapore Siti, siti@techenomics.com, in Mongolia Tumee, tumee@techenomics.com, or in Australia Steven Adamthwaite, steven@techenomics.com and Michael Noncic, michael@techenomics.com