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Press Release

# Foaming controlled by regular top ups

Regular oil top ups can reduce levels of foaming, which if left unchecked can lead to excessive oxidation and cavitation thus reducing the lubricating properties of oil, according to independent oil analysis, fluid management and condition monitoring specialist Techenomics International.

Chris Adsett, CEO of Techenomics International

Foaming impacts hydraulic oil but can also happen in turbine oil and gear oil. It occurs when air is trapped in the oil and thoroughly mixed with it through agitation and churning. Techenomics says it is important to manage this issue because it reduces the oil's lubricity and load-carrying ability by limiting the effective viscosity at the load points of bearings and gears. This can result in serious gearbox problems and hydraulic system failure.

Techenomics' CEO Chris Adsett said, "The traditional 'clear and bright' visual test can quickly determine the presence of water in oils and when the oil is heavily worked or agitated an anti-foam agent is commonly added to shorten the air release time and reduce the potential for foaming."
He said that through extensive testing in Techenomics' state-of-the-art laboratories the company's expert chemists had found that regular top ups can minimize the damage caused by foaming. The testing aimed to show how to control foaming and to ascertain if aggressive filtration affected foaming tendencies.

PT. Tekenomiks Indonesia Team

Chris Adsett said the tests were a follow-up to feedback received from companies having problems with foaming in hydraulic oil, most of which were regularly filtering their oil in a bid to extend lubricant life. “After discovering a lot of clients were doing this our Indonesian subsidiary, PT Tekenomiks Indonesia (PTTI), decided to carry out tests to show how to control foaming and to demonstrate the impact of topping up with extra oil when the existing oil is out of spec.

“Six PTTI clients took part in the tests - Hexindo, Pama, Thiess, SIS, Madhani and Liebherr. Results show that a 20% top up can reduce the foaming tendency by up to 87.5% (normal limit).”
The testing is ongoing and future analysis of results and subsequent research will be grouped according to unit, oil type, oil hours and normal operation condition. This grouping is carried out in order to classify the top up.

PTTI’s acting general manager Jim Ellison said, “Overall, testing shows that levels of foaming in lubricants can be controlled by regular top up. This minimises the volume of oil consumption as complete oil changes can be reduced. It also ultimately reduces the cost of operations as equipment availability is improved.
“The work showed that even with aggressive filtration, top ups can balance foaming tendencies.
“Due to the wide variance of results it is recommended that testing, especially if secondary filtration is being used, be carried out routinely,” Jim Ellison added.

SOLVE YOUR OIL FOAMING PROBLEMS!
Do you have an oil foaming issue? Click here to receive a free consultation from Techenomics that will help you with solutions to oil foaming problems.

Techenomics provides innovative foaming tests throughout its network of independent laboratories, including Indonesia, Mongolia and Australia, as part of regular oil analysis. It involves testing of the foam and its characteristics by utilising the ASTM D 892 test method.

*For more information about foaming and Techenomics’ unique solutions contact Jim Ellison, e-mail: jim.ellison@techenomics.com or Eka Karmila, e-mail: eka@techenomics.com*