



Analyse Lubricant Performance Property on Site

Mixing lubricants is a dangerous action -to your equipment, your business and your wallet.

Modern lubricants are sophisticated products. In the luckiest case, mixing incompatible lubricants leads to degradation of lubricant performance in an undamaged system. At the other end of the spectrum, deposits, sludge and tacky residue may form to increase wear and plug filters. Lubricants reactions will depend on the products in the mixture, the end-use application, the relative concentrations of products and the total volume involved.

Spectroscopy

Fourier Transform Infrared Spectroscopy (FTIR) verify the composition and quality of materials. For example, the method can confirm the identity and quantity of incoming raw materials reading wavelength for each substance measured, also for non-routine samples.

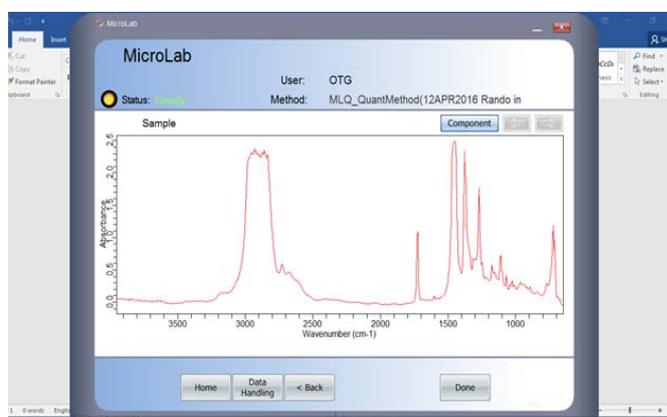
Work Process at Client's Site

Converting old oil to biodegradable oil, for example, the percentage of old oil must not legally exceed 2-5%. The FTIR analysis traces named substances. Defining client based reference samples, Ocean Team Group can obtain knowledge for further operational decisions on-site within 30 seconds whether converting oil on an oil & gas platform, on a power plant or at a wind turbine.

An on-site a laptop is hooked up to the FTIR device. Placing a drop of oil under the reader, the FTIR analysis starts off measuring wavelengths of the substances.

Benefits of FTIR

FTIR analysis supports a beneficial choice of additives obtaining performance and avoiding lost production due to lu-



▲ Oil analysis with a 1% deviation from total purity

bricant ineffectiveness.

Traditional methods to provide knowledge for operational decisions included sending oil samples for testing at a chosen laboratory. This process would take 10-12 days, which would make it ineffective and un-operational.

Using FTIR on-site Ocean Team Group knows instantly when customer oils have reached performance properties: avoiding contamination to spread unwanted particles from one location to the full system and decreasing further costs of wasted oil. On-site analysis optimizes the time and amount of oil used for flushing.

Further Benefits

Allowing a broad spectrum of investigation and comparison the Ocean Team Group can define a customer's special need for analysis in defined cases.



▲ Mobile FTIR unit