

## FT-IR Spectroscopy



## Spectrum Two In-Service Lubricants Analysis System

Analyzing in-service lubricants is essential to minimize expensive equipment downtime and ensure oil is changed at optimal intervals.

Lubricant failure due to oxidation

and nitration can be detrimental to machinery's performance, while contamination by water, fuel or glycol can provide an early warning of mechanical problems before catastrophic damage occurs. Monitoring the levels of additive depletion, contamination build-up and base stock degradation enables lubricant change periods to be optimized and preventative maintenance to be carried out in a timely manner, which in turn maximizes the service life of machinery.

Spectrum Two™ from PerkinElmer offers trouble-free analysis of in-service lubricants. Intuitive design features and dedicated in-service lubricants analysis protocols enable even inexperienced IR users to generate clear, high quality results. Engineered to make in-service lubricant analysis accessible to everyone, everywhere, Spectrum Two incorporates over 65 years' experience in FT-IR technology and builds on the success of Spectrum™ OilExpress, the market leading high throughput system.

## IR Ready to Go

Powered by the innovative and intuitive Touch™ software, Spectrum Two is an 'out of the box' solution with everything necessary to generate industry standard results in minutes. The In-Service Lubricants Application Pack includes clear step-by-step instructions for instrument usage, making set-up as fast and simple as possible, even for inexperienced users. As your needs develop, Spectrum Two can also be expanded with additional analytical tools to measure other materials and properties.

## On Location

Spectrum Two is ready when you need it, even in remote locations. Compact and transportable, the instrument produces lab quality answers, wherever it is used, providing confidence in results and the ability to correlate data. The In-Service Lubricants System has been designed and evaluated to use solvents easily accessible in the field, and can be powered by battery or a 12V adaptor when access to a power supply is difficult.

Spectrum Two's unique design features ensure maximum durability. OpticsGuard™, a unique humidity shield, protects the instrument from damaging environmental effects and enables the desiccant to be changed less regularly – saving time and money. Plus, Spectrum Two's solid state laser is designed to last the lifetime of the instrument.

## Results for Everybody

Industry-specific Touch App™ software launches recognised analysis methods at the touch of a button: JOAP, ASTM, and mineral and synthetic oil subtraction methods for in-service lubricant contaminant and quality testing. Touch App guides users through every step of the analysis, providing detailed on-screen instructions. A wizard-style interface steers operators to the result, while instructions for sampling minimise error. The software is also multi-touch enabled for a faster, more intuitive user experience. Unlike dedicated analysers, Spectrum Two also has the performance capability and sampling flexibility of a FT-IR and can be expanded to perform many other test methods.



Touch App software provides intuitive operation.

For more information, visit [www.perkinelmer.com/spectrumtwolubricants](http://www.perkinelmer.com/spectrumtwolubricants)

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