

FORMULATED OILS, GREASES AND ADDITIVE TESTING

TESTING AND ANALYSIS FOR AVIATION, AUTOMOTIVE AND INDUSTRIAL APPLICATIONS

We are a Total Quality Assurance provider. Through our global network of state-of-the-art facilities and industry-leading technical expertise we provide innovative and bespoke Assurance, Testing, Inspection and Certification services to customers.



Our Expertise

Intertek's formulated oil, grease and additive testing capabilities can provide assurance that the product our clients use is performing on specification.

Our ISO 17025 accredited laboratory can test a wide range of formulated oils and additives from the development stages to QC and production to in-service analysis.

We have a large scope of experience which covers aviation, industrial and automotive fluids and greases have the ability to run testing to a variety of specifications including ASTM, IP, CEC, SAE, UK Def. Stan., US Fed. Stan., US Mil. Spec.. Additionally we can offer bespoke testing methods and custom troubleshooting to satisfy our clients requirements.

Physical Testing

We can perform a wide range of industry standard physical tests on formulated oils, greases and additives including:

- Air Release and Foaming Tendency
- Insolubles and Filtrations
- Water Separability and Demulsification
- Shear Stability
- Lubricant and Elastomer Compatibility
- Flash and Fire Point
- Cloud and Pour Point
- Evaporation Loss

- Colour and Appearance
- Kinematic Viscosity
- Cone Penetration
- Dropping Point
- Low Temperature Torque
- Water Washout

Chemical and Instrumental Testing

We can offer an expansive range of chemical tests including:

- Acid and Base Number
- Water Content
- ICP-AES Additive Levels, Wear Metals, Elemental Concentration
- XRF Additive Levels, Elemental Concentration
- GC and GC-MS
- HPLC
- Infra-red Spectroscopy: Soot, Water, Oxidation, Nitration
- Scanning Electron Microscopy and EDX

Oxidation Testing

We can perform a variety of oxidation testing including:

- Oxidation in the Presence of Biodiesel
- Oxidation & Corrosion Stability by Metal Squares
- TOST
- RPVOT

- Coking Propensity by HLPS
- Thermal Ageing
- Oxidative Stability
- Copper Corrosion
- Rust Prevention
- Hydrolytic Stability
- Oxidation Characteristics

Tribology and Rigs

We have a range of capabilities to examine the surface effects of lubricants including:

- FZG Gear Test
- 4 Ball Wear and Weld
- KRL Shear
- KO Shear
- ALTE
- Fretting Wear
- Micropitting Rig
- High Frequency Reciprocating Rig

FOR MORE INFORMATION



+44 1252 392 100



flc.enquiries@intertek.com



[intertek.com/formulated-oils](https://www.intertek.com/formulated-oils)