RHEOLOGICAL STUDIES AND CHARACTERIZATION OF PRODUCTS





Short Description

Rheological studies of different products depending on their nature, using different techniques and equipment (viscometers, rheometers, etc) and according to customer requirements.

Deliverable

Report with the requested information, which is adapted to the client's needs.

Benefits

- Characterization of lubricating oils, fuel oils, polymers, extender oils, etc.
- Characterization of products with complex rheological behavior through various techniques.



ARES rheometer

Differential Features

- Customized rheological studies
- SAE viscosity grades. ENAC ISO 17025 accreditation
- Determination of Mw in polymers
- Determination of Strain Hardening
- Flow curves and visco-elastic properties of oils and polymers
- Gel studies
- Structure-Physical Properties Correlation



Kinematic and Brookfield equipment

Requirements

- Detailed information of tests required.
- Specific information about the properties to be correlated or determined.

Limitations

• Pressure , temperature and shear limits. The limitations are related to the specifications of the instruments.

The Product in Depth

• The Technology Lab offers facilities and knowledge to design lubricants and polymers adapted to customer needs. The Technology Lab provides sample testing and research using rheometers and viscosimeters that cover a wide temperature range, a high measurement pressure and shear.

We offer our customers studies in the fields of:

- Crude oil
- Lubricant oil
- Polymers
- Base oil, inks, wax...

Some Use Cases

- Rheology profiling services
- Determination of adhesive properties in polymers
- Viscoelastic fingerprinting for material classification to determine extent of solid-like or liquid-like behavior