



OilLab 580 Noack



ASTM D5800
IP 421

Subject

Determination of the evaporation loss of lubricating oils (particularly engine oils). Procedure A uses the Noack evaporative tester equipment. Procedure B uses the automated non-Woods metal Noack evaporative apparatus.

Measuring Noack Principle

A quantity of 65 grams of sample is heated to a specific temperature and maintained for 1 hour while it is enclosed in a crucible, the crucible's cover is shaped to allow a constant vacuum of -2 mbar to remove from the crucible the evaporating portion of the sample. At the end of the test, the sample is cooled and then reweighed: the difference, reported in percentage, represent the sample's Evaporation Loss by the Noack Method.

Method A: bath is controlled at 250°C;
Method B: the sample is controlled at 245.2°C.

Measuring Temperature Probe

- Platinum resistance PT100 class A

Measuring Parameters

- Temperatures: in °C
- Testing range: +225°C to +275°C
- Measuring range: 0°C ... +320°C
- Resolution: 0.01 °C
- Accuracy: ± 0.1 °C
- Repeatability / Reproducibility: according ASTM D5800 or better

Electronic regulator for automatic control of differential pressure

- Differential pressure 20 mm H2O, accuracy 1%

Crucible, Crucible Cover and Heating Block

- Same dimensions and volume as ASTM D5800
- Electrically heated new designed aluminium block, no Woods metal needing

Heating unit

- Electrical resistance, 500 W

Vacuum Pump

- Equipped with high resistant Kalrez valve, inlet filter to remove product residuals
- Automatic electronic control system able to maintain the -2mB during the analysis
- Low voltage power supply

Integrated Touch Screen Panel PC

- TFT/LCD 8"
- Resolution 1024 × 768, 16.2 M colours
- 2 USB ports for connection to an external printer and/or external PC
- Storage capacity for more than 60'000 analysis
- Lin-Tech operating software Lab-Link running in Windows ambient
- Automatic reading of the weight suggested balance LT/B-2470/BCA500 INT- CAL

Software Features

- All analytical parameters recorded
- Customizable analysis parameters and methods
- Customizable results report
- Printable graphs and results

The software includes:

Analysis Menu

- Standard method as per ASTM / IP / ISO / EN / DIN... norms of reference
- Unknow sample
- Direct access to all analog, digital, inputs and outputs

- Audible alarm and displayed messages at the end of the analysis and in case of errors and/or malfunctions
- [Diagnostic Menu](#)
- Selectable value displaying: °C / Volt
- [Calibration Menu](#)

- Automatic calibration of each temperature probe
- Last calibration date referred to each single probe displayed and relative data printable
- Display of calibration diagram
- Insertion of offset values

Data Utilities

- Fields for introduction of operator and product name
- Archive viewer for files recall
- All analysis stored in Excel® compatible format
- Storage capacity for more than 60'000 analysis
- LIMS compatible

Dimensions

- Length 400 mm
- Width 450 mm
- Max. height: 450 mm

Weight

- 22 Kg

Electrical Supply

- 220V ± 15% / 50 to 60 Hz
- 115V ± 15% / 60 Hz

Cord cable

- 3 conductors flexible cable 2 m (7 feet) length with PVC sheath oil and heat resistant as per CENELEC directives

Ambient Temperature

- Max 35°C
- H.R. 80%

