



OilLab 580 Noack



ASTM D5800
CEC L-40-A-93
DIN 51581
IP 421
JPI-55-41-04
NB/SH/T 0059

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.

OilLab 580 Automatic Noack Tester

- Small footprint table top instrument.
- Dry aluminium heating block electrically heated, non-woods metal needed.
- High efficiency vacuum pump with oil resistant membranes, in-line filter with discharging of condensate to protect the pump from oil entrance.
- Dedicated electronic board for automatic control of temperature and differential pressure.
 - Measuring range: 0 °C ... 320 °C.
 - Resolution 0.01 °C, accuracy 0,5 °C.
 - Differential pressure 20 mm H2O, accuracy 1%.
- Managed by a touch screen panel PC by means of the Lab-Link software running in Windows ambient.
 - TFT/LCD 8".
 - Resolution 1024 x 768 and 16.2M colours.
 - 2 x USB ports.
 - Storage capacity for more than 60'000 analysis.
 - Lin-Tech operating software Lab-Link running in Windows ambient.
 - External balance can be connected for automatic reading of the weight.
- Supplied with the instrument:
 - Evaporation crucible with PT100 and 10 test balls;
 - Nozzle cleaner, pliers and hook wrench for demount the crucible;
 - Protection gloves for heat protection.

Dimensions

- Length 40 cm
- Width 45 cm
- Height 45 cm

Weight

- 22 kg

Electrical Supply

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

Ambient Temperature

- Max 35°C
- H.R. 80%

Accessories

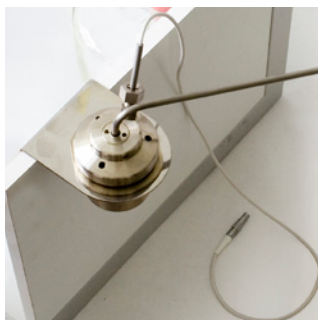
- 2139: Glassware acc. CEC L40-A-93, 1 complete set:
 - 2 glass bottles 2 litres capacity;
 - Rubber bungs;
 - Glass delivery tubes, internal diameter 4 mm;
 - Silicone tubings;
 - Bleeding valve.
- 5747: Stainless steel stand for correct positioning of all the glassware:
 - Inclined water-manometer for measure 20 mm H2O.
 - Glass filter tower "Fresenius Column" filled with synthetic wadding.
 - Holder for crucible during stand-by.
 - Cooling vessel for crucible.
- 5447: Evaporation crucible made in stainless steel with outage tube and ferrule for PT100.
- 3597: PT100 sample with connector.
- 7334: Silicon tubing 2 m for connecting the glassware.
- 7309: Air filters, for vacuum/compression system, pack of 10 pcs.
- 7456: Test balls, pack of 10 pcs.
- 7311: Nozzle cleaner.
- 7138: Gloves heat resistant.
- 2129: Fresenius column filled with synthetic wadding and with silicon connection tubes.
- 7320: Synthetic wadding for Fresenius column, pack of 250 g.



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Particular attention has been paid to the integrated vacuum pump that is also protected by an inlet filter for residual recovery.



Crucible holder made in stainless steel keeps the cup assembly ready to use.



Protection gloves and hook wrench, high quality materials for safety operations.



With the pliers the nut of the crucible cover is accurately and easily fixed.



- LAB-580/001-01: Crucible gasket kit composed by PTFE gasket and threaded ring and drilled made in metal.
- LAB-580-0011: Hook wrench.
- LAB-580-0012: Pliers.
- 2302: Woulf bottle.
- 2143: Elbow tube made of glass.
- 2144: Tube Y shape made of glass.
- 2142: Tube short bent made of glass.
- 2141: Tube long bent made of glass.

Tools Required for Routine Calibration

- 3013: Calibration decade box - PT100 Simulator.
- 3102: Kit of connectors and cables.

Reference Oil

- LAB-580/004-03: Noack reference oil RL 208.

Optional Accessories

- 1000461: Analytical balance.
 - Capacity: 510 g.
 - Readability: 1 mg.
 - Linearity: ± 2 mg.
 - Repeatability: ± 1.00 mg.
 - Response time: 5/8 sec.
 - Pan diameter: 110 mm.
 - Calibration: internal.
 - LCD display with small decimal digits.
 - Membrane keyboard, water proof and solvent resistant, easy to use with TARE, ON/OFF, PRINT and MODE keys.
 - Indication of the reached stable weight.
 - Bar-graph indicator of dosage and remaining capacity of the balance.
 - Parameters configurable by menu, reading in g (grams), lb (pound), oz (ounce), ct (carats), pcs (pieces), % (percentage).
 - Full scale automatic calibration with internal and/or external mass.
 - Weighing underneath the balance.
 - Selectable response time: "fast/slow".
 - Data output: RS232 I/O adjustable.
 - Operating temperature: 10° ... 35°C (optimum 18° ... 28°C) 15° ... 25°C for models with CE mark (Legal metrology).
 - Power supply: 230 Vac 50 Hz.
 - Power consumption: 200 mA.
 - Dimensions:
 - width 21,6 cm,
 - depth 38 cm,
 - height 33,5 cm.
 - Weighing chamber dimensions:
 - width 18 cm,
 - depth 15 cm,
 - height 20 cm.
 - Net weight: 7 kg.