

## Evaporation Loss of Lubricating Oils - NOACK VP 250 (semi-automatic)

ASTM D 5800-A, DIN 51581-1, IP 421-A

**Product group(s):** Oil

**User group(s):** Engine Oil, Lubricating Oil

**Scope:** This test method covers three procedures for determining the evaporation loss of lubricating oils (particularly engine oils).

Procedure A:

uses the original Noack evaporative tester equipment

The test method relates to one set of operating conditions but may be readily adapted to other conditions when required.



### Noack - Digital Evaporation Tester VP 250

More details are mentioned in the "Order Number" section

### Technical Data

PID Control Accuracy:  $\pm 0.1$  °C at +250 °C  
 Temperature Range: +150 to +300 °C : 0.1  
 Pressure Control Range: up to 21 mm H<sub>2</sub>O  
 Pressure Control Accuracy:  $\pm 0.02$  mm H<sub>2</sub>O  
 Pressure Control Stability:  $\pm 1\%$

## Main Unit

16-3100

### Digital Evaporation Tester - Noack VP 250

ASTM D 5800-A - IP 421-A - DIN 51 581-1

Consisting of:

Aluminium block with electric heater, microprocessor-PID-controller, accuracy  $\pm 0.1$  °C at +250 °C, digital temperature setting by menu and display, range 150 to 300  $\pm 0.1$  °C, differential-pressure-controller, error messages are given in case of temperature deviations, two Pt-100 sensors, digital timer, independent overtemperature protection, acoustic warning signal, recorder-interface 0-10 V for permanent registration of temperature.

Supplied with:

- 1 vacuum-pump
- 1 evaporation crucible
- 1 jet-cleaner
- 5 test balls (3,5 mm)
- 1 nozzle cleaner
- 1 crucible holder
- 1 cleaning brush
- 1 protective gloves
- 300 g Wood-Metal

Power supply: 230 V, 50/60 Hz

25-0470

**Vacuum-Pump with mini-compressor**

(oil-free diaphragm pump with filter)



Technical Data:

Max. capacity: 6 l/min  
 End vacuum: 100 mbar  
 Operating pressure : 2.4 bar (overpressure)  
 Dimensions / Weight : 9 x 17 x 12 cm (WxDxH), 1.9 kg  
 Power supply : 220/230 V, 50 Hz, EU-plug

16-1137

**Glassware Set**

Consisting of:

1 set of hose connectors (glass tubes 1 each 100° & 90° & 80° angle & Y-shape),  
 2 Woulff flasks (2 l) with screw closure, 2x 1 m of silicon hose

16-1122

**Metal Rack**

with inclined manometer

**Options & Accessories**

16-1114

**Reference Liquid - Type: RL 208**

Content: 1 liter  
 for CEC L-40-A-93 (DIN 51 381) (Noack Evaporation)

16-2022

**Documentation Unit**

to record the progress of vacuum and temperature of Noack evaporation tests and print out the data.

Consisting of: measurement printer, data transmission and mains cords

Power supply: 110/230 V, 50/60 Hz

16-2025

**Balance, range: max. 600 g, resolution: 0.01 g**

Power supply: 230 V, 50 Hz

16-2026

**Balance, range: max. 600 g, resolution: 0.01 g**

Power supply: 115 V, 60 Hz

**Spare Parts**

12-0338

**Thermometer**

Range: +40 to +260 : 1 °C  
 Length: 300 mm, Immersion: 48 mm, Ø 9.5 mm

12-0339

**Thermometer**

Range: +40 to +260 : 1 °C (officially certified)

12-0340

**Thermometer**

Range: +190 to +410 : 1 °C

12-0341

**Thermometer**

Range: +190 to +410 : 1 °C (officially certified)

16-0793

**Evaporation Crucible with lid & pipe**

16-0798

**Wood Metal, 100 g**

16-0800

**Woulff Flask, 2 liter, with screw closure**

16-0805

**Bottom-Heater, Ø 145 mm; 230 V, 1000 W**

16-0806

**Ring-Heater, Ø 160 mm; 230 V, 200 W**

16-1072

**Gasket for pipe**

16-1078

**Jet Cleaner, 2 mm**

16-1105

**Inclined Manometer,**

0-50 mm water column Ø 0.2 mm on metal-plate, density: 0,82 g/ccm

<b>16-1109</b>	<b>Test Balls, pack of 5</b>
<b>16-1133</b>	<b>Thermometer Holder</b>
<b>16-1134</b>	<b>Heat-Protection Gloves</b>

**Order Guideline**

Minimum equipment: 1x each 16-1130, 16-0797, 16-1122, 16-1137  
Spares (approx. 1 year): Thermometer, 16-0793, 16-0798, 16-1072, 16-1109  
Additional requirements: