



## NewLab 225 Filter Plugging Tendency



ASTM D 2068  
ASTM D 6426  
IP 387

### Subject

Determination of Filter Plugging Tendency (FPT) of distillate fuel oils where the end use demands an exceptional degree of cleanliness. This test method is applicable to fuels within the viscosity range of 1.50 to 6.00 mm<sup>2</sup>/s (cSt) at 40°C. Test range 1.0-30 (FBT/FPT).

Filterability of middle distillate fuel oils within the viscosity range from 1.70 to 6.20 mm<sup>2</sup>/s (cSt) at 40°C. Test range 100-1 (F-QF).

### Main Features

- Bench top analyser
- Integrated cooling system equipped with Peltier module
- Working temperature up to 0°C
- Measuring device complete with support for filter, Beakers, PT100 sensor Class A, level sensor, pressure gauge, tubes and joints
- Micro Pump
- Managed by a Touch Screen Panel PC by means of the Lab-Link software running in Windows ambient.
- Bath made in aluminium

### Measuring Principle

A sample of the fuel to be tested is passed at a constant rate of flow (20 mL/min) through a glass fiber filter medium. The pressure drop across the filter is monitored during the passage of a fixed volume of test fuel. If a prescribed maximum pressure drop is reached before the total volume of fuel is filtered, the actual volume of fuel filtered at the time of maximum pressure drop is recorded and used to obtain the automatic calculation result.

Otherwise if the prescribe volume is filtered without reach the 105kPa pressure, the maximal pressure during the test is recorded and used to obtain the result.

### Measuring Devices

- PT100 Sensors Class A
- Level sensor 0 ... 300 ml
- Pressure sensor 0 to 210 KPa

### Technical Features

- Bath / Sample Temperatures: °C/°F (selectable)
- Measuring range: -50°C...+80°C
- Bath temperature: -10°C ... +40°C
- Pump flow rate: 20 ml/min

### Integrated Touch Screen Panel PC

- TFT/LCD 12.1"
- 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

### Software

#### Main features

- Automatic calculation of FBT/FTP and/or F-QF
  - User friendly interface
  - Real time display of all the analytical parameters
  - Storage of all the analysis
  - Storage of the results in Excel® format
  - Display of the graphic
  - Printable results
- #### Calibration
- Automatic calibration of each temperature probe by means of the calibration decade box
  - Storage of the data referred to the calibration
  - Last calibration date referred to each single probe displayed

### Diagnostic

- Access to all analogue and digital signals (inlet and outlet) in order to verify their functioning.

### Accessories

- LAB-225/013-02: kit for ASTM D2068 method B, composed by filter support, filter 1.6 um, filter taper housing, joint for connection, kit for 150 test.
- LAB-225/013-03: kit for ASTM D2068 method C, composed by filter support, filter 5 um, filter Luer housing, joint for connection, kit for 150 test.

### Spare Parts

- LAB-225/005-06: PT 100 bath
- LAB-225/008-12: PT100 product with connector for FBT
- LAB-225/008-04: FBT glass cell (sample reservoir)
- LAB-225/008-05: glass cell lid
- LAB-225/008-13: FBT glass receiver (receiver beaker)
- LAB-225/008-06: level sensor
- LAB-225/013-01: luer lock filter support

### Consumables

- 1820-8013: glass fibre filters, Ø 13 mm, pack of 100 pieces for ASTM D2068 method A

### Dimensions (cm)

- width 48
- depth 30
- height 52

### Weight

- 27 kg