



## OilLab 620 RECC - Rapid Equilibrium Closed Cup



ASTM D3828  
IP 303  
EN ISO NF 3679

### Subject

These test methods cover procedures for the determination of the flash point by a small scale closed tester.

The procedures may be used to determine the actual flash point temperature of a sample or whether a product will or will not flash at a specified temperature (flash/no flash).

### Measuring R.E.C.C. Principle

A specimen of a sample is introduced by means of a syringe into the cup of the selected apparatus that is set and maintained at the specific temperature/expected flash point. After a specified time a test flame is applied and the observation made whether or not a flash occurred.

### Measuring R.E.C.C. Devices

- Testing unit equipped with two ignition systems
- Electrical system or flame exposure device
- Flash point detected by a ionization system

### Measuring Temperature Probe

- Platinum resistance PT100 class A

### Measuring Parameters

- Temperatures: in °C
- Measuring range: -50°C ... +350°C
- Resolution: 0.06 °C
- Accuracy: ± 0.1 °C
- Repeatability / Reproducibility: as per standards methods or better

### 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
- Unknown sample
- Audible alarm and displayed messages at the end of the analysis and in case of errors and/or malfunctions

#### Diagnostic Menu

- Direct access to all analog, digital, inputs and outputs
- 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
- Standard and advanced calibration modes

#### Data Utilities

- Fields for introduction of operator and product name
- Archive viewer for files recall
- All analysis stored in Excel® format
- LIMS compatible

### 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

### Test Cup

- The cup is made of aluminium and equipped with high temperature resistant o-ring

### Heating

- Electrical heating cartridges
- Equipped with over temperature cut-out

### Cooling System

- Air fan

### Warning light and acoustic signal

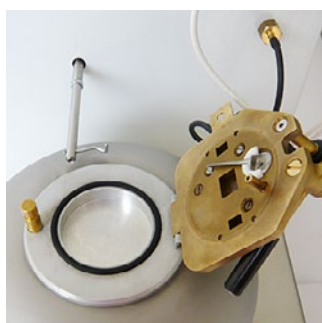
- When the test temperature is reached, the light blink and an acoustic signal is emitted to inform the operator that the sample must be injected. If the injection of the sample is not performed and confirmed the signal will be repeated after 30 seconds.



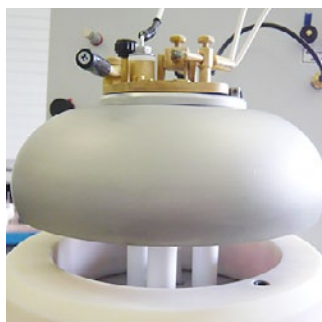
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Automatic opening, closing and positioning of the sliding shutter.



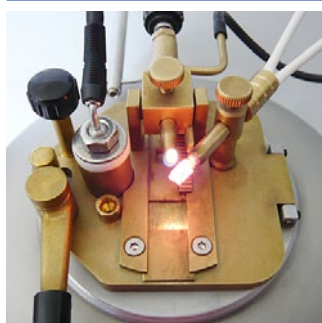
The test cup is completely made of aluminium and is equipped with a high temperatures resistant o-ring, allowing an uniform sealing of the closing cover.



Particular attention has been paid to the heating system allowing the best heat's transmission without dispersion on air. The power of the heater is therefore of only 420W but allows to obtain a temperature higher than 370°C.



The ionisation components are the essential flash point detection system that grants excellent results and high repeatability. The quantity of sample (2 ml / 4 ml) is injected into the cup through the filling orifice.



The instrument is equipped with two ignition systems. An electric pilot that ignites the test flame 30 seconds before the test.



### Shutter

- Automatic mechanism opening the shutter conform to the methods

### Electrical Supply

- 220V  $\pm$  15% / 50 to 60 Hz
- 115V  $\pm$  15% / 60 Hz

### Cord Cable:

- 3 conductors flexible cable with schuko plug

### Ambient Temperature

- Max 35°C
- H.R. 80%

### Dimensions

- width 31 cm
- depth 47 cm
- height 52 cm

### weight

- 27 Kg

### Spare Parts

- LAB-620/05-13: heating cartridges
- LAB-620/06-21: gas valve
- LAB-620/07-01: electrical ignitor
- LAB-620/07-03: micro switch
- LAB-620/07-05: gas ignitor
- LAB-620/08-12: PT100 sensor
- LAB-620/08-13: detection / Ionisation cable
- LAB-620/09-04: gas reducer
- LAB-620/10-04: PCB fuses, box of 10
- LAB-620/10-05: main electronic board
- LAB-620/11-01: silicon tubing, 1 meter
- LAB-620/12-01: voltage transformer for ignitor
- LAB-620/13-01: high temperature resistant o-ring for cup

### Calibration Tools

- OilLab 80: calibration decade box – PT100 simulator
- OilLab 81: set of connectors and cables for cold range