

# AutoFlash-92

# AUTOMATED CLEVELAND OPEN CUP FLASH POINT ANALYZER



AutoFlash-92 is programmable fully automated micro controller based standalone Cleveland Open Cup Flash Point Analyzer conforming to standard ASTM D92, ISO 2592, IS 1448 (P:69) & IP 36.

These test method is applicable to all petroleum products (Primarily for viscous materials) with flash points above 79°C and below 400°C except fuel oils.

It is also used to determine fire point which is a temperature above the flash point, at which the test specimen will support combustion for minimum of 5 seconds.

### **Features:**

- ☐ Standalone model with inbuilt PC & display.
- □ Accurate determination of Flash Point
- □ Easy operation: Select procedure, enter Expected Flash Point and click on start. Instrument follows the exact procedure and completion of the test cycle is signaled by beeps, with display & saving of results.
- ☐ Rapid heating procedure for high flash point till selected temperature below expected flash point
- ☐ Search programmes enables a quick determination of fully unknown samples
- ☐ Interchangeable gas or electric igniter source
- ☐ Automatic barometric pressure correction
- □ Interlocks for safe operation.

# **Ordering Information:**

## **Standard Accessories:**

AutoFlash-92 Cleveland Open Cup Flash point
Analyzer with all standard accessories and
1 spare sample cup, 1 spare electric igniter

### **Optional accessories:**

Certified Reference Material, Low Flash Point, 250ml Certified Reference Material, High Flash Point, 250ml

# **Technical Specifications**

Model: AutoFlash-92

Methods: ASTM D92A, ISO 2592, IS 1448 (P:69) & IP 36, User defined, Unknown search,

Rapid heating

User Interface: Windows based user friendly S/W with methods & results storing

Standalone with inbuilt PC & 8.4" touch screen display. RS 232, LAN and USB Ports for Printer & other peripherals.

SYSTEM:

Heating: Coil heater 1000 watt @ 230VAC

Heat rate as per method or defined by the user from 1 to 20 deg C/min

Cooling: Centrifugal Blower, 56.5 CFM, 35 watts@230 VAC

Ignition: DC motor controlled movement; S/W selectable Electric/gas igniter,

S/W selectable dipping interval, Continuous Monitoring & Auto Ignition of Igniters

Arm Movement: Automatic DC motor controlled swing arm

Permanently fixed, sample temperature sensor, Flash detector, fire detector and

Igniter for easy operation

Flame Extinguisher: Automatically extinguishes the flame covering the cup in case a fire is detected or

after fire / flash point detection

MEASUREMENTS:....

Auto Calibration: Prior to Every run, auto temperature calibration will be performed without

the use of any calibration device.

Sample Temperature: PT 100 Class A, SS sheath, Measurement Range 0 to 400 deg C, Resolution 0.1 deg C Bath Temperature: PT100 Class A, Disk Type, Measurement Range 0 to 600 deg C, Resolution 0.1 deg C

Flash Detection: Ionisation Ring.

Ambient Pressure: Built in pressure sensor, Range 500 to 1100 hpa

Fire Detection: Optical Sensor

# SAFETY INTERLOCKS: .....

- Temperature sensors (bath/sample) is found defective.
- Flash Detector is found defective.
- Electric Igniter is blown off.
- Test Stop at above expected FP as selected or at 400 deg C
- Upon Detection of Fire by optical sensor, warning buzzer will beep and power will cut off and activate fire extinguisher
- Arm is not set in place.

# OPERATING REQUIREMENTS:.....

Power Supply: 230Volts 50 Hz 1500 watt

Housing: W: 410 mm D: 420 mm H: 330mm Wt: 16 Kg

Ambient: Temp 10 to 35 deg C and Relative Humidity 80% at 35 deg C

### Manufactured by:



# Acute Instruments Pvt Ltd.

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