Touchless Automatic Pensky Martens Flash Point Tester

- ➤ ASTM D93-2010, ISO 2719, GB/T 261-2008

- ➤ One-Button Start. The tester can automatically perform the ignition, heating , stirring, detection, pressure correction at flash point, printing, and colling.

- ➤ An advanced 32-bit ARM processor, a high-precision platinum resistor, and 24-bit analog-to-digital converter.

- ➤ The first non-contact stirring method.

- ➤ Build-in the atmospheric pressure sensor.

Introduction

The Touchless Automatic Pensky Martens Flash Point Tester, developed by Canada Etech International Enterprises Inc. (EIE), uses the most advanced international design concepts and test methods in the world, which improves the automation degree of the flash point tester, guarantees the measurement accuracy, and minimized the adverse consequences caused by operator errors.

Under the specified testing conditions, the test flame will ignite the sample vapour and spread to the liquid's surface, where the lowest temperature can be achieved and corrected under the atmospheric press of 101.3 kPa. The flash point is a safety index and volatility index of flammable liquids, which is of great significance to its production, transportation, storage and use.

This tester applies to the closed cup flash point measurement of liquids specified in ASTM D93. Operated in strict accordance with the standard test procedures, it can fully meet the accuracy requirements. The tester can be widely used in petroleum, electric power, railway, aviation, water carriage, scientific research and other industries.

Technical Features

1. The tester is equipped with an advanced 32-bit ARM processor and is manufactured with cutting-edge and reasonable design concepts integrating light, mechanical and electrical parts.
2. Featuring a high-precision platinum resistor and 24-bit analog-to-digital converter, its measurement results are accurate and precise.
3. Integrating the atmospheric pressure sensor can measure the atmospheric pressure in real-time and automatically calculate and correct the flash point at 101.3kPa.
4. By taking advantage of an advanced temperature control algorithm, the heating rate is stable, and the measurement results are repeatable.
5. Capable of measuring the flash point with One-Button Start, the tester can automatically perform the ignition, heating , stirring, detection, pressure correction at flash point, printing, and cooling.
6. The ignitor flame is automatically detected and automatically ignited, which is safe and reliable.
7. It is equipped with a built-in thermal printer, of which the auto/manual print can be switched over. The measurement data can be exported to the LIMS system.
8. At the end of the measurement, the buzzer will beep for one minute to remind the operator to deal with it in time.
9. The patented non-contact stirring technology.
10. The instrument uses a built-in microcomputer and analysis software. The instrument has a built-in test plan that meets the standard so that users can choose or customize it. The built-in database can save 500 analysis reports to ensure that the data can be traced.
11. It is equipped with a safety protection system with an automatic heating cut-off to ensure the experiment process's safety.
12. Through different passwords, users, technicians, and professional maintenance personnel can be distinguished.
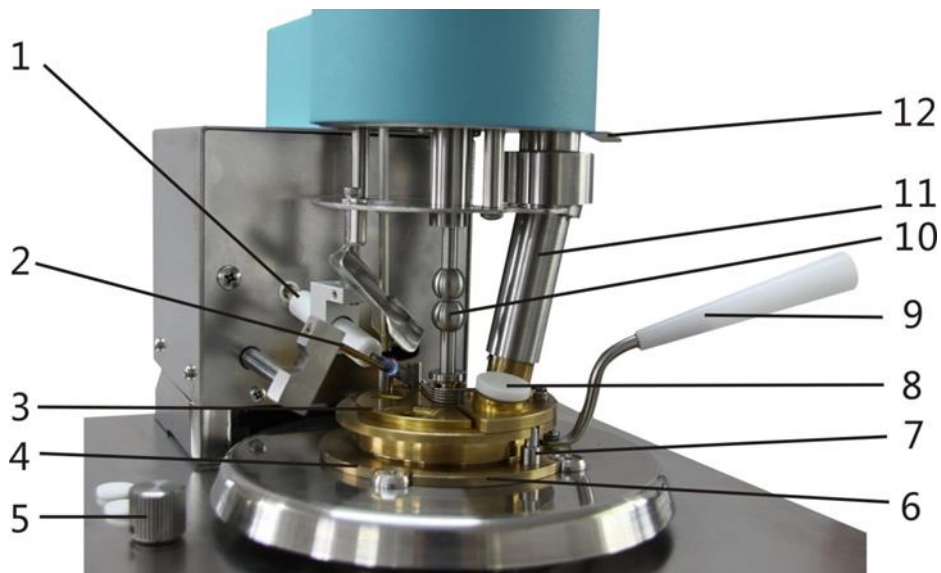
1. Chassis 2. Touch screen 3. Micro printer 4. Power switch

5. Heating furnace 6. Rotating detector 7. Sample cup holder

1. Electric ignitor 2. Gas supply igniter 3. Slide 4. Test cup cover 5. Gas supply throttle

6. Test cup 7. Test cup cover fixing pin 8. Glass thermometer socket plug

9. Test cup handle 10. Stirrer 11. Integrated sensor 12. Detector handle

SPECIFICATIONS

Standards	
ASTM D93-2010, ISO 2719, GB/T 261-2008	
Technical Details	
Measurement range	0 - 410°C
Display resolution	0.1°C
Measurement accuracy	±0.2°C
Repeatability	0.025X (X is the average of two consecutive test results)
Heating system	It can quickly heat up so that the sample has fluidity and is convenient for testing
Heating rate	0.5 - 12°C /min adjustable
Stirring rate	0 - 300 RPM adjustable
Data record	500 groups
Cooling method	Built-in forced air cooling
Flash point detection system	Integrated flash point detector can cover all types of flash points
Ignition mode	electronic ignition or flame ignition
Ignition temperature interval	0.5 - 5°C adjustable
Voltage	AC 110V-220V ±10%, 50/60 Hz
Total power	600W
Dimensions	435mm × 230mm × 380mm (L x W x H)
Overall weight	15 KG
Operating Environment	
Operating temperature	5 - 35 °C
Storage temperature	-10 - 55 °C
Relative humidity	< 85%
Operating place	Indoor