Reid Saturated Vapor Pressure Tester

- ASTM D323, GB/T 8017
- One-Button Start. The tester can automatically perform the oscillation, measuring, recording, and printing.
- An advanced 32-bit ARM processor, advanced sensors and conditioning circuits are adopted.
- It adopts advanced wireless data transmission technology to minimize the influence of air leakage on the test.
- 2 Groups of detection units are equipped.

EIE

Reid Staturated Vapor Pressure Tester

EIE-RVP-2

Introduction

The Canadian EIE Company developed the EIE-RVP-2 Reid Saturated Vapor Pressure Tester following ASTM D323 Petroleum Product Vapor Pressure Measurement Method (Reid Method). It adopts the most advanced international design concepts and test methods. After years of research and innovation, we finally design and produce an automatic measuring instrument for petroleum products' vapor pressure. This instrument is suitable for determining the vapor pressure of gasoline and other volatile petroleum products and volatile crude oil as specified in ASTM D323 and fully meets the precision requirements. It can be widely used in petroleum, transportation and scientific research industries or departments.

Vapor pressure: The pressure produced by the gas phase when a liquid reaches gas-liquid equilibrium.

Reid vapor pressure: Using the prescribed test method (ASTM D323) to determine the vapor pressure of gasoline and other volatile petroleum products, the total pressure reading obtained after correction.

Vapor pressure is an important physical property of volatile liquids. Vapor pressure is a critical factor for automotive gasoline and aviation gasoline and affects its vapor resistance trend during startup, heating, and high-temperature or high-altitude operation. In some regions, the law stipulates gasoline's maximum vapor pressure limit as an essential measure to prevent air pollution. The vapor pressure of crude oil is significant to crude oil production, refining operations, and initial refining processing. The vapor pressure can also be used as an indirect measurement method of volatile petroleum solvents' volatilization rate.

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. It uses advanced sensors and conditioning circuits, high-temperature accuracy.
3. It adopts advanced wireless data transmission technology to minimize the influence of air leakage on the test.
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 oscillation, measurement, recording, and printing.
6. The pressure unit can be kPa or psi.
7. It is equipped with a built-in thermal printer, of which the auto/manual print can be switched over.

8. The measurement data can be exported to the LIMS system.
9. With built-in large-capacity memory, it can store 400 groups of historical data for data tracing in the future.
10. At the end of the measurement, the buzzer will beep to remind the operator to deal with it in time.

SPECIFICATIONS

Standards	
ASTM D323, GB/T 8017	
Technical Details	
Temperature range	Room temperature - 50°C
Display resolution	0.01°C
Temperature control accuracy	±0.1°C
Pressure range	0 - 200 kPa (0 - 29 psi)
Pressure display resolution	0.01 kPa (0.01 psi)
Detection unit	2 groups
Data record	400 groups
Voltage	AC 110V-220V ±10%, 50 Hz
Total power	< 1100W
Dimensions	865mm x 305mm x 465mm (L x W x H)
Overall weight	33 KG
Operating Environment	
Operating temperature	5 - 40 °C
Relative humidity	< 85%
Operating place	Indoor