

Product Name :
Asphalt Bending Beam Rheometer

Product Code :
CHINAELABC4790001



Description :

Asphalt Bending Beam Rheometer

Technical Specification :

The low-temperature shrinkage and cracking performance of asphalt pavement is related to the creep stiffness of asphalt binders and the slope of the logarithmic and time logarithmic curve of creep stiffness.

The bending beam rheometer is a device that uses the SHRP method to test the flexural creep stiffness of asphalt binders in low-temperature conditions. As a result, it's utilized to assess asphalt binders' low-temperature cracking properties. The test results include the low-temperature creep stiffness $S(t)$ and creep stiffness change rate $m(t)$ index.

Feature

Adopts industrial computer, deformation curve, pressure curve and temperature curve displayed in real time.

With LVDT calibration device which makes calibration process simple and convenient.

Dual mode of Peltier and refrigerator for cooling can realize rapid cooling from room temperature to -18°C in 40 minutes.

To reduce vibration, the refrigerator is separated from the main unit by a hose.

A magnetic stirring rotor with adjustable speed is installed in the liquid bath which makes the liquid bath temperature accurate and uniform.

The air pressure, pre-pressure, loading pressure and air axle bearing pressure can be displayed in software.

With USB communication port, data is exported easily.

With overloading alarm and fault warning alarm function. The buzzer alarms and fault code will display at the same time.

The stainless steel base box is durable and easy to clean.

The testing time can be set to verify the deformation after 240s (default: 240s).

The timing for calculating result can be set by software (8s, 15s, 30s, 60s, 120s, and 240s by default).
Two-stage high-precision air filter prevents air impurities from affecting the test accuracy.

Sensors

Displacement sensor range: 0~10mm

Displacement sensor resolution: 5 μ m

Pressure sensor range: 0~4900mN

Pressure sensor resolution: 2mN

Temperature sensor range: -50 $^{\circ}$ C~room temperature

Temperature sensor accuracy: $\pm 0.1^{\circ}$ C

Liquid bath: Liquid bath temperature range: -40 $^{\circ}$ C~room temperature

Temperature control accuracy: $\pm 0.1^{\circ}$ C

Volume: 5L

Rotating speed: 25r/min

Others Specimen size: 127mmx12.7mmx6.35mm

Top radius of specimen rack: 3mm ± 0.3 mm

Loading axis radius: 6.3mm ± 1.3 mm Spherical contact point

Number of specimen: 1 Pc

Creep stiffness range: 20MPa~1000MPa

Data interface: USB

Power Host: 220VAC 1kW

Power Box: 220VAC 1.8kW

Refrigerator: 220VAC 3kW



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