

BENDING BEAM RHEOMETER (BBR)

STANDARDS: AASHTO T313, ASTM D6648, EN14771, AASHTO TP112

The Bending Beam Rheometer (BBR) is used to measure the low temperature flexural creep stiffness of asphalt binders, to evaluate the ability of asphalt binder to resist low temperature cracking. The test results include low temperature creep stiffness $S(t)$ and creep stiffness change rate $m(t)$.

Industrial panel computer control and display, real-time display of deformation curve, pressure curve and temperature curve.

Equipped with LVDT calibration device, making the calibration is simple and convenient.

Adopts the composite cooling mode of Peltier and chiller, the cooling speed is quick. It can drop from room temperature to -18°C in 40 minutes, the temperature control accuracy is high.

The chiller is connected to the host with a hose and placed separately to prevent the vibration of the chiller from affecting the test results.

A magnetic stirrer with adjustable speed is installed in the liquid bath to make the temperature more uniform.

Air source pressure, pre-pressure, load pressure and air bearing pressure are digitally displayed in the software.

With a USB communication port which is convenient for data export.

With overload protection, fault warning and other functions. Buzzer alarm and display fault code at the same time.

The base is made of stainless steel, which is easy to clean and durable.

The test time can be set, which is convenient for verifying the deformation after 240s (default 240s). The time required for calculating the results can be set by software (default 8s, 15s, 30s, 60s, 120s, 240s).

Two-stage air filtration prevents air impurities from affecting test accuracy.

Technical Specifications:

Product Code	Product Name
HR-AS2269	Bending Beam Rheometer (BBR)
Displacement sensor range	0~10mm
Displacement sensor resolution	5 μm
Pressure sensor range	0~4900Mn
Pressure sensor resolution	2mN
Temperature sensor range	-50°C ~ room temperature
Temperature sensor accuracy	$\pm 0.1^{\circ}\text{C}$
Liquid bath temperature range	-40°C ~ room temperature
Temperature control accuracy	$\pm 0.1^{\circ}\text{C}$
Liquid bath capacity	5L
Stirrer speed	25rpm
Mould size	127x12.7x6.35mm
Top radius of sample Support	3 $\pm 0.3\text{mm}$
Loading shaft Radius	6.3 $\pm 1.3\text{mm}$ spherical contact point
Number of samples	1
Creep stiffness range	20~1000MPa
Data output	USB port
Power	Host AC220V 1kW; power box AC220V 1.8kW; chiller AC220V 3kW
Host dimensions	610x610x620 mm
Host weight	80kg



HR-AS2269

