

Bending Beam Rheometer 3 (BBR3)



The ATS Bending Beam Rheometer 3 (BBR3) performs flexural tests on asphalt/bitumen binder and similar specimens per AASHTO T 313, AASHTO TP 87, ASTM D6648, GOST 58400.8-2019, and BS EN 14771 specifications as part of the PG grading system according to Superpave. An ATS original, the BBR3 is the first of its kind to offer a state of the art internal computer system, incorporating intuitive new software and touchscreen technology.

Features

- New and improved LVDT calibration disk and weight pan as well as an enhanced software update (2.8.1 and later). For more information see the "BBR Product Update" sheet on our website.
- 12 inch, industrial strength touchscreen display
- Programmable test parameters include deflection plot, load plot, bath temperature, stirrer speed, specimen size, testing times, load, and testing company
- Changeable specimen supports easily transition for crack sealant testing
- Remote monitoring capabilities
- · Compact external chiller with reduced noise during operation
- Customizable report settings add a company logo, notes, and accreditations
- Seven pre-programmed language options include English, Spanish, German, French, Chinese, Italian, and Arabic
- Test data available in CSV and HTML.





Product Specifications

Load Frame Construction	Integral stainless steel, frictionless construction
Loading Shaft Point	In-line stainless steel with blunt point
Test Load	Variable test range from 0 to 4,500 mN (459 g) standard. System maintains required test load within +/- 5 mN (0.5 g) throughout test cycle.
Test Cycle Times	Cycle times for pre-load, recovery, and test load are completely operatoradjustable.
Load Cell	500 g (temperature-compensated)
Mechanical Overload Protection	Standard
Testing Temperature Range	0 to -40°C (32 to -40°F)
Temperature Measurement	Platinum RTD
Power Requirements	115 VAC, 1 ph, 50/60 Hz, 2 A or 230 VAC, 1 ph, 50/60 Hz, 2 A
Air Pressure	60 psi inlet pressure (414 kPa) @ Class 3 Quality max particle of 5 μm
Test Weights	Calibrated and traceable to NIST
Rating	IP20 Enclosure rating
Sample Supports	3 mm (0.118 in) radius stainless steel spaced 101.6 mm (4.00 in) apart
LVDT Displacement Transducer	0.25 in (6.35 mm) calibrated range to provide 2 µm resolution throughout testing and verification range.
Data Display	Large on-screen display of load, displacement, and bath temperature provides ease of setup and operation. Real time displacement, loading, and temperature graphs are displayed during the test cycle and can be re-plotted and re-scaled as needed for easy viewing.
Tank Liquid Volume	1.5 gallons (5.5 liters)
Weight	150 lb
Dimensions	BBR: 24 in W x 26.5 in D x 23.5 in H (with load frame) Chiller: 10.5 in W x 20 in D x 9.25 in H