



Bending Beam Rheometer CBBR 2000

Test System for Determination of Flexural Creep Stiffness
of Asphalt Binder at low temperatures

DIN EN 14771, ASTM D 6648, NF T66-062
AASHTO TP1, AASHTO T313, SHRP 1002, SHRP B-002,
According to FGSV-AL BBR-Test Edition 2017



Bending Beam Rheometer (BBR)

The flexural strength, among other things, is determined in order to evaluate the behaviour of asphalt binder and similar products at low temperatures. The bending beam rheometer developed by Coesfeld enables users to determine these material properties comfortably. The deflection of the specimen is measured for this purpose with a resolution of 1 µm.

The test force is regulated with an accuracy of 1 mN. This makes determination of the flexural strength possible with reproducibility of 1% independent of the operator.

The specimen unit is moved by an electromotor and makes fitting and removing the specimens uncomplicated and simple.

Automatic, software-controlled operating and standardised evaluation and representation of the findings.

The automatic system monitoring contains various diagnosis functions and prepares the re-

quired diagnosis records.

Performance features:

- Integrated programmable controller for controls and recording measured data
- Compact tempering unit with heater and compressor cooling and powerful pressure/suction pump
- Temperature range: -35...+30°C, Resolution ±0.01 K
- Freely selectable test temperatures
- Separate test bath with constant level maintenance
- Linear-electromagnetic loading unit, max. lift 10 mm, max. force 2000 mN
- Incremental transducer, accuracy better than 1 µm
- Load cell accuracy class 0.1 (better than ± 0.1%)
- Force control better than 1mN

- Working range 0 ... 1962 mN
- Own layout of test records

Technical data:

- Dimensions: (HxWxD) 750 x 980 x 580 mm
- Weight: approx. 100 kg without accessories
- Bath volume: Tempering unit: approx. 4.9 l
Test bath: approx. 9 l
- Bath liquid (recommended): Ethanol, 95 %
- Mains connection: 230/240 V, 50/60 Hz, 115 V, 60 Hz (optional)
- Output: 2750 VA



Available versions:

Appliance description	Order number
Bending beam rheometer in accordance with: EN 14771, NF T66-062, ASTM D 6648, AASHTO T313 Mains connection: 230/240V 50/60 Hz	76-710-001
Bending beam rheometer in accordance with: EN 14771, NF T66-062, ASTM D 6648, AASHTO T313 Mains connection 115V 60 Hz	76-710-005
Bending beam rheometer in accordance with AASHTO TP1, SHRP Mains connection: 230/240V 50/60 Hz	76-700-001
Bending beam rheometer in accordance with AASHTO TP1, SHRP Mains connection 115V 60 Hz	76-700-005

Accessories and supplements:

Description	Order number
Casting mould made of aluminium for making specimens (sales unit= 5 pieces)	76-702
Casting mould made of aluminium for making specimens (sales unit= 3 pieces)	76-702-002
Test certificate for the measurement of casting molds	76-702-003
System for force calibration with works certificate	76-704
System for force calibration with DKD certificate	76-704-001
Measuring equipment for temperature calibration with works certificate	76-705
Measuring equipment for temperature calibration with DKD certificate	76-705-001
Cold thermostat up to -25°C for cooling the casting moulds before removing the specimens	10-605-001

