

B054 DUCTILOMETER

STANDARDS: EN 13398 | ASTM D113, D6084 | AASHTO T51

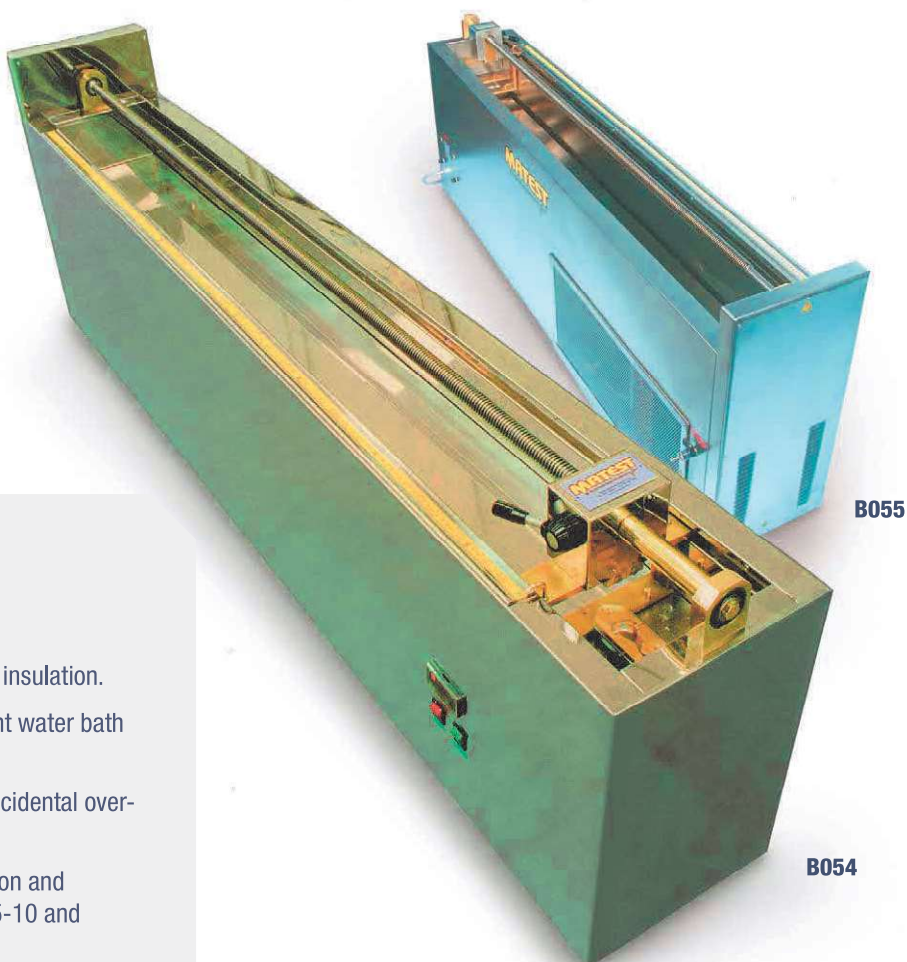
Used to determine the bituminous ductility, that is the distance to which a briquette of molten bitumen can be extended under controlled conditions, before breaking. The Ductilometer basically consists of a moving carriage travelling along guide ways. The carriage is driven by an electrical motor, inside a large tank fitted with digital thermostat, immersion electric heater, cooling coil for cold water circulation and pump unit. Max. traction force: 300 N, accuracy: ± 0.1 N

The ductilometer can accept up to 3 specimens simultaneously. Supplied complete **except** for the briquette mould and base plate that must be ordered separately (see accessories).

Power supply: 230V 1ph 50Hz 750W

Dimensions: 1880x360x680 mm

Weight: 95 kg approx.



MAIN FEATURES

- Works automatically.
- Speed 50 mm/min.
- Max stroke 1500 mm.
- Stainless steel made with fibreglass insulation.
- Digital thermoregulator for a constant water bath temperature ($25\text{ }^{\circ}\text{C} \pm 0.5\text{ }^{\circ}\text{C}$).
- Dual safety thermostat to prevent accidental over-temperature.
- Cyber-plus 8 progress data acquisition and processing system available in B055-10 and B055-20M models.

ACCESSORIES

B054-01A

DUCTILITY BRIQUETTE MOULD

STANDARDS: ASTM D113, AASHTO, GOST

Used to prepare the specimen, it is brass made, accurately machined. Supplied without base plate. Weight: 300 g

B054-03

ELASTIC RECOVERY MOULD - STANDARD: EN 13398

Used to prepare the specimen, it is brass made, accurately machined. Supplied without base plate. Weight: 300 g

B054-04A

FORCE DUCTILITY METHOD MOULD

STANDARDS: EN 13589, ASTM D6084

Used to prepare the specimen, it is brass made, accurately machined. Supplied without base plate. Weight: 300 g

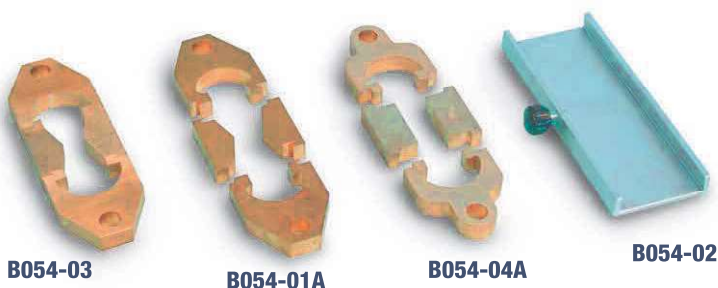
B054-02 BASE PLATE for ductility briquette mould.

B055 DUCTILOMETER WITH COOLING SYSTEM

Same as for mod. B054 but equipped with incorporated refrigerating unit for tests with water temperature from $+ 5^{\circ}$ to $+ 25^{\circ}\text{C}$.

Dimensions: 1880x360x680 mm

Weight: 130 kg approx.



B055-10 DUCTILOMETER WITH DATA ACQUISITION

STANDARDS: EN 13398 | EN 13589 | EN 13703 | ASTM D113, D6084 | AASHTO T51 | GOST 11505-75, 33138

Same as mod. B054, but upgraded with:

- Cyber-plus Progress data acquisition and processing system, **colour touch screen display**, 24 bit resolution. It automatically performs data acquisition and processing. Directly connected to printer (accessory) via USB it prints the test certificate. Equipped with slots for external pendrive or SD card infinite memory support with direct connection to PC. Hardware details: see p. 213
- Software UTM NET to unload and visualize test data to PC.
- One electric load cell 50 N capacity complete with installation and calibration. (Possibility to install later on up to 3 cells directly by the end user). Supplied **without** briquette mould and base (see accessories).



ACCESSORIES

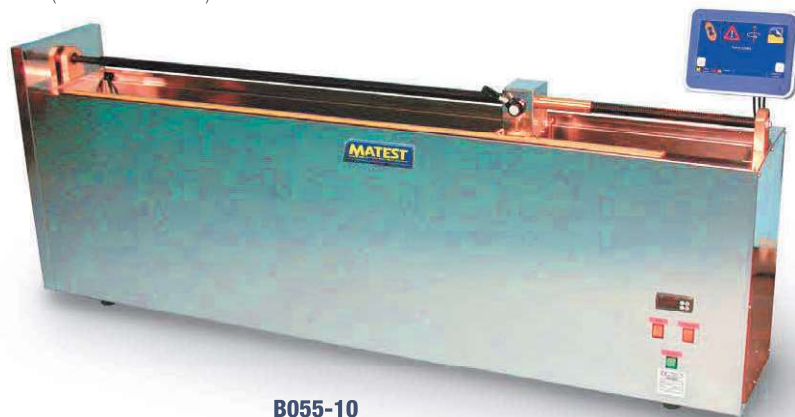
B055-15

LOAD CELL electric, 50 N capacity, complete with installation and calibration (possibility to install up to 3 cells).

B055-16

REFRIGERATING UNIT, incorporated into the machine, for tests with water temperature from +5 °C to +25 °C (not possible to fix on later).

Ductility moulds and base plate:
see p. 144



B055-10



B055-20M

B055-20M DUCTILOMETER WITH DATA ACQUISITION FOR RESEARCH HIGH PERFORMANCE

STANDARDS: EN 13589, 13703, 13398 | ASTM D113, D6084
AASHTO T51, T300, T301
GOST 11505-75, 33138

Developed and manufactured for ductility tests and for research purposes. Stepper motor providing a variable speed range from 1 to 400 mm/min with digital displacement measuring system.

Up to 3 samples can be tested simultaneously.

One electric high capacity load cell 500 N (possibility to install later on up to 3 cells directly by the end user).

Automatic positioning of start test.

Visualization of the elongation in mm and load/elongation chart.

Max elongation recording before breaking failure.

Absorbed energy elaboration.

Temperature setting and visualization of the test execution with continuous recording during the test.

Test certificate print-out (USB connector or local printer).

Cyber-plus Progress data acquisition and processing system **colour touch screen display** (technical details: p. 213).

Software UTM NET to unload and display test data to PC.

Glass upper cover.

Supplied **without** briquette mould and base (see accessories).

Power supply: 230V 1ph 50-60Hz 1000W

Dimensions: 2140x400x650 mm

Weight: 110 kg approx.

ACCESSORIES

B055-15

LOAD CELL electric, 50 N capacity, complete with installation and calibration, suitable for soft bitumen.

B055-25

LOAD CELL electric, 500 N capacity, complete with installation and calibration (possibility to install up to 3 cells).

B055-26

REFRIGERATING UNIT, incorporated into the machine, for tests with water temperature from +0 °C to +25 °C. 230V 1ph 50 Hz (Not possible to fix later on).

C128

LASER PRINTER, bench model, for graphics and certificates with direct connection via USB.

Ductility moulds and base plate:
see p. 144



Detail: 3 load cells 500 N