

BITUMEN - ASPHALT

B072

Ring and Ball softening point apparatus

STANDARDS: EN 1427 / ASTM D36 / AASHTO T53 / NF T66-008
Comparable to: BS 2000 / UNI 4161 / DIN 52011 / UNE 7111

The softness of bitumen depends, amongst other factors, on the temperature of the substance, where, as the temperature is raised, the softness of the bitumen increases. The unit consists of a pyrex beaker; brass frame, two tapered rings, two ball centering guides and two balls. Weight 900 gr.

ACCESSORIES:

B072-01 THERMOMETER ASTM I5 C -2 to +80°C subd. 0,2°C

B072-02 THERMOMETER ASTM I6 C +30 to +200°C subd. 0,5°C

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B072

B072-07

Pouring plate, to pour the bituminous mixture into the brass tapered ring, as requested by EN 1427 Specification.
Dimensions: 75x50x10 mm



B072-07

B074

Hot plate, complete with thermoregulator for temperature adjustment.

Power supply: 230V 1 ph 50/60 Hz 1000 W
Weight: 6 kg

ACCESSORY:

B074-01

Electric stirrer, accessory to the hot plate B074 to ensure a more uniform temperature to the bath.

Supplied complete with vertical support and base.

Power supply: 230V 1 ph 50 Hz 100 W
Weight: 3 kg



B072-01

B074-01

B072

B074

B073-01

Hot plate with magnetic stirrer

Complete with thermoregulator for temperature adjustment and magnetic stirrer with electronic adjustment from 100 to 1200 rpm. Suitable for tests in distilled water with softening point between +30°C. to +80°C.

Alternative version to mod. B074 + B074-01

Power supply: 230V 1 ph 50-60Hz 700W

Weight: 4 kg approx.

B073-02

Hot plate with magnetic stirrer

Same to mod. B073-01, but with more powerful electric heating resistance, suitable "also" for tests in glycerine with softening point over +80°C. up to +150°C.

Power supply: 230V 1 ph 50-60Hz 700W

SPARES for B072:

B072-03 Steel ball dia. 9,5 mm

B072-04 Brass tapered ring

B072-05 Ball centering guide

B072-06 Pyrex beaker



B072-01

B072

B073-01

MATEST

material testing equipment

B070N1

SOFTMATIC

Automatic Digital Ring and Ball apparatus "TOUCH-SCREEN"

STANDARDS: EN 1427 / ASTM D36 / AASHTO T53 / NF T66-008;
comparable to: BS 2000 / DIN 52011 / UNE 7111 / UNI 4161 / CNR N.35

This "high technology" digital microprocessor tester, designed and manufactured by Matest, automatically determines the softening point of asphalts and pitches.

Two laser sensors detect the balls fall determining the softening point.

The bath temperature is measured by an electronic system maintaining the gradient (5°C./min) as specified by the Standards.

Real time visualization of the Temperature(°C)-Time(sec) graph along the entire test.

A magnetic stirrer with electronic speed adjustment from 0 to 160 rpm also ensures an uniform temperature in the vessel during the test execution.

The touch-screen graphical interface allows an easy set up of the parameters and the immediate execution of the test.

High resolution color display, 1/4 VGA, offers all the functions of a PC for the management and analysis of data, test results, and graphs.

Two test parameters can be selected by the microprocessor menu:
- test on boiled distilled water for softening point from 30 to 80°C.
- test on glycerol for softening point from 80 up to 150°C.

Language selection: English, French, Spanish, German, Italian, Polish, Russian, Greek, Portuguese, Dutch.

Functions of: clock calendar, test number, user/customer name, general notes, start/end of the test.

Real time visualisation of the bath temperature, test progress, rpm of the stirrer.

Unlimited memory, with possibility to save data onto an external memory (USB pendrive, SD card) and then edit them through an Excel spreadsheet.

The tester is basically composed by:

- Ceramic-glass heating plate with automatic cut off at the end of the test cycle.
- Motherboard with microprocessor, which controls: heater/stirrer; temperature probe, laser sensors, pre-heating phase of the plate, and memorizes all the test parameters.
- Steel balls centering device.

Power supply: 230V 1ph 50/60Hz 700W
Dimensions: 500x350xh550 mm
Weight: 20 kg approx.

ACCESSORY:

B070-II

RODS WITH SPHERICAL ENDS (set of 2 pieces) for checking and calibration of the instrument.

SPARE PARTS for B070N:

- B072-03** Steel ball 9,5 mm diameter
- B070-15** Brass tapered ring, chromed
- B070-16** Brass centering guide, chromed
- B070-17** Pyrex beaker



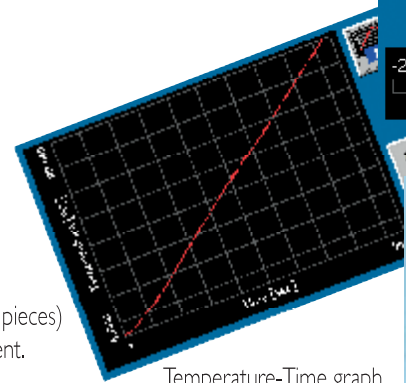
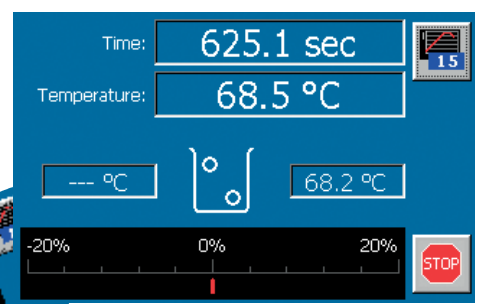
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Main Functions:

- Touch-Screen display like a normal PC
- Unlimited memory
- Multilanguage selection
- Microprocessor friendly-driven menu to control all the test phases
- Top quality components: laser sensors, electronic magnetic stirrer, ceramic-glass heating plate
- Fully automatic



MATEST

material testing equipment