

Softening point of asphalt

Standards EN 1427 | ASTM D36 | AASHTO T53



Automatic ring and ball apparatus

This advanced microprocessor controlled automatic tester is used to determine the softening point of bitumen using water or glycerol as heating fluid. The softening point is taken by two suitably positioned light barriers and the temperature is measured by a PT100 sensor placed in a centralposition. During operation a magnetic stirrer with adjustable speed assures temperature uniformity in the vessel. The temperature gradient is strictly maintained throughout the test by the electronic system which conforms with the Standards.

Safety features

The hot plate is automatically turned off at the end of the test. The apparatus is also fitted with an emergency stop button. The test is automatically interrupted if the probe fails or is not correctly positioned. The hot plate will not be damaged or affected by accidental leakages of water or glycerol, or if the beaker breaks.

Specifications

The apparatus comprises the following parts:

- Heater and magnetic stirrer with speed control
- Temperature probe
- Glass beaker, test rings and ball support
- Application and centering device for steel balls
- Light barrier system
- Microprocessor system and large graphic display with membrane keyboard
- RS232 port for PC or printer

Firmware

- Main menu:
- Test on boiled distilled or deionized water for softening point between 30 and 80° C
- Test on glycerol for softening point above 80 and up to 150° C
- Test configuration set-up
- File management
- Date and time
- Operator name, test number, general notes
- Language selection
- Test parameters conforming to the type of test: up to 80° C or above 80 up to 150° C, hot plate pre-heating temperature thermocouple calibration
- Magnetic stirrer speed adjustment from 0 to 150 rpm
- Baud rate selection 38400 for PC and 9600 for printer

Phisical specifications

- Power: 750 WOverall dimensions:
- 530 x 300 x 280 mm (w x d x h)
- Weight: approx.16 kg

Ordering information

81-PV0143

PAVELAB, Automatic ring and ball apparatus. 230 V, 50-60 Hz, 1 ph. <u>81-PV0143/Z</u> As above but 110 V, 60 Hz, 1 ph.

Accessories

82-P0172/1

RS232 cable

Spares

81-PV0145/1

Brass ring

81-PV0145/2

Steel ball

81-PV0145/3

Ball centering guide

81-PV0143/1

600 ml beaker