Automatic Ring & Ball Apparatus



Year of Purchase:2020 Cost: 4.21 Lac

Description

The Automatic Ring and Ball Tester allows fully automatic performance of softening point determination of binders conforming to most common international Standards.

Two binder specimens, cast in shouldered brass rings, are heated at a controlled temperature rate in a water or glycerol bath while each supports a steel ball. The softening point corresponds to the average temperature at which the two specimens soften enough to allow each ball, enveloped in binder, to fall 25mm, automatically detected by a calibrated light barrier.

Full Conformity

The Automatic Ring and Ball Tester fully complies with the temperature heating rate, displaying in real time the gradient and its deviation from the theoretical one. The tester saves the gradient and softening point results on the internal memory or onto a USB pen drive. You can export the temperature / time data in real-time to your PC or manage it with the optional PC software.

Improved Safety

The hotplate is fully sealed, so it cannot be damaged or affected by possible water or glycerol leakages, or if the beaker breaks. At the end of the test, the hotplate is automatically switched off and the integrated cooling fan enabled, improving the beaker cooling operations and reducing risks for the operator. The front transparent cover reduces the risks coming from accidental water or glycerol spilling from the beaker.

Standard Outfit

The apparatus is supplied complete with outfit for softening point of bituminous materials (two rings, two steel balls, two centering devices, support frame, 600ml beaker, PT100 probe, sample preparation plate and magnetic stirrer).

Main Features

- Fully automatic softening point determination. The apparatus automatically applies the temperature gradient and detects the specimen position with light barriers, recording the softening point.
- 7" color touchscreen display, with multiple preset and custom testing procedures, allowing realtime display of the temperature / time graph on display or PC (with optional software).
- Inbuilt cooling fan, automatically enabled at the end of the test, to reduce the beaker cooling time.
- Removable transparent front cover, protecting the operator from accidental hot water or glycerol splashing or accidental contact with the hot beaker and plate.
- PT100 probe holder and drip tray for specimen holder, complete with handle, improving beaker positioning operations.
- Possibility to perform user-defined tests with maximum temperature up to 250°C.