OilLab 500
Ring and Ball

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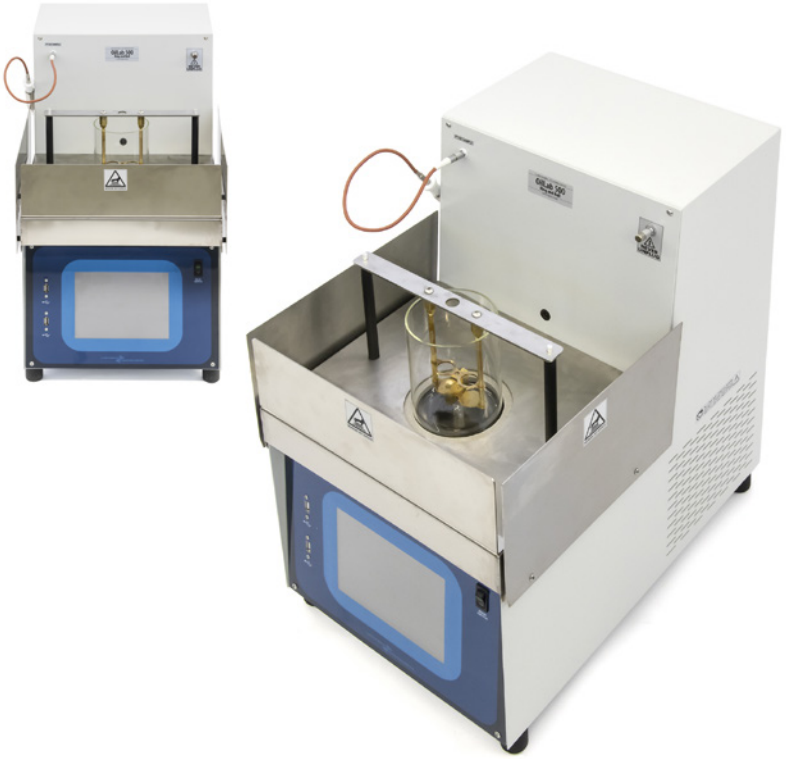

ASTM D36, ASTM E28
EN 1427
IP 58
ISO 4625
DIN 52011
NF T 66-008
AASHTO T53
JIS K2207

Subject
Softening point of bitumen, bituminous binders, hot coatings, tar, tall oil rosins, waxes, polymeric resins.

Measuring Ring-and-Ball Principle
The sample is heated in a liquid bath respecting the heating rate prescribed by the standards test methods. During this procedure the product gradually become softer and when the test ball fall a distance of 25 mm the softening point is determined.

Measuring Ring-and-Ball Devices
- Testing unit equipped with 2 steel balls, 9.5 mm diamenter, 3.5 gr
- Mechanical ring holder and assembly, made of brass, support for 2 test rings, centering guide
- Heating plate
- Heat resistant glass Beaker, 800 ml capacity
- Automatic falling ball detection system by video camera

Measuring Temperature Probe
- Platinum resistance PT100 class A

Measuring Parameters
- Temperatures: in °C
- Measuring range: 0°C … +250°C
- Analysis range: ambient up to +200° C
- Resolution: 0.06 °C
- Accuracy: ± 0.1 °C
- Repeatability / Reproducibility: as per standards methods or better

Integrated Touch Screen Panel PC
- TFT/LCD 8"
- Resolution 1024 × 768, 16.2 M colours
- 2 USB ports for connection to an external printer and/or external PC
- Storage capacity for more than 60'000 analysis

Software Features
- All analytical parameters recorded
- Customizable analysis parameters and methods
- Customizable results report
- Printable graphs and results
- Self-identification of the typology of the analysers connected

The software includes:

Analysis Menu
- Standard method as per ASTM / IP / ISO / EN / DIN… norms of reference
- Unknow sample
- Audible alarm and displayed messages at the end of the analysis and in case of errors and/or malfunctions

Diagnostic Menu
- Direct access to all analog, digital, inputs and outputs
- Selectable value displaying: °C / Volt

Calibration Menu
- Automatic calibration of each temperature probe
- Last calibration date referred to each single probe displayed and relative data printable
- Display of calibration diagram
- Insertion of offset values
- Standard and advanced calibration modes

Data Utilities
- Fields for operator and product name
- Archive viewer for files recall
- All analysis stored in Excel® compatible format
- LIMS compatible

Heating
- Electrical heater 1200 W
- Equipped with over temperature cut-out
- Magnetic stirrer of approx. 250 rpm for heating uniformity

Cooling System
- Air forced ventilation fan

Electrical Supply
- 220V ± 15% / 50 to 60 Hz
- 115V ± 15% / 60 Hz

Cord cable
- 3 conductors flexible cable 2 m (7 feet) length with PVC sheath oil and heat resistant as per CENELEC directives

Ambient Temperature
- Max 35°C
- H.R. 80%

Dimensions
- Width 48 cm, depth 30 cm , height 52 cm

Weight
- 25 kg

Spare Parts
- LAB-500/005-13: heater
- LAB-500/005-26: PT100 bath
- LAB-500/009-05: Pyrex® jar
- LAB-500/171-01: steels balls, pack of 50 pcs.
- LAB-500/171-06: ring ASTM, pack of 2 pcs.
- LAB-500/171-07: collar ASTM, pack of 2 pcs.
- LAB-500/011-02: magnetic stirring bars

Tools Required for Routine Calibration
- OilLab 80: calibration decade box PT100 simulator
- OilLab 84: set of connectors and cables