



Automatic Analysers: OilLab Range

OilLab 500 Ring and Ball



ASTM D36
ASTM E28
EN 1427
IP 58
ISO 4625
DIN 52011
NFT 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 diameter, 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
- 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
- Unknown 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
- Equipped with over temperature cut-out

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

Accessories

- LAB-500/005-06: PT100 bath
- LAB-500/005-26: PT100 bath
- LAB-500/008-05: protective shields
- LAB-500/008-18: forceps
- LAB-500/171-01: steels balls, pack of 50 pcs.

Spare Parts

- LAB-500/005-13: heater
- LAB-500/005-26: PT100 bath
- LAB-500/009-05: Pyrex® jar
- 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 81: set of connectors and cables for cold range