



OilLab 730 Ductilometer



ASTM D113
ASTM D6084
AASHTO T51
EN 13398
IP 32 (obs.)

Ductility of Bituminous Materials.

The ductility of a bituminous material is measured by the distance to which it will elongate before breaking when two ends of a briquet specimen of the material are pulled apart at a specified speed and at a specified temperature.

Unless otherwise specified, the test shall be made at a temperature of $77 \pm 0.9^\circ\text{F}$ ($25 \pm 0.5^\circ\text{C}$) and with a speed of 5 cm/min $\pm 5.0\%$.

At other temperatures the speed should be specified.



5047+15945



5045+15945



5207

Automatic Refrigerated Apparatus for Ductility of Bituminous Materials

- Structure fully made in stainless steel, internal bath realized with round edges easily to clean, bath is also equipped with atmospheric drain.
- Bath is automatically thermo-stated with integrated refrigerating gas motor-compressor system CFC free for test temperatures up to $+5^\circ\text{C}$ and heated with total immersion stainless steel heaters granting temperature up to $+50^\circ\text{C}$, resolution $0,1^\circ\text{C}$ and stability $\pm 0,1^\circ\text{C}$ (with cover).
- Double pump system with gently movement of liquid avoid ripple on sample surface.
- 1 x traction monophasic motor 220 Watt with reduction. fitted on traction head able to manage 3 samples thanks to 3 independent force reader sensors.
- Analysis length resolution 1500 mm with $< 1\text{mm}$ resolution and minimum settable parameter.
- Transparent inspection window and anti-overturn system.
- Automatic traction system to measure and record the traction from 0.1 to 300N for each test place, with automatic system to measure the elongation from 1 to 1500 mm for each test place.
- Touch screen panel pc 10.1" high visibility display equipped with 2 USB ports for connecting external control peripherals, for software updates, for exporting files and printing, 1 x RJ45 for Ethernet connection and LIMS.
- Dedicated software for automatic sample according to ASTM D113 – ASTM D6084 - EN13589 - EN13703:
 - User friendly and customizable interface;
 - Automatic saving of all analytical parameters;
 - Customizable analysis parameters;
 - Printable graphs and results.
- Included with instrument:
 - 3 x Ductility form for ASTM D113;
 - 3 x Base plate for form filling.

Dimensions

- Width 190 cm
- Depth 50 cm
- Height 90 cm (with open cover)

Weight

- 82 Kg (empty)

Bath Internal Dimensions

- Width 175 cm
- Depth 25 cm
- Height 16 cm

Range

- $+5^\circ\text{C}$ to $+50^\circ\text{C}$

Power supply

- 230 Vac 50 Hz
- 115 Vac 50 Hz

Max. consumption

- 1300 Watt

Accessories

- 5047+15945: elastic recovery form/mold made in brass for ASTM D6084

Spare Parts

- 5045+15945: ductility form/mold made in brass for ASTM D113
- 5207: base plate for form/mold filling