

## INDENTATION TEST USING CUBES OR MARSHALL SPECIMENS

STANDARDS: EN 12697-20, EN 13108

This EN describes a test method for determining the depth of indentation of mastic asphalt and rolled asphalt, when force is applied to them via a cylindrical indenter pin with a circular flat-ended base. The test applies to aggregates of maximum nominal size less or equal to 16 mm.

This test method is performed on mastic and road constructions asphalts, on waterproofing and floor screeds in building constructions.

The indentation test can be applied also on Marshall specimens. Condition the specimens together with their moulds for at least 60 min under water at the test temperature of 40°C. or 22°C. respectively with +/- 1°C. accuracy.

### B059-10

#### Asphalt indentation penetrometer

Comprising:

- Rugged basic frame where the screw penetration load device is fixed.
  - Two interchangeable penetration pistons having 1 and 5 cm<sup>2</sup> surface.
  - Two metallic discs having total weight of 500 N ( 51 kg) that are positioned on the load device.
  - Dial gauge 30 mm, sens. 0,01 mm to measure the penetration.
  - Stainless steel water bath complete with water discharge cock. Heater, cube mould, test mould, "are not included" and have to be ordered separately (see accessories).
- Dimensions: 530 x 600 x 820 mm  
Weight: 160 kg

B059-10



ACCESSORIES:

#### B059-15

CUBE MOULD 70,7 mm.

To prepare cube specimens.

Steel manufactured, it is easily detachable. Weight: 4350 g

#### B059-16

PENETRATION (ADJUSTABLE) TEST MOULD 69 mm.

Used during the penetration test of the cube specimen.

Made from aluminium alloy. Weight: 1850 g

**B059-17** BASE, steel made, to fix the Marshall specimen into the Penetrometer. Weight: 1100 g

**B059-18** CALIBRATION DEVICE for the Indentation Penetrometer. Weight: 700 g

#### B059-21

THERMOSTAT DIGITAL HEATING SYSTEM, complete with immersion heating element.

It heats water at the required temperature of 22°C. or of 40°C. with an accuracy within +/- 1°C. as requested by Standards.

Power supply: 230V 1ph 50Hz 1500W

Weight: 3 kg. Approx.

## BITUMINOUS MIXTURES TEMPERATURE MEASUREMENT

STANDARD: EN 12697-13

### VI54

#### Digital microprocessor thermometer

Range : -50 +950°C., resol. 0,1 – 1°C.

Supplied "without" probes to be ordered separately (see accessories).

Technical details: see section "V" pag. 480

VI54



ACCESSORIES:

**VI54-01** Penetration probe, 120 mm long

**VI54-02** Surface probe, 260 mm long

