

## SETTING TIME AND CONSISTENCY OF CEMENT

**E050**

### Automatic recording penetrometer "Italcementi model" \*

Used for determining the initial and final setting time of hydraulic binders.

This instrument automatically measures and records the time needed by a cement paste to reach a pre-established consistency degree.

The setting of the specimen is measured in static conditions; it is continuously and automatically recorded on a diagram allowing an accurate and uniform determination of the initial, intermediate and final hardening process.

The operator obtains a graph with the results of each tested specimen, accurately showing the progressive increasing of the consistency-time ratio (consistogram).

The instrument automatically cut-off at the end of the test.

\* NOTE

This Penetrometer has been expressly manufactured on specific request of "Italcementi group" cement factory.

THE PENETROMETER IS SUPPLIED COMPLETE WITH:

- two penetration needles
- two plastic moulds dia. 70/80 h 40 mm complete with base and humidity hopper
- two writing ink pens
- 100 recording diagrams

Power supply: 230V 1ph 50Hz 100W

Dimensions: 450 x 185 x 370 mm

Weight : 22 kg



E050

## LOSS-ON-IGNITION OF CEMENT AND BUILDING LIME, AND CONTENT OF CHLORIDE, CARBON DIOXIDE AND ALKALI INTO THE CEMENT

STANDARDS: EN 196-2 / EN 196-21 / EN 459-2

A muffle furnace is used to oxidize the sample in air at  $975 \pm 25$  °C.

Technical details:

see mod. A024, pag. 28 section Aggregates.



A024

**E059**

### Funnel groove

CONSISTENCY OF GROUTS

STANDARDS: EN 13395-2 / UNI 8997

Used to determine the consistency of the expansion premixed cement mortars for anchorages, mixed with water, classified of super-fluid type. Supplied complete.

Weight: 20 kg



E059

**E060**



E060-01

E060-03

### DETERMINATION OF THE FREE EXPANSION IN PLASTIC PERIOD,

and of the exudation quantity of the mixing water on expansion premixed mortars for anchorages, mixed with water.

STANDARDS: UNI 8996, 8998

The equipment consists of:

**E060** Bridge of dual measure, formed by a steel square straightedge with two adjustable measure screws

**E060-01** Fix caliper at two steps, having heights of 100 and 107 mm

**E060-03** Metallic container dia. 99x120 mm with 3 hermetic covers

