



M028E ELECTRONIC AUTOMATIC PENETROMETER

The electronic automatic penetrometer measures and records on a continuous gradual increase of the consistency of the dough cement or any other similar material.

A needle with an appropriate form to ensure a constant friction surface, is able to penetrate slowly in a mass, provided that it applies a force equal to the resistance that opposes the movement. In the automatic recording penetrometer, is not the needle that sinks into the specimen, but the specimen that rises towards the needle on which, initially, no force is applied. In spite of the fact that the relevant movement of the two elements is very slow (and therefore imperceptible), there is a moment in which the consistency reached by the specimen is sufficient to drag the needle, that starts rising. The needle is connected with a 5000 g load cell.

The acquisition and management system is managed by a microprocessor with LCD display for displaying the value of load in real time, the initial and final setting time. The software give the possibility to view in real time the Load/time curve (CHART) and record the values in ACCESS format (.MDB) and print the test certify with the graphic of the curve. Also you can export the CHART on format :bmp, jpg, emf, png, gif, tif.



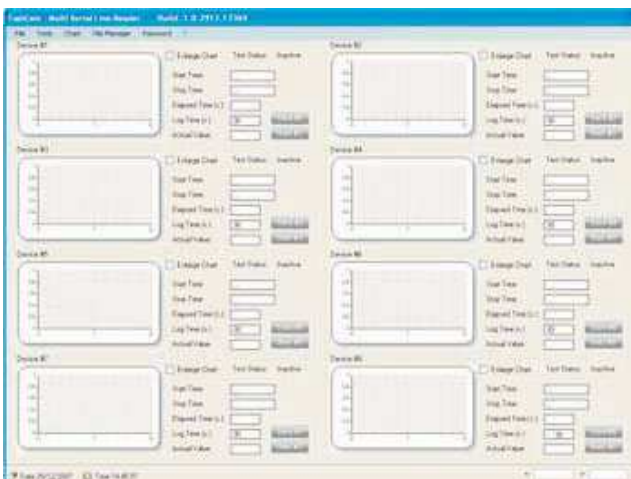
Through the unit SERVER ETHERNET (**MUST BE ORDERED BY PURCHASING THE PENETROMETER**) you can connect up to 8 penetrometers which communicate with the PC through the input network ETHERNET 10/100 Mbps. For only one penetrometer you don't need this SERVER but only the RS232 serial port on PC.

With this penetrometer the hardening of sample is not only measured in static conditions but also recorded in continually and automatically. You obtain the Faithful documentation of the characteristic behaviour of each sample on a graphic form representing the increase and progressive increasing of consistency depending on time. At the end of the test, the instrument stops automatically, with no need of survey by the operator during his function. The body is built in a light alloy but in a very compact way.

The supply included:

- Software **LBG-FASTCOM** for management and acquisition
- N°1 Conical plastic mould
- N°1 Penetration needle
- Manual instructions



The accessories to effect all the tests have to be ordered separately.







TECHNICAL CHARACTERISTICS

Maximum force cell Resolution	5 kg 0.002 kg
Speed of climb of sample	3 mm/h
Maximum test time	12 h
Dimensions Width x Depth x Height	320 x 180 x 430 mm
Weight	11 kg
Power Supply	240V 1ph 50Hz + T

ACCESSORIES

	M028E-A100 SERVER ETHERNET MODUL RS232/10/100 Mbps Unit with 8 connections for connect up to 8 penetrometers.
	M028E-A101 SERVER ETHERNET MODUL RS232/10/100 Mbps Unit with one connection for connect one penetrometer.
	M028E-A102 PERSONAL COMPUTER Operating system: Windows 7 Microprocessor: Intel Core i5 3Ghz o Superiore Ram memory: 4Gb o Superiore Hard Disk: 500Gb o Superiore ETHERNET Connection 10/100 Mbps Mouse and keyboard Logitech Monitor Asus 21.5" LED Color printer HP OfficeJet 6100

SPARE PARTS

	M028E-A100 SERVER ETHERNET MODUL RS232/10/100 Mbps Unit with 8 connections for connect up to 8 penetrometers.
	M028E-A101 SERVER ETHERNET MODUL RS232/10/100 Mbps Unit with one connection for connect one penetrometer.
	M028E-R100 NEEDLE FOR FALSE SETTING TIME
	M028E-R101 PENETRATION NEEDLE



M028E-R102 CONICAL PLASTIC MOULD
Consisting of 3 pieces (Base, body and top)