

Product Showcase

Testing Equipment

Accu-Tek Touch 250 Auto

ELE International's Accu-Tek Touch 250 Auto is an automatic compression testing machine, fully compliant with ASTM C39/C39M and AASHTO T 22 concrete testing standards. The Accu-Tek Touch 250 Auto has a capacity of 250,000 lbf (1110 kN), with kN or kgf options, and is delivered ready for testing 6 x 12 in. (152 x 305 mm) cylinders. Users can also rapidly mount a wide range of optional accessories to the upper crosshead, including platens for testing 4 x 8 in. (102 x 203 mm) cylinders and 2 in. (50 mm) mortar cubes as well as loading blocks for testing 6 x 6 in. (150 x 150 mm) concrete beams. Automatic loading is provided by a closed-loop hydraulic system, with automatic stress calculation. Test results are recorded with the machine serial number, and load versus time is plotted in real time. Providing full traceability, this data can be stored for later use.

—ELE International Ltd, www.ele.com



Gilson Super Air Meter

Gilson's HM-345 Super Air Meter is a modified version of a conventional Type B concrete air meter. It measures both total air content and air void spacing factor of fresh concrete in under 10 minutes. The meter complies with traditional ASTM C231/C231M and AASHTO T 152 test methods for total air content, and it produces a system air metric (SAM) number as described in AASHTO TP 118. The unique, pre-programmed digital controller guides the user through the sequential pressurizations applied to the specimen. The SAM number is the difference between two peak values and reflects average size and spacing of the air voids. The optional CAPE Tank accessory provides compressed air via three regulated inflation chucks. It eliminates manual pumping and reduces the effort required to pressurize the meter.

—Gilson Company, Inc., www.globalgilson.com



Elcometer 510 Automatic Pull-Off Adhesion Gauge

Elcometer 510 Automatic Pull-Off Adhesion Gauge measures the strength of the bond between a coating and its substrate. It is equipped with an automatic hydraulic pump that ensures smooth and continuous pressure application and has fully adjustable pull rates of 0.1 to 1.4 MPa/s (15 to 203 psi/s). Adhesion testing can be performed as either a pull to a maximum value or to a preset limit. Elcometer 510 comes with 10, 14.2, 20, and 50 mm (0.4, 0.6, 0.8, and 2.0 in.) dolly options. For accurate, repeatable, and reproducible results when testing coatings on low bond strength substrates such as concrete, a larger surface area (50 mm dolly) is required. For concrete application, the Elcometer 510 is available as a Concrete Adhesion Tester Kit, or 50 mm accessory items (skirt, dolly, cutter) can be added to existing Elcometer 510 adhesion kits.

—Elcometer, Inc., www.elcometer.com



Spectra QEST

Spectra QEST provides software solutions for materials engineering and testing companies, construction materials producers, construction companies, and government agencies. QESTLab is a laboratory information management system specifically designed for the testing of construction materials. The system tracks laboratory samples and resources (personnel, security, tester competencies, equipment, and calibrations) and produces reviewed test reports, supporting over 500 common construction materials test methods with fully functional electronic worksheets. QESTFied is a field data management system for construction materials and geotechnical testing and inspection. The system removes the need to physically move paper records, eliminates data transposition, and reduces report turnaround times. QESTConcrete is a software system for design, management, and optimization of concrete mixtures. The system works with raw material and concrete test quality control data from QESTLab as well as concrete production data (batch records and costs). Construction Hive is a cloud-based platform for report and data distribution and analysis of information.

—Spectra QEST,
www.spectraquest.com



Tramex Concrete Inspection Kit

Tramex Concrete Inspection Kit, CIK5.1, allows for instant and precise measurement of moisture content in concrete per ASTM F2659 to a depth of about 3/4 in. (20 mm), as well as ambient air conditions and in-place relative humidity in concrete per ASTM F2170. The kit includes a CMEX II concrete meter, four Hygro-i® relative humidity probes, 12 hole liners, SALT75 (calibration check salts), and an infrared thermometer.

—Bluebeam, Inc., www.tramexmeters.com



Giatec SmartRock2

Giatec's SmartRock2™ is a wireless sensor that allows real-time temperature and maturity monitoring of concrete. The sensor is installed on a reinforcing bar before concrete placement at a recommended installation depth of within 50 mm (2 in.). The sensor has a wireless range of up to 8 m (26 ft). Its temperature range is between -30 and 80°C (-22 and 176°F) with an accuracy of ±1°C (1.8°F) and resolution of 0.5°C (0.9°F). SmartRock2™ can be used to accurately estimate the strength of concrete over time per ASTM C1074. Sensor data can be monitored in real time on a smartphone or tablet using the SmartRock2™ app.

—Giatec Scientific Inc., www.giatecscientific.com

CTG-2 Concrete Thickness Gauge

Olson Instruments Inc.'s CTG-2 (concrete thickness gauge) is a handheld, battery-powered, nondestructive system for measuring thickness of concrete slabs, pavements, tunnel linings, walls, and other platelike structures. CTG-2 uses the impact-echo test method per ASTM C1383 to test concrete with thicknesses from 3 in.

to 6 ft (80 mm to 1.8 m). It works through paint and most types of bonded ceramic tile. When calibrated on a known thickness location, the instrument's accuracy is ±2%. CTG-2 works with most Windows 7 and Windows 8 devices and uses Olson's WinCTG2 Software for data acquisition and analysis.

—Olson Instruments Inc., www.olsoninstruments.com



AZ Technology Portable Spectroreflectometer

AZ Technology LPSR 300T Portable Spectroreflectometer allows for an easy and quick measurement of total hemispherical spectral reflectance of almost any surface from 250 to 2800 nm. It also has a capability to separate out the specular component in accordance with ASTM E903. The LPSR 300T is designed for use both in the field for measuring the surfaces of existing buildings and in the laboratory or manufacturing facility to test specimens of varying sizes by inverting the unit and placing samples on top.

—AZ Technology, www.aztechnology.com