

Testing Equipment

GSSI UtilityScan GPR System

The UtilityScan GPR (ground-penetrating radar) system is a portable, compact unit that is easy to maneuver in tight survey areas. It features a new wireless antenna that can handle required data rates and is built to withstand field conditions. The electrical design uses GSSI's patented HyperStacking technology, which increases depth penetration in challenging soils while also providing high near-surface data resolution. The UtilityScan has a backup Ethernet connection if Wi-Fi is not desired or allowed on a jobsite. The unit can also be equipped with the LineTrac™ accessory, which helps locate power sources situated underground, including AC power and induced RF energy present in conduits.

—Geophysical Survey Systems, Inc., www.geophysical.com



modes of vibration are available for measurements: longitudinal, transverse (flexural), and torsional. The Emodumeter automatically computes the maximum amplitude, and the frequency spectrum is shown on an easy-to-read, backlit display. The device itself can store 200-plus readings, and data can be uploaded to and stored on a PC for further analysis.

—James Instruments Inc., www.ndtjames.com

Giatec SmartHub

SmartHub™ is a 24/7 remote monitoring system that works with Giatec's SmartRock™ wireless concrete maturity sensors to allow users to access their concrete data anywhere at any time. The waterproof SmartHub device automatically collects concrete temperature and strength data from the SmartRock sensors and uploads it to the Giatec360 cloud via LTE/Wi-Fi connection. The real-time data is then synced to construction teams on their mobile phones within the SmartRock app. With SmartHub's alert system combined with Roxi's artificial intelligence capabilities, users receive notifications when their concrete has reached specific temperature gradients or strength thresholds.

—Giatec Scientific Inc., www.giatecscientific.com



GCP AIRTRAC

The AIRTRAC™ Air Control System for Precast Concrete is a sensor that is installed in a mixer to measure the total air content and temperature of a concrete mixture as it is mixing. This allows users to determine in real-time whether a mixture has gone outside of the batch's specifications, allowing corrections and minimizing waste and rework. Data from AIRTRAC is uploaded to a web-enabled cloud system, allowing both the mixer operator and remote staff to access the data and troubleshoot problems as they arise. AIRTRAC is designed for use in equipment with stationary outer walls, including pan, planetary, twin-shaft, and turbine mixers.

—GCP Applied Technologies, www.gcpat.com

James Instruments Emodumeter

The Emodumeter® is a device that tests resonant frequency of materials. It can be used to determine a material's modulus of elasticity, Poisson's ratio, and damping constant. Specimens up to 6 in. (150 mm) in cross section and from 1.75 to 28 in. (45 to 700 mm) in length may be used. Data are generated by an impact sensed by an accelerometer. Three

Creaform HandySCAN 3D

The HandySCAN 3D is a handheld metrology-grade three-dimensional (3-D) scanner with a large scanning area comprised of 11 laser crosses. It is capable of scanning irregular surfaces and complex shapes in high resolution and offers measurements that are repeatable and accurate to 0.025 mm (1 mil). No gear is required for operation outside of the device itself. Scans are accurate even when the HandySCAN 3D or the user moves during scanning thanks to the scanner's dynamic referencing. It is easily portable at a weight of 2.1 lb (0.94 kg). The HandySCAN 3D comes packaged with VXelements™, Creaform's 3-D software platform.

—Creaform, www.creaform3d.com