

# Product Showcase

## Testing Equipment

### Fluke IR-Fusion Technology

Fluke IR-Fusion® technology captures a visible light image in addition to an infrared thermal image. This combination allows users to easily see, document, and address problems uncovered during a thermal inspection. Fluke's technology provides pixel-for-pixel alignment of digital and infrared images, allowing for optimal on- and off-camera analysis. The modes of IR-Fusion technology include: full infrared, which displays a full-screen infrared view for maximum detail; picture-in-picture, which maintains a frame of reference by placing an infrared "window" within the digital image; AutoBlend™ mode, which blends partially transparent infrared and visible images into a single view for easy problem detection; IR/color alarms, which isolate problem areas within user-defined temperature ranges; and full digital, which displays a digital image. Users can capture and annotate corresponding digital and infrared thermal images in the field and quickly import them into the SmartView software to set the viewing mode for presentations or publications.

—Fluke Corporation, [www.fluke.com](http://www.fluke.com)

### Chlorimeter

James Instruments' Chlorimeter™ determines chloride concentrations by measuring the voltage from the electrochemical reaction of a pre-weighed powder sample placed in an extraction liquid. It automatically displays a temperature-compensated reading ranging from 0.002 to 2% chloride by weight. Initial test results can be determined in less than 5 minutes. More accurate results are typically obtained after the sample has been in the extraction liquid for 24 hours. Test results are stored and can be uploaded to a computer.

—James Instruments Inc., [www.ndtjames.com](http://www.ndtjames.com)



### ForneyVault

ForneyVault™ securely gathers material testing data in an unalterable, auditable format. Clients can review the test results and be sure that their testing was done and done properly. Each data set is organized in a structured database according to unique GUID codes. ForneyVault is a subscription cloud database that automates the collection and storage of data and facilitates real-time integration of test data into the user's business system. Access is gained via a secure website or the user's laboratory information management system.

—Forney LP, <https://forneyonline.com/forney-vault>

### Olson Engineering Sonic Surface Scanner

Olson Engineering Sonic Surface Scanner (S3) uses the impact echo (IE) test method and can be used to measure concrete slab thickness on undamaged slabs; detect corrosion delamination at top and bottom reinforcing bar mats; and locate other defects such as cracks, voids, honeycombing, and debonding of concrete deck overlay and asphalt pavement lifts. The rugged and portable S3 can quickly scan large areas at 6 in. (152 mm) intervals; produce high-accuracy deck condition maps; and scan plain, reinforced, or post-tensioned slab construction. The unit is designed for easy use, and it can be operated by a single technician.

—Olson Engineering, [www.olsonengineering.com](http://www.olsonengineering.com)

## Vaisala HUMICAP Humidity and Temperature Probes

The Vaisala HUMICAP® Humidity and Temperature Probes HMP4, HMP5, HMP7, HMP8, and the Vaisala Temperature Probe TMP1 are designed for applications that involve pressure, temperature, and high or rapidly changing humidity. Those applications include drying and test chambers, combustion air, and other humidifiers and meteorological measurements where measurement performance and chemical tolerance are essential. The probes share functionalities such as chemical purge and sensor heating. The HMP7 probe features warmed probe technology, which enables accurate measurements in highly condensing environments. All the HMP probes are equipped with the new Vaisala HUMICAP® R2 composite sensor, which provides corrosion resistance, particularly in acidic environments. The HMP and TMP probes are also resistant to dust and most chemicals, and their surfaces are smooth and easy to clean. The probes are compatible with the free Vaisala Insight PC software, which allows convenient setup, diagnostics, and field calibration. The probes can also be used without Indigo host device through Modbus protocol.

—Vaisala, [www.vaisala.com](http://www.vaisala.com)

## Proceq Ultra Wideband GPR Live

Proceq's Ultra Wideband GPR Live ground-penetrating radar uses steeped-frequency continuous-wave (SFCW) technology to provide rapid inspections. SFCW features include a frequency range of 0.9 to 3.5 GHz for structural concrete applications, eliminating the need to switch antennas to obtain clear images of both shallow and deep areas; a maximum peak power of 10 dB; maximum depth range of 28 in. (711 mm); built-in live-wire detection feature; and multiple measurement modes. The device wirelessly connects to iPads (iOS 9.0 or greater) through the free Proceq GPR Live app, allowing users to collect, analyze, and share data. The portable scan car is tough, yet lightweight. The Proceq GPR Live unit can be used to assess structural integrity; verify as-built conditions; detect and locate reinforcing bars, voids, ducts, and wires; and assess the thickness of asphalt and concrete layers on slabs and pavements.

—Proceq, [www.proceq.com](http://www.proceq.com)



## Luna ODiSI 6100

The Optical Distributed Sensor Interrogator (ODiSI) 6100 provides thousands of strain or temperature measurements per meter of a single high-definition fiber sensor. The high-definition data can fully map the contour of strain for a structure under test (or the continuous thermal profile of a process) in real time. The fiber optic sensor is flexible, has a low profile, requires no electrical source, and can be bonded to sharply curved surfaces, embedded within structures, or mounted directly to electrical surfaces. When used on (or in) concrete or other composite material, a sensor can provide high-density data that can pinpoint the exact moment of a crack's initiation, long before it becomes visible.

—Luna Innovations Incorporated, [www.lunainc.com](http://www.lunainc.com)

