

# INNOVATION

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## Hansford Sensors debuts compact triaxial vibration monitor



The HS-173 accelerometer. (Courtesy: Hansford Sensors)

Hansford Sensors, a leading designer, developer, and manufacturer of high performance industrial accelerometers, has launched a compact and lightweight 100mV/g triaxial vibration sensor.

Called the HS-173, the new accelerometer is a side-entry device can be used in both online and offline applications and has been introduced to enable OEMs, vibration analysts, and end users to measure vibration in three axes simultaneously. This makes it ideal for use across a range of industries.

With an operating sensitivity of 100mV/g and a transverse sensitivity of less than 5 percent, the HS-173 is one of the most compact triaxial accelerometers on the market and ensures measurement time can be reduced due to the simultaneous reading of three axes. This, combined with its excellent frequency response of 6 Hz to 6 kHz, makes it ideal for monitoring vibration in a variety of machines, from fans, motors, pumps, compressors and gear-

boxes, to conveyors, process equipment, and spindles on machine tools.

The HS-173 is a robust and reliable industrial accelerometer, weighing just 250 grams, protected by a stainless steel casing that is sealed to IP67, and capable of operating at temperatures ranging from -55 to 140 degrees C. Installation is quick and simple, via a standard M12 connector, either temporarily for offline data monitoring with a handheld data collector or online as part of an integrated condition monitoring system.

The HS-173 forms part of Hansford Sensors' extensive range of industrial accelerometers, which includes 4-20mA, AC and AC/Velocity sensors, vibration modules, enclosures, switch boxes, and cables and connectors. ↴

Source: Hansford Sensors

For more information, go to [www.hansfordsensors.com/us/](http://www.hansfordsensors.com/us/)



The Rotorlock locking system has been developed for application in wind power stations with a nominal capacity of up to 7 MW. It absorbs transverse forces of up to 7,500 kN (Courtesy: Roemheld).

## ‘Rotorlock’ locking system rated for turbines up to 7 MW

Roemheld has improved the performance of its modular locking system “Rotorlock” for the inspection and maintenance of wind-power stations. With a transverse force absorption of up to 7,500 kN, the systems reliably and safely lock rotors with a maximum capacity of 7 MW. Customer-specific variants with higher values are also possible. Due to their design and special coating, they are maintenance-free and corrosion-free through the entire service life of onshore and offshore stations.

The core of Rotorlock is a double-action, hydraulically or electromechanically driven pin that quickly and reliably locks the rotor disc. Non-contact position monitoring transmits the end positions “rotor disc locked” and “rotor released” to the system control and hence provides for extra safety for the operator.

At present, great interest for the locking system developed by Roemheld is shown by the offshore industry. Adverse weather conditions, temperatures between  $-30^{\circ}\text{C}$  and  $70^{\circ}\text{C}$  and air with a high salt content are easily managed by Rotorlock. All components meet the corro-

sion protection requirements for offshore stations with a surface coating pursuant to DIN ISO 12944.

### SPECIAL COATING

A special coating provides long-term protection for the sleeve where the locking pin rests during wind-power station operation. Roemheld warrants continuous corrosion protection for a period of 25 years and hence the typical service life of a wind-power station. Regreasing, as for other models, is not necessary, either. The element is therefore practically maintenance-free and ready to use at any time.

Since only restricted space is available in most gondolas, the locking system has a specially compact design. As stated by Roemheld, the standard modular systems allows for offering special designs on the short term and at reasonable cost.  $\sphericalangle$

*Source: Roemheld*

For more information, go to [www.roemheld-gruppe.de](http://www.roemheld-gruppe.de)

## G&W Electric collaborates with GE on new integrated recloser relay

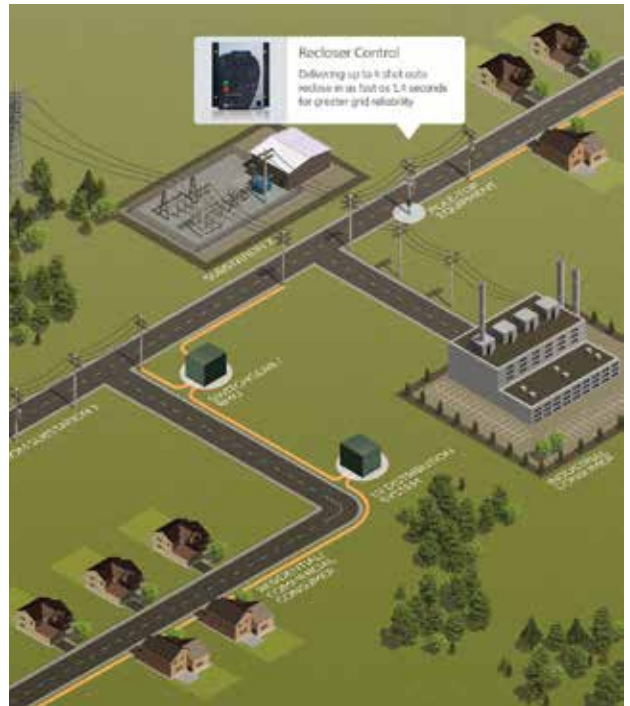
G&W Electric and GE's Grid Solutions have collaborated on the development of a new integrated recloser solution. G&W's Viper®-ST Recloser has been designed and tested to work seamlessly with GE's new Multilin® R650 recloser control. It delivers comprehensive performance in protection, monitoring, control, automatic network configuration, and communications. This is a leading recloser package to be deployed in distribution automation projects using G&W's LaZer® solution.

"Providing highly reliable and smart switchgear solutions to customers while meeting the evolving challenges of distribution automation is G&W's specialty," said John Mueller, G&W Electric owner and chairman. "By collaborating with GE, G&W's solid-dielectric recloser products perform reliably, and provide customers with an easy solution to install, maintain, and monitor."

GE's Multilin R650 platform provides secure and reliable protection by offering a comprehensive range of standard and advanced elements with multiple stages and wide setting ranges for each. Because a recloser needs a highly accurate and efficient tripping mechanism to clear as many faults as possible, the R650 contains a unique driving electronics module specifically matched to the Viper-ST recloser design. This combined solution delivers reliable four-shot auto-reclosing in as fast as 1.4 seconds, ensuring distribution utilities can maintain grid reliability.

"G&W's customized solutions, well-regarded reputation, and expertise made them an obvious partner for GE," said Jeff Mazereeuw, chief technology officer. "G&W's Viper-ST model is a great fit for this integrated solution. Together with the R650, it will deliver the speed, flexibility, and situational awareness needed for intelligent, distributed control. By collaborating with leaders like G&W, we can ensure our utility customers are provided with intelligent, simple to deploy, and effective distribution automation solutions to address the demands of the new network."

With a new 16kA rating, G&W's Viper-ST is a three-phase independent pole-operated recloser. It offers single or three-phase trip and single or three-phase lockout, fast-



GE's Multilin R650 platform provides secure and reliable protection by offering a comprehensive range of standard and advanced elements with multiple stages and wide setting ranges for each. (Courtesy: GE)

er installation with site-ready designs, maintenance-free solid-dielectric technology, field-changeable silicone insulators, a single 32-pin control cable interface and advanced safety features. This integrated solution allows for single phase tripping capabilities and integral current and six voltage sensing that allows for automation, providing significant reliability improvements.

A variety of options are available for the integrated Viper-ST and R650 recloser solution including recloser control accessories, customized pole-mount and substation frames, wildlife protectors, lightning arrestors, and more. ↴

Source: G&W Electric

For more information, go to [www.gegridsolutions.com/multilin/catalog/r650.htm](http://www.gegridsolutions.com/multilin/catalog/r650.htm)

## Spectro upgrades SpectroTest mobile metal analyzer

Spectro Analytical Instruments recently announced a major upgrade to its SpectroTest arc/spark mobile metal analyzer for applications in the metal producing, processing, and recycling industries.

The SpectroTest mobile spectrometer delivers precise

results without compromise when an exact metal analysis is required, materials are difficult to identify, or there is a large number of samples to be tested. Applications include the on-site grade confirmation of incoming materials at the shipping dock or on the production floor,

or when metal sorting for value-optimized recycling.

The upgrade, which introduces a new, more-advanced readout system, represents a dramatic improvement to an already industry-leading solution. The new readout is a prerequisite for the introduction of iCAL 2.0 — a consistent enhancement of the instrument's proprietary iCAL calibration logic system; iCAL 2.0 enables the mobile analyzer to deliver unsurpassed stability, even in the face of ambient temperature changes.

With pre-defined calibration packages and the iCAL 2.0 diagnostics software, the upgraded SpectroTest allows users perform a single-sample standardization (in less than 5 minutes) at the start of the day's testing. The iCAL diagnostics ensure stable performance through a typical day, and, now the software helps maintain the same standardization, regardless of most temperature shifts.

The SpectroTest analyzer is designed for productivity and reliability as well as portability. The analyzer's high-resolution optical system provides for the probably widest element range, including N, Li, Na — all elements necessary for a complete on-the-spot metal analysis.

Its measurements are fast with flexible, point-and-shoot analysis. Sample probe adapters are quick and easy to change for arc excitation and spark excitation (arc spark OES). Its battery-powered operation can deliver up to 800 measurements on a single charge. An app enables the display of the measuring screen on a PC monitor, tablet, or smartphone. Results can be simultaneously observed in the laboratory and on site.

Global service and support for the upgraded SpectroTest are provided through the AMECARE Performance Services program, backed by more than 200 AMECARE service



The SpectroTest mobile spectrometer. (Courtesy: Spectro)

engineers in 50 countries, who help ensure peak performance and extended life for every SpectroTest instrument. AMECARE's high-value, customized services include proactive maintenance programs, application solutions, access to specialists, and instrument-specific training.

The upgraded SpectroTest mobile arc/spark spectrometer is available from Spectro Analytical Instruments. ↵

Source: Spectro  
For more information,  
go to [www.spectro.com](http://www.spectro.com)