

350900 High-Temperature Velocity and Acceleration Sensor

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Building on over 25 years of experience with seismic vibration measurements on gas turbine casings, we are pleased to announce the new Bently Nevada® 350900 High-Temperature Velocity and Acceleration Sensor (HTVAS). Chosen by GE Energy for the monitoring and machinery protection aspects of their new LMS100™ gas turbine, the HTVAS is not limited to one particular engine type or manufacturer – it is generically applicable for use on a wide variety of aeroderivative and industrial gas turbines. With a 4-hole pattern that matches many existing high-temperature accelerometers, the transducer is intended both for inclusion by OEMs on new units as well as for retrofits when replacing an older sensor or addressing an existing machine without any currently installed instrumentation.

The sensor's reliable design separates the high-temperature-rated sensing element from the signal conditioning electronics, with the two permanently connected via a flexible, mineral-insulated, hardline cable. This robust arrangement allows mounting of the sensing head in areas with temperatures as high as 482°C (900°F) while the electronics can be installed in a

cooler location up to 125°C (257°F). By eliminating connections between the sensing element and its associated signal conditioning electronics, a common source of potential transducer failures – connector problems – is eliminated.

Excessive casing vibration velocity is often used for machinery protection alarms, while the unfiltered acceleration signal is highly useful for machinery diagnostics. With the HTVAS, both acceleration and integrated acceleration (velocity) measurements are simultaneously provided, thereby simplifying installation and reducing noise compared to designs that extract a velocity measurement further away from the sensor.


The HTVAS is compatible with Bently Nevada's popular 3500 Series machinery protection system, along with a number of other monitoring, control, and protection platforms that address the unique filtering and signal processing requirements of gas turbines. A



BENEFITS

- Increased reliability
- High operating temperature
- Simultaneous velocity and acceleration outputs
- Compatibility with 3500 Series and other monitoring systems
- Available in a variety of integral cable lengths

variety of service offerings are also available to help customers with sensor installation as well as integration with the appropriate machinery protection, machinery control, and condition monitoring systems.

North American and European (ATEX) hazardous area approvals and the European CE mark are available. Additional information is available on www.bently.com, or by contacting your nearest Bently Nevada sales professional. 

learn more online at

<http://www.bently.com/prod/newprod/newb.htm#HTVAS>