

MillerCoors brewery uses Meggitt's Wilcoxon Research accelerometers for portable data collection

Brewing beer employs a variety of machines which benefit from machinery health monitoring. At the MillerCoors facility in Ft. Worth, Texas, Wilcoxon Research vibration sensors are among the brewery's arsenal of condition monitoring equipment.

MillerCoors uses permanently installed Wilcoxon Research 797 accelerometers from Meggitt Sensing Systems. The 797 is a 100 mV/g ($\pm 5\%$) general purpose accelerometer with a side exit connector. The low profile enables installation in areas where clearance may be a problem due to limited overhead access. Another advantage of the side exit sensor is the captive screw mounting stud. This enabled MillerCoors to swivel the accelerometer in any direction, minimizing cable turns where space limitations may prohibit small bending radiuses. The outer case of the 797 is made from 316L stainless steel, so it is rugged and corrosion resistant for use in the harsh industrial environment. Meggitt Sensing Systems' exceptional design and manufacturing ensure uncorrupted vibration data over the long life of the 797: it is hermetically sealed to keep contaminants from entering the sensor, undergoes piezoelectric crystal stabilization, and has built-in reverse-wiring, over-voltage, ESD, EMI, and RFI protection.

The 797 is a general purpose accelerometer, meaning it is suited to monitoring a variety of industrial machinery, including the motors, pumps, and gearboxes at the MillerCoors brewing facility. The 797 accelerometers were permanently mounted, with R6Q connectors and shielded twisted pair cable. The Viton® boot of the R6Q creates an IP68-rated seal between the sensor and the cable, easily snaps in place, and will not accidentally disengage. Industrial cables were run from the sensor to a junction box to simplify and expedite portable data collection. Vibration data was collected with a portable data collector every 30 to 60 days, depending on the importance and history of the machine.

Using portable vibration monitoring with Wilcoxon Research accelerometers from Meggitt Sensing Systems, MillerCoors was able to detect faults such as misalignment, unbalance, and bearing failures before a catastrophic failure. In this way, repair costs are minimized and unscheduled downtime avoided.

Meggitt Sensing Systems is a leading supplier of sensing and monitoring systems measuring physical parameters in extreme environments.

It has operated through its antecedents since 1927 under the names of Wilcoxon Research, Endevco, Sensorex, ECET Lodge Ignition, Vibro-Meter and Ferroperm Piezoceramics. Today, their capabilities and facilities have been integrated under one Meggitt division, providing complete systems from a single supply base.

Our eight development and manufacturing sites are located in Switzerland, France, UK, Denmark and the USA. An extensive sales and support network extends across Europe, Asia and the Americas.

