Application: Petrochemical

Problem
A major petrochemical additives company has a large number of pumps that must be maintained in top working condition at all times. This had been accomplished by measuring vibration using walkaround micro-log data collectors. However, the company’s reliability team desired a less time-consuming—and costly—way to collect the data required for their predictive maintenance program.

Benefit
Compared to using handheld vibration-measuring devices, i-ALERT enables companies to collect data in about half the time. The cost savings often enable them to monitor more machines than their budget may have allowed for in the past.

Solution
The company’s PdM service provider recommended i-ALERT®2 devices to monitor the company’s equipment. The i-ALERT2 is an affordable, compact sensor that can be quickly attached to any pump, motor, fan or other type of rotating equipment. Inside the sensor is everything needed to measure temperature and vibration in all three axes. The unit takes readings every five minutes, records them every hour and stores them for 170 days. Data can then be conveniently collected with a smart phone or tablet via Bluetooth from as far away as 30-to-100 feet.

The i-ALERT app allows them to quickly create and edit data collection routes. A technician simply walks around following the list that has been created. As each i-ALERT-enabled machine comes into range, it pops up on their phone and the technician downloads the data based on pre-determined settings.

Together, these innovations have cut the company’s route-based data collection time by more than 50%. Of the 33 i-ALERT2 monitors installed, 13 can be read by standing in one spot. Upon route completion, an exception report is automatically created, which saves even more time. The net result is that the service provider’s vibration analysts can now focus on troubleshooting instead of data collection, thereby maximizing the value of their contract with the customer.