Case Study

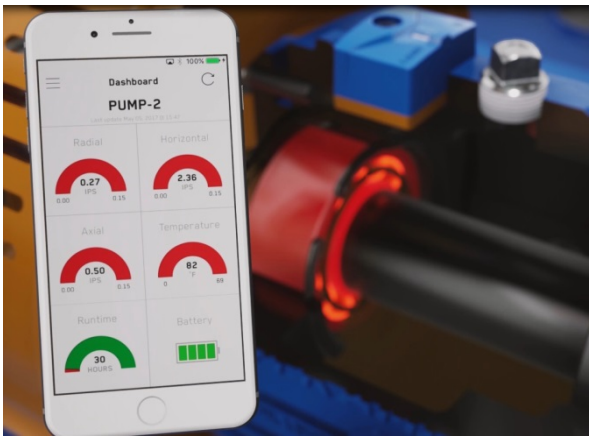
i-ALERT®

www.i-alert.com

Application: Pulp & Paper

Problem

To ensure productivity, a Fortune 500 paper manufacturer must keep all of their rotating equipment, including their tissue machine rolls, in top working condition. Normally this is accomplished through a predictive maintenance program based on measuring vibration using handheld devices. However, the reliability team was looking for a less time-consuming and more economical way to collect data. In addition, given that handheld collection can only provide “snap shot” data, they desired a means to continuously monitor their machines to provide an extra margin of protection to their program.



Solution

The manufacturer decided to install i-ALERT®2 devices on one of their tissue machine rolls. 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 manufacturer installed approximately 90 i-ALERT2 sensors on the machine. For smaller equipment, one sensor mounted to the drive-end bearing is all that is needed. With larger machines that have multiple bearing assemblies, each one should be covered with its own sensor.

Data collected by the i-ALERT2 sensors quickly identified two rolls with bad bearings. They were immediately changed out without incurring any unexpected downtime.

Benefit

The paper manufacturer is extremely pleased with the performance of the i-ALERT2, including the fact that they are affordable, compact and durable, measure vibration on all three axes and are wireless. They are planning to install them on additional tissue machine rolls.