

i-ALERT[®]

Case Study

Application: General Industry Solution Saves 72-Hour Downtime and \$290,000 USD

Background

A leading cement producer in North America has used multiple ways to do condition monitoring for their equipment as in weekly preventative maintenance routes. They looked at the i-ALERT sensor to make it efficient for their team to keep track of their routes. They started using the sensors in 2017 and then started expanding to the Ai Platform and then to the i-ALERT Gateway. They started with critical equipment and then added additional equipment. The motor in this case was not monitored using a condition monitor and was having bearing failures. To pin point the root cause a i-ALERT sensor was installed on the motor.

Solution

The cement producer installed the i-ALERT2 Sensor to pin point the root cause of these failures. They had over 40 sensors and has had one unit on this motor since January 2019. The i-ALERT2 Sensor in conjunction with i-ALERT Gateway picked up inconsistencies and sent alarm notifications for over 3 months, indicating severe imbalance. With this notification, additional investigation with a high speed camera and natural frequencies confirmed a foundation flexibility issue. This discovery allowed for the cement producer to have a planned repair. They avoided the sudden equipment failure which would have resulted in up to 72 hours of downtime, costing \$290,000 USD.

