

## CUSTOMER SUCCESS STORY

# DELIVERING VALUE WITH SEMI-CONTINUOUS DATA COLLECTION

INDUSTRY | Plastic Fabrication

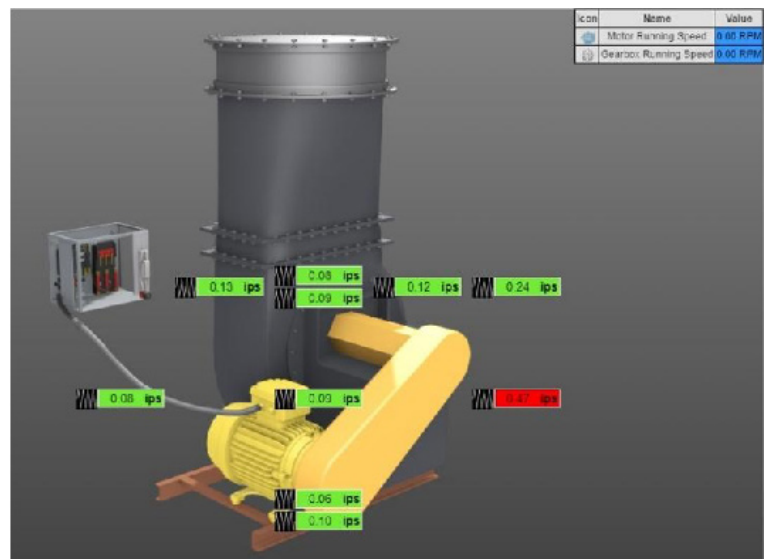


## OVERVIEW

Our wireless system detected a 3xRPM and overall data peak that exceeded the alarm threshold thus sending an alarm to the Allied Analyst. The anomaly was immediately identifiable from Allied’s SmartCBM™ application.

A full review of the data indicated that aerodynamic forces were in play. Specifically, the output of the fan had a severe blockage. The analyst created a fault entry report for the customer and communicated to everyone who was impacted. The report clearly outlined the assessment and the repair recommendation.

Further inspection revealed that product had clogged the entire baghouse and ‘bridged’ over 50% of the ‘dumps’, causing a turbulent flow issue. The facility was shut down to complete the repair, which took less than 15 minutes.



SmartCBM visual showing inboard bearing in alarm

## VALUE DELIVERED

If allowed to continue, this problem would have created quality and health and safety issues and led to bearing failure. This scenario would have required a three-day shutdown (minimum) of the entire facility.

## ENABLING TOOLS, TECHNOLOGY, AND PEOPLE

### SmartCBM™ Reliability Tool Suite

A set of proprietary tools that enable the development of a maintenance strategy listing necessary activities and their frequency to mitigate design-failure modes to maximize equipment reliability and availability. This suite includes our proprietary failure mode library, which is derived from analysis of over 3 million components from over 1500 facilities.

### Wireless Sensors

Continuous sensors collecting data three times a day.

### Allied Analyst

**Location:** >> Bag House >> Air Handling >> Blower >> Blower

**Assessment Date:** 11/6/2018 3:52:50 PM

**Job Type:** PdM

**Severity:** Critical

**Criticality:**

**Work Request:**

**Work Order #:**

**Assessment Comment:**

**Analysis Comment:** A 3XRPM peak is present and extremely high. Overall trend values have increase substantially and broke alarm levels.

**Repair Recommendation:** Check for blockage or restrictions on the discharge side of the blower.

**Repair Comment:**

**Analyst Name:** Chris Klosterman

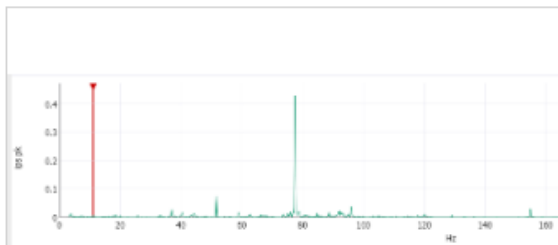
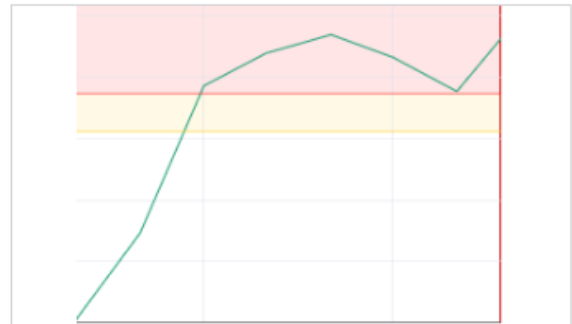
**Analyst Email:** [klostermanc@alliedreliability.com](mailto:klostermanc@alliedreliability.com)

**Technology:** Vibration

**Failure Mode:** Restricted

**Part Name:** Impeller Blades

**Reason:** Blockage



*Fault entry report capturing analysis and repair recommendation for client*