

## CUSTOMER SUCCESS STORY

# CONTINUOUS MONITORING SAVES TIME AND MONEY

INDUSTRY | Chemical Processing



## OVERVIEW

Our wireless system detected an increase in energy at 1xRPM and overall data that exceeded the alarm threshold thus sending an alarm to the Allied Analyst. The Allied Analyst then leveraged the SmartCBM™ reliability tool suite to determine the cause.



A full review of the data indicated that the coupling had locked up at startup. The analyst created a fault entry report for the customer and communicated to everyone that 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 shutdown to complete the repair, which took less than 15 minutes.

## 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 one-day shutdown (minimum) of the entire facility.

## ENABLING TOOLS, TECHNOLOGY, AND PEOPLE

### Condition Based Maintenance (CBM) Personnel

#### Allied Monitoring and Analysis

**Location:** >> SULFURIC (1A) >> SA 1-3 (0010) >> C1001020141 C1 #2 BOILER FEED WATER PUMP (1-3) >> Coupling

**Assessment Date:** 2/4/2019 9:30:43 AM

**Job Type:** PdM

**Severity:** Low

**Criticality:** 134

**Work Request:** UP

**Work Order #:** U264785041

**Analyst Name:** Todd Wisilosky

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

**Technology:** Vibration

**Failure Mode:** Misalignment

**Part Name:** Coupling, Grid Insert

**Reason:** Insufficient Data

#### Assessment Comment:

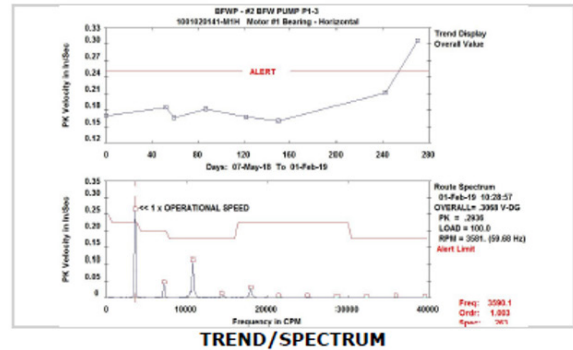
- Analysis Comment:**
- Increasing vibration on motor at one times operational speed.
  - This signature is commonly associated with coupling misalignment and/or damage.

- Repair Recommendation:**
1. Ensure all mounting hardware is intact with proper torque.
  2. Inspect coupling for wear/damage and verify alignment is within 0.002".
  3. Complete any additional repairs as found.
  4. Contact Allied for a post repair quality check when repairs are complete.

#### Repair Comment:



C1001020141 #2 Boiler Feed Water Pump (1-3)



Fault entry report capturing analysis and repair recommendation for client