

# MILLS AND CRUSHERS

MACHINE HEALTH SOLUTION FOR MINING



## THE PROBLEM:

Mills and Crushers are critical machines in mining facilities around the world. Both are required to maintain operations - used to break down & blend materials.

Maintaining mills and crushers can be challenging. Machinery is exposed to harsh conditions, is challenging to access, and is rarely offline. Unfortunately, failures are common.



### COST OF ASSET FAILURES

**Up to \$100k/hour**  
Downtime Cost

**4-30 hours**  
Downtime

**Long replacement**  
lead times

### INDUSTRY SAVINGS POTENTIAL

Average yearly mill failures:

Up to 3 per unit

Up to 12 per facility

## ASSET BLIND SPOTS:

There are several inherent challenges related to monitoring Baghouse Fan health:



**Challenge #1: Vibration frequencies are often undetectable by the human ear and eye.**



**Challenge #2: Assets are difficult to access for preventative maintenance and inspections.**



**Challenge #3: Time-based preventative maintenance is challenging to schedule, conduct, and does not prevent all failures.**

# A NEW APPROACH TO ASSET HEALTH



Above: Wireless, magnetic vibration sensor

Relying on preventative maintenance and occasional inspections do not prevent failures on mills and crushers exposed to harsh mine site conditions.

Rugged, wireless vibration sensors installed on critical, problem assets such as mills and crushers can be used to continuously monitor health and performance. Real-time data, actionable insights, and alarms are all delivered through KCF Technologies sensor and service packages.

Eliminate mill and crusher failures using predictive technology: know exactly when and how to act to avoid disaster.



## HARDWARE

- Monitor drives & bearings
- Rugged, magnetic, wireless
- Easy to install
- Installation packages available
- Measure vibration & temperature
- Advanced sensors are available to track multiple asset health metrics



## SOFTWARE

- Setup automated alarms
- Multiple asset health indicators
- Dashboards
- Easy insights
- Advanced analytics



## REAL-TIME DATA

- Actionable insights available with:
  - Bearing model numbers
  - Motor nameplates
  - Run speed & VFD information
  - Belt or gear ratios
  - Tooth counts



## TRAINING

- Expertise vibration analysis provided with Sentry Solutions packages
  - Regular site visits
  - In-person training
  - Biweekly or monthly reports
- Online KCF Academy portal

## CONTACT US!

Call **814-867-4097** or email [sales@kcftech.com](mailto:sales@kcftech.com) for information.

