

LOOPER CARS

MACHINE HEALTH SOLUTION FOR METALS



THE PROBLEM:

Looper cars are required to maintain a continuous process. Unlike the tension and payoff reels, the looper cars operate the entire time.

Looper cars are very critical to a continuous finishing line by the means of maintaining the lines continuation. If one looper car experiences a failure, the line can be down for up to 22 hours!



COST OF ASSET FAILURES

18-22 hours
Downtime

Other
Safety, Injuries, Quality

INDUSTRY SAVINGS POTENTIAL

Ability to minimize
unplanned downtime
utilizing vibration &
temperature

Having multiple looper cars
increases your chances of
having an unwanted failure

ASSET BLIND SPOTS:

There are several inherent challenges related to monitoring Looper Cars.



1. Challenge #1: Based on location and the operation of moving along a track, it can be difficult to routinely check up on Looper Cars.

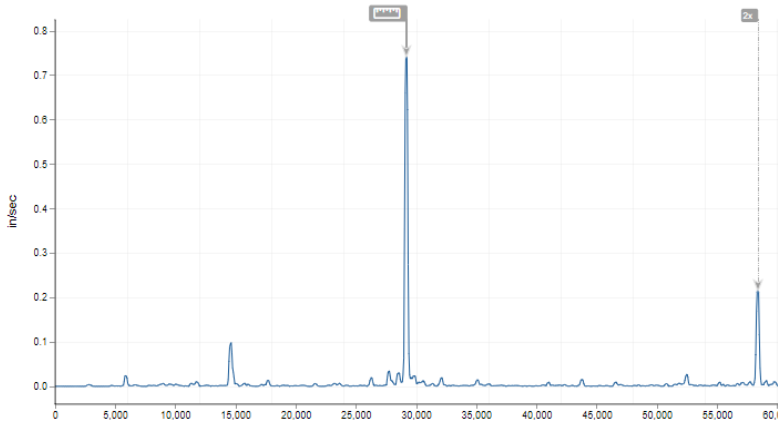


2. Challenge #2: Continuous monitoring provides the ability to monitor the equipment's entire progression to failure.



3. Challenge #3: Time-based protocols do not capture actual inflicted damage.

LOOPER CAR HEALTH OPTIMIZATION



Continuous, live-feed vibration monitoring reveals underlying fault conditions in real time.

For looper cars, fault detection comes in many forms, resulting from wear and fatigue, incorrect operating or setup procedures, and electrical issues.

The figures above illustrate a gear tooth wear condition that was detected with KCF's V3 vibration sensor. A high vibration alarm was triggered, and a spike in the gear mesh frequency and regular impacting led to a tooth wear diagnosis. The gearbox was pulled and rebuilt before a catastrophic failure resulted in costly downtime and substantial product loss.



HARDWARE

- KCF's V3 biaxial vibration sensor can be easily installed on any critical monitoring spots
 - Inboard/outboard roll bearings
 - Motor bearings
 - Drive shafts
 - Cable Drum bearings
- Oil quality sensors - particulate detection
- Ultrasonic sensors - proper lubrication



SOFTWARE

- SMARTDiagnostics monitoring
 - Continuous vibration readings
 - Individualized alarm thresholds
 - Sentry data analysis
- Data dashboard - Callout reporting



REAL-TIME DATA

- Data needed to optimize analysis:
 - Schematics/drawings of gearbox, drum, and roll system
 - Run speed
 - Bearing information
 - Crucial process flow information



TRAINING

- Sentry
 - Quarterly site visits
 - In-person training
- KCF Academy
- Customer training/handbooks

CONTACT US!

Call **814-867-4097** or email sales@kcftech.com for information.

