

TENSION REELS

MACHINE HEALTH SOLUTION FOR METALS



THE PROBLEM:

Tension reels are critical to maintaining a continuous process. A tension reel is where the steel is rolled into a coil at the end of a finishing line. If a failure occurs at the tension reel, production stops entirely, creating a massive process disruption. At KCF, we offer solutions to minimize unwanted downtime with our predictive analysis techniques.



COST OF ASSET FAILURES

\$30,000/hour
Downtime Cost

18-22 hours
Downtime

\$600,000
Replacement

INDUSTRY SAVINGS POTENTIAL

\$50,000/month

\$50,000/asset/month

ASSET BLIND SPOTS:

There are several inherent challenges related to monitoring Tension Reels:



Process demands continuous run time, with little time for PMs and inspections.



Motors and gearboxes present numerous failure modes.

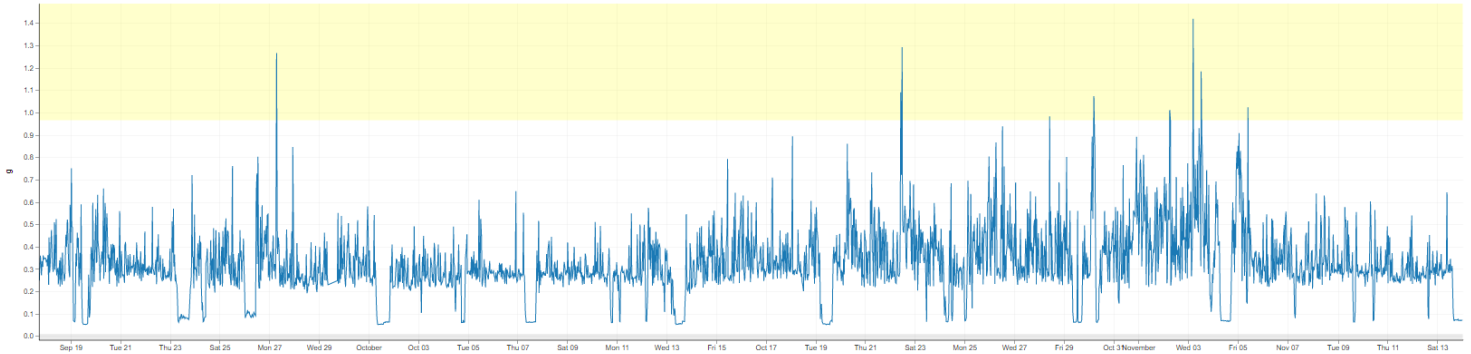


Predictive maintenance is crucial to preventing unwanted downtime.

A NEW APPROACH TO TENSION REELS

The biggest advantage to continuous monitoring is having the ability to track the assets behavior continuously.

With continuous data we can give real time updates about equipment health. Continuous monitoring is a key component to maintaining a continuous process.



HARDWARE

- V3 vibration sensors to measure biaxial vibration in each of the gearbox and reel bearings.
- BS4 base stations to remotely send the collected data to the cloud for analysis.



SOFTWARE

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



REAL-TIME DATA

- V3 vibration sensor data and analytics
- Lubrication, Thermography, and Motor Current data
- Customer process data
 - Schematics/drawings of equipment
 - Run speed
 - Gear ratios
 - Bearing make and models
 - Product and shift-specific metadata



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.

