



# TENSION REELS

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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.**

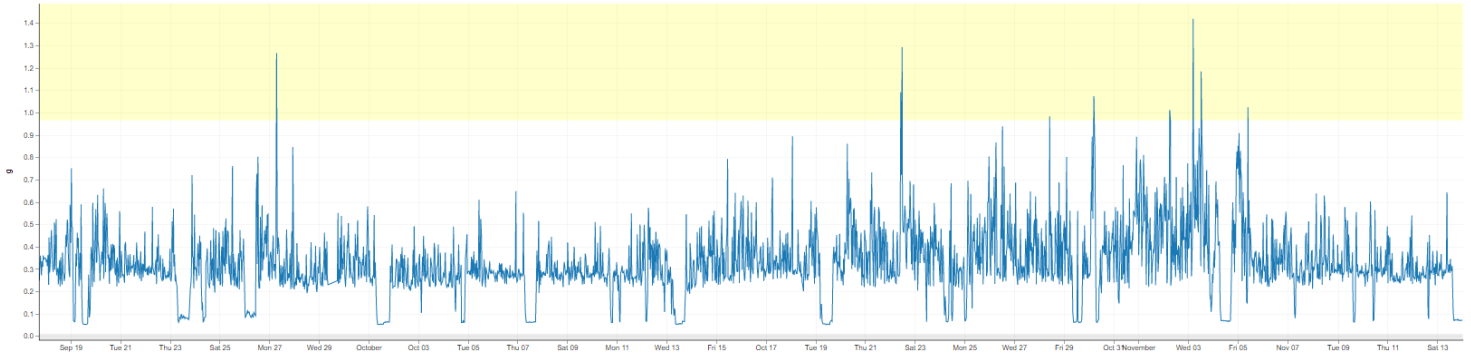


**Predictive maintenance is crucial to preventing unwanted downtime.**

# 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](mailto:sales@kcftech.com) for information.





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