



CONVEYANCE

THE PROBLEM:

Automotive conveyors have different uses, including moving parts, processing, indexing, welding, and moving heavy parts. This is critical in the operations for Toyota's manufacturing process.

When a conveyor is damaged or fails an operations shutdown is likely. Depending on the severity of the failure it could shut down a line and cause significant downtime.



COST OF ASSET FAILURES

\$900,000/hour
Downtime Cost

1-2 hours
Downtime

Other
Safety and
environmental

Navistar's SAVINGS POTENTIAL

1 hour of downtime per
asset per year
\$900,000

About 100 hours of
downtime per shop
\$90,000,000

ASSET BLIND SPOTS:

There are several inherent challenges related to monitoring conveyor systems.



Challenge #1: Improper care and lubrication can cause premature bearing failure

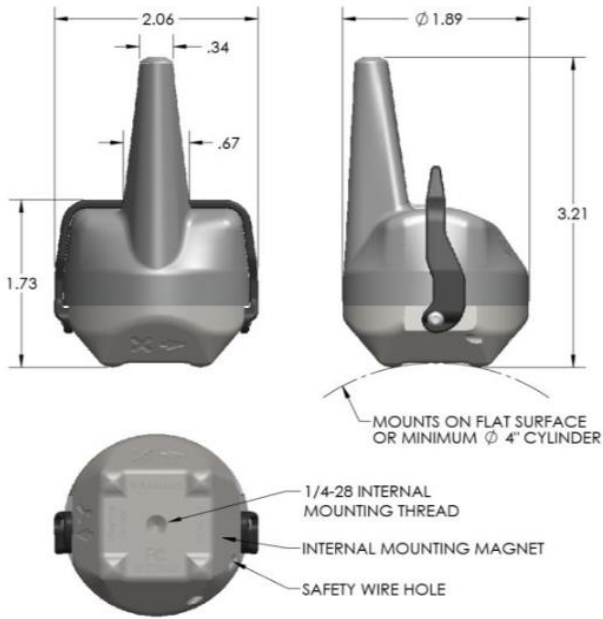


Challenge #2: Excessive tooth loads can result in higher stresses which can lead to the gearbox failing.



Challenge #3: Repetitive high load beyond endurance limit can cause the chain to fracture.

A NEW APPROACH TO CONVEYOR SYSTEMS



Time-based maintenance is often used, resulting in maintenance on assets that don't need it and over greasing bearings that can cause more damage, rather than preventing.

Our solution, using V3 sensors and SMARTdiagnostics, enables continuous, real-time machine health monitoring. This solution allows for automated callouts directly through Maximo using advanced analytics and creating dashboards to increase the plant's visibility.

Above are the specifications of a V3 Sensor



HARDWARE

- V3 Vibration Sensors
- Base stations
- Repeaters
- Time-based data collection



SOFTWARE

- Threshold Settings
- Indicators
- Sensor Configurations
- Dashboards
- Reporting
- Maximo Integration



REAL-TIME DATA

- Integrated with your real time data and machine information:
- Schematics of systems/equipment
- Run speed
- VFD information
- Bearing types
- PLC integration/process data



TRAINING

- Sentry
 - Daily visits
 - Site visits
 - In-person training
- Academy
- Customer training/handbooks

CONTACT US!

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

