

# VERTICAL DROP LIFTS

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#### VDL MACHINE HEALTH SOLUTION FOR AUTOMOTIVE

## THE PROBLEM:

A VDL is a piece of equipment that is often used in automotive plants. Its main purpose is to move the vehicles to be in position so they can be built. Typically lifts them to put them in position, hence the name Vertical Drop Lift.

This asset is important to monitor since it is crucial to the plant operations and could lead to downtime. Without this crucial asset production would likely be halted and could potentially lead to not producing enough vehicles.

COST OF ASSET

**FAILURES** 

\$7400/hour

**Downtime Cost** 

1.5 hours

Downtime

#### Navistar SAVINGS POTENTIAL

\$11,100 Per Asset

\$ 99,900 Plant Wide based on estimated asset count

## ASSET BLIND SPOTS:

There are challenges related to monitoring VDL's.



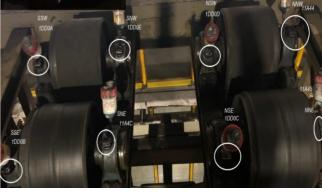
Challenge #1:Difficult for the human ear/eye to detect vibration frequencies, especially with the different number of components where issues could arise (ex. Motor, Gearbox, Bearings)



Challenge #2: Time based PMs and other checks are not thorough enough to ensure no failures would occur.



Challenge #3: Too many sensors are often offline on this asset, and we are currently only monitoring one VDL at this plant giving us no comparative data.





#### **A NEW APPROACH TO THE PROBLEM**



Above: HUB

Ford currently didn't have a great solution for this issue. This is based on the need for our equipment in the first place. However, with this plant numerous sensors are always often offline giving us practically unusable data.

The proposed solution is potentially using the HUB to monitor these assets in order to avoid the need for battery changes. Also, if we can convince them to monitor more VDL's we could also get more data to compare different VDL's which often helps to identify issues.

### HARDWARE

• 1-2 Hubs per VDL



 Make sure to set thresholds and other indicators after collecting sample data. This will alert us when the vibration increases as problems arise.



#### REAL-TIME DATA

 There shouldn't be much more information needed from the crew. We have been monitoring this asset already and have a lot of the required information needed,

# TRAINING

 The customers could continue to benefit from additional training either through the sentry team or the academy. As well as some more on-site presence even though this is a Canadian location and not as easily assessable.



#### CONTACT US!

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