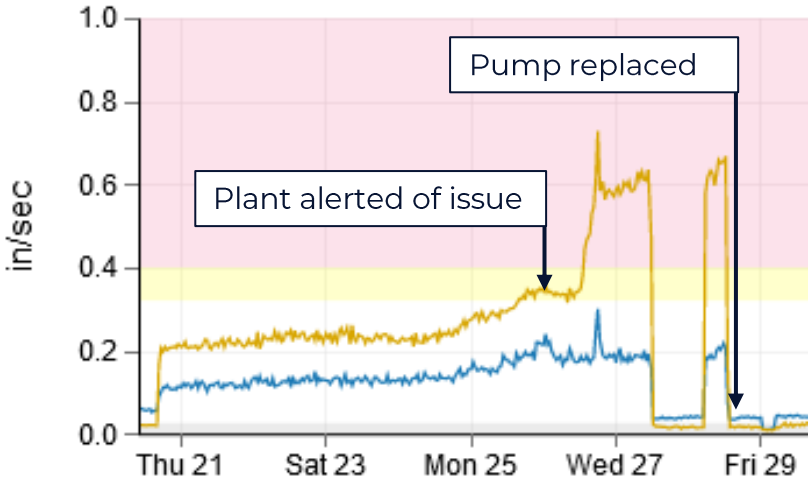
Weld Water Pump

Machine Health Solution For Automotive

THE PROBLEM:

Weld water pumps provide **process-critical** cooling to weld cells in automotive assembly shops. These assets are traditionally maintained through scheduled PM's, which can leave reliability personnel in the dark when machine condition changes rapidly. In this case, the standby pump was already out of commission for repair, so reliance on time-based maintenance would have cost a customer **millions of dollars** when asset condition changed overnight.

Weld Water Pump Trend:



COST OF ASSET FAILURE

$900,000/hour
Downtime Cost

25 hours
Downtime from Failure

$22,500,000
Total Cost Avoided

ASSET BLIND SPOTS:

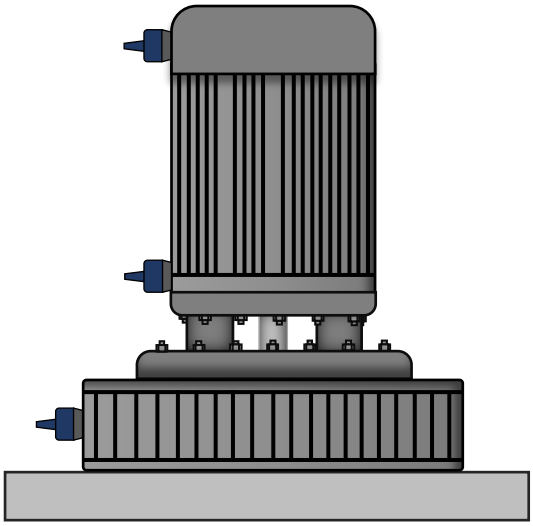
There are several inherent challenges related to monitoring Weld Water Pumps.

1. Pumps are often in low traffic areas, without continuous monitoring, this fault would have likely gone unnoticed until production was halted.

2. Automotive facilities contain several hundred critical assets, making route-based monitoring impractical

3. Time-based protocols are not sensitive to changes in machine health. With condition monitoring, you can track asset health in real time

A NEW APPROACH CENTRIFUGAL PUMPS



Suggested sensor position on vertically arranged pump

Pumps are traditionally maintained through preventative or run to failure maintenance programs. Both approaches result in wasted material, time and energy, **and** leave the asset at risk of failure.
Condition monitoring allows for data-backed maintenance decisions, which enable your Team to take the right action in the right place at the right time, **minimizing waste** and **maximizing uptime**.

HARDWARE

- 1 Sensor at Motor Outboard: Allows for detection of motor and bearing faults
- 1 Sensor at Motor Inboard: Allows for detection of motor, bearing, and coupling faults
- 1 Sensor on Pump: Allows for detection of pump, bearing, and coupling faults

SOFTWARE

- Asset specific thresholds are set for key indicators – allows for automatic fault alarming
- Email and text notifications sent in the event of a fault
- Custom dashboards facilitate data digestion

REAL-TIME DATA

- What does the customer provide:
  - Asset make / model
  - Bearing information
  - Operational Conditions
- What does the customer receive:
  - Component specific diagnosis
  - Process optimization guidance
  - 24/7 machine health monitoring

TRAINING

- Sentry:
  - Monthly machine health touchpoints
  - In-person training
  - Bi-annual site visits
- KCF Academy Access

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

KCF technologies