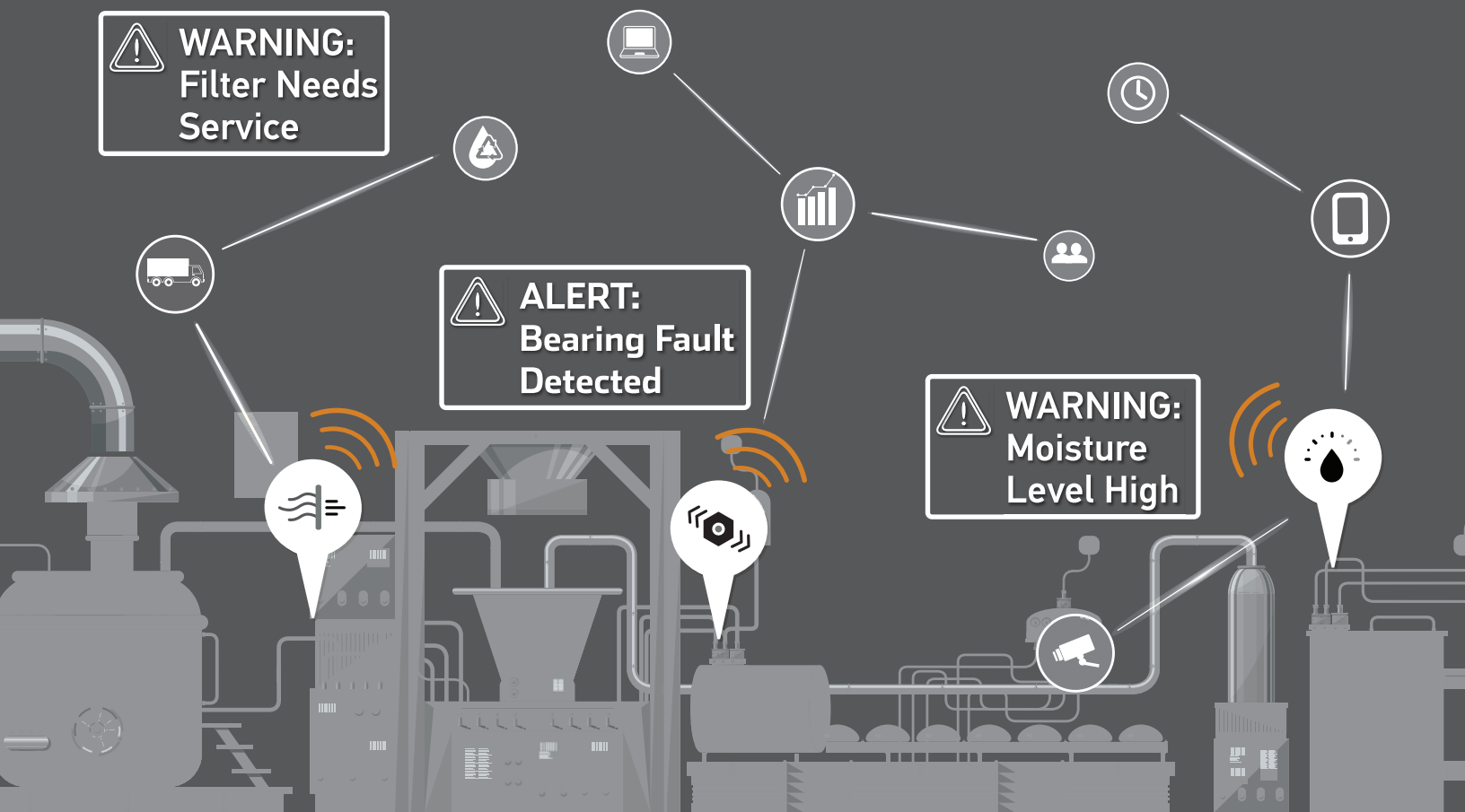


# Condition Monitoring Solutions Guide

## Connecting Products to the Industrial Internet of Things

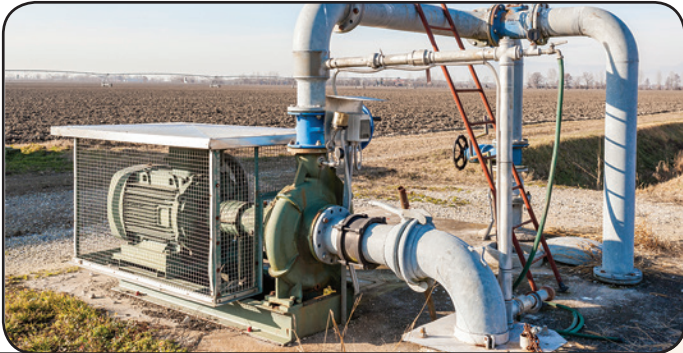


# Bearing Fault Monitoring

Rotating machinery runs unattended in many applications, from pipeline pumps to wind generators to ventilation fans in finishing barns. Bearing failure is a common cause of process downtime, sometimes with disastrous results. Adding a bearing fault detection system with remote reporting can alert the operator to changes in bearing condition as it happens.

## Sensing technology used for this application:

- Accelerometer mounted on motor or machinery bearing hub
- Bearing fault detector with peak acceleration output and displacement output
- Resistance temperature device to monitor for temperature conditions



# Lift Station Monitoring

Generally located in places where access is limited while crops are growing makes manual monitoring of a lift station impractical. A malfunction could mean a field becomes saturated, resulting in poor yields and machinery mired in mud.

## Sensing technology used for this application:

- Float switch for high level detection, indicating pump malfunction
- Float switch to monitor normal functionality, indicating frequency of activations
- Level switch on pump lubricant tank to alert to a low condition



# Refrigeration Monitoring

Food safety cannot be taken for granted. Refrigeration is critical to maintaining freshness of foods, and the usability of chemicals for many process industries. Remote monitoring provides an early warning when a temperature crosses a threshold helping to avoid waste and assure that processes are running uninterrupted.

## Sensing technology used for this application:

- Resistance temperature device changes resistance as the temperature changes
- Temperature switch can provide a simple set threshold detection



# Filtration Monitoring

A plugged filter can be disruptive. Pumps run harder, flow rate slows, and the process shuts down. Adding remote monitoring to a filter provides visibility to the health of the filter and sends alerts when maintenance is required.

## Sensing technology used for this application:

- Differential pressure sensor to measure pressure drop across the filter
- Temperature of the fluid to correct for viscosity changes
- Flow meter or flow switch to monitor flow



## The Simple Solution to Make Any System Smarter



Your Industrial Equipment



AssetScan Wireless Monitor



Intelligence Platform



Improved  
Decisions



Maximized  
Efficiencies



Data Driven  
Service  
Schedules



Minimized  
Downtime



# The AssetScan Solution

**AssetScan makes it easy to augment a condition monitoring program for smarter, connected products that unlock the power of analytics.**

**AssetScan is a complete platform of wireless sensors, cloud software and data analytics that can monitor any variable, in any location, on one dashboard, any time you need it.**

## Condition Monitoring Solutions for Industrial Manufacturers.

### Connect industrial equipment with relevant-time monitoring of critical assets.

The AssetScan Bearing Fault Advisor is a rugged and robust vibration monitoring solution under the AssetScan Condition Monitoring family of products. Process and discrete manufacturers utilize the Bearing Fault Advisor for bearing fault, lubrication, cavitation, alignment, temperature, looseness and imbalance detection. The Bearing Fault Advisor is a battery-powered, self-contained cellular, cloud, software and analytics solution utilized by reliability professionals and maintenance engineers alike for predictive maintenance. Prevent equipment failures and reduce unplanned maintenance with the AssetScan technology.



### Quick & Easy Installation

Add-on to existing equipment. Cellular connectivity requires no integration into a control system or IT network and the battery-powered design allows for immediate and convenient installation.



### Condition-based Alerting

User-specified machine alert conditions are received via text, email and through the dashboard.



### Patented Technique

Bearing Fault Advisor uses a patented software algorithm in data acquisition to capture, organize and classify fault conditions through the vibration waveform.

