AIR COMPRESSORS

MACHINE HEALTH SOLUTION FOR AUTOMOTIVE

THE PROBLEM:

Air compressors in a plant can be a major source of energy loss and significant downtime cost if it fails unexpectedly.

Air leaks throughout the system cause the compressor to work under increased demand to meet system pressure. This increased demand not only comes at the cost of increased energy consumption but also results in wear and tear to compressor components

Compatible with Ingersoll Rand, Atlas Copco, GE, Siemens, and many others!

COST OF ASSET FAILURES

$60,000
Per year/ compressor

Navistar SAVINGS POTENTIAL

Increase efficiency by **50%**

$30,000 per year/compressor
In energy savings

$90,000 per year
For 3 compressors in the plant

ASSET BLIND SPOTS:

There are several inherent challenges related to monitoring Air Compressors.

Challenge #1: Air Leaks are often undetectable by the human especially when compressors are located in remote parts of the plant

Challenge #2: Air leaks can cause inefficient operation conditions which can result in shortening asset lifetime

Challenge #3: Time-based protocols do not capture actual inflicted damage.

A NEW APPROACH TO Monitor Air Compressors

Dryer Tank Pressure Sensor

Current Reality:

Time and route-based monitoring to detect leaks when they occur and catch mechanical issues with the air compressor is not an efficient way to monitor and optimize air compressor operations.

New Solution:

Implement a condition-based maintenance program by installing pressure sensors on the air compressor tanks and vibration sensors on the motor and compressor to monitor and detect issues in the asset the moment they occur.

HARDWARE

- 6 Vibration Sensors
- 2 Pressure Sensors
- 2 Differential Pressure Sensors
- 1 Voltage Sensor
- 1 Current Sensor

SOFTWARE

- 24/7 Continuous Monitoring
- Warning and Alarm Threshold Settings
- Custom Built Indicators
- Dashboards
- Monthly Reports

REAL-TIME DATA

- Air Flow Schematics
- Part numbers
- Pressure, Current, and Voltage ranges
- Running Speed
- VFD Settings
- Gearbox ratios

TRAINING

- Sentry
  - Site visits: 2 times/year
  - In-person training
- Academy
- Customer training/handbooks
- Asset playbook

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

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