yazzoom

PUMP MONITORING, ALERTING AND QUICK DIAGNOSTICS

WHY WORK WITH US?

Yazzoom is a Belgian software and engineering company helping its customers for over ten years with software and services for industrial data analytics and process improvement. Driven by a passion for innovation targeted at creating value for our customers.

PROJECT APPROACH

1. Definition of pilot scope and issue detection ambition (1-day elapsed time).
2. Optionally you install additional sensors on some pumps based on ambition (0 to 12 weeks)
3. Installation and integration of pump monitoring detector in your IT/OT architecture (1 to 2 weeks)
4. Configuration and training of initial pump specific anomaly detectors (1 to 2 weeks)
5. Iterations of evaluation and improvement + knowledge transfer (2 to 6 months)
6. Scope expansion to additional pumps and/or other equipment.

WHY PUMP ANOMALY DETECTION?

PREDICTIVE MAINTENANCE

- From reactive to proactive maintenance
- Detection of cavitation, wear of components and electrical or sensor issues
- Lifetime prolongation at controlled risk

EFFICIENCY IMPROVEMENT – CO2 REDUCTION

- Detection of reduced motor and/or pump efficiency

USED DETECTION METHOD

COMBINATION OF HUMAN EXPERTISE AND AI

- Uses self learning algorithms to learn from historical data what the normal sensor signals of a specific pump are but has pump expert knowledge built-in about what signal characteristics are indicative of pump issues

CLOUD OR ON-PREMISE – YOUR PRIVATE DATA

- Our asset monitoring software is added to your data collection software, on-premise or in cloud

DATA NEED?

USES AVAILABLE PUMP AND MOTOR SENSORS

- Tries to detect any issue as early as possible using available sensors: recommended: flow or speed, power or current(s), input and output pressure; optional: features from vibration or ECA
- Historical data in all operating conditions for which you want to use anomaly detection

LOW CONFIGURATION EFFORT

- No need for detailed datasheets

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REDUCED EXPERTISE NEED

NO DATA SCIENCE OR CODING NEED
Intuitive multi-lingual graphical user interface for configuration, analysis and system maintenance

INTERPRETABLE BY OPERATORS AND MAINTENANCE PEOPLE
Involve reliability engineer only when detailed additional analysis is needed

SCALABILITY

SCALABLE SOFTWARE ARCHITECTURE
Software scales from a few to thousands of monitored assets on cloud or on-premise Linux machine

EXPANDABLE
Pump monitoring is part of the AI-for-industries software **Yanomaly.** It also has detectors for monitoring motors, drives, control loops,…

A FEW CUSTOMER REFERENCE USE-CASES

Detection of high energy consumption
In example above Yanomaly shows high anomaly score and alert because power consumption is higher than expected for the produced flow and head.
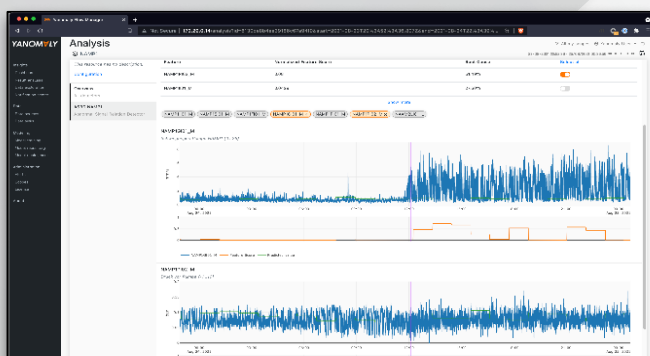
Detection of abnormal vibration
In example above Yanomaly had sent anomaly alert because RMS velocity of vibration sensor was abnormally high for the current operating regime.

YANOMALY IS TRUSTED BY

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