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. Installation and integration of control monitoring detector in your IT/OT architecture (1 to 2 weeks)
3. Configuration and training of initial control loop specific anomaly detectors (1 to 2 weeks)
4. Iterations of evaluation and improvement + knowledge transfer (2 to 6 months)
5. Scope expansion to additional control loops and/or other equipment like pumps and motors.

WHY CONTROL LOOP & VALVE ANOMALY DETECTION?

PREDICTIVE MAINTENANCE
- From reactive to proactive maintenance
- Detection of mechanical, electrical, control setting or sensor issues in control loops (optionally with control valve). Lifetime prolongation.

PROCESS IMPROVEMENT – CO2 REDUCTION
- Detection of reduced process control performance
- Avoidance of loss in process efficiency and stability and/or reduced quality of produced products

USED DETECTION METHOD

COMBINATION OF HUMAN EXPERTISE AND AI
- Uses self learning algorithms to learn from historical data what the normal performance of a specific control loop is, but has expert knowledge built-in about what signal characteristics are indicative of control performance degradation like oscillation, imbalance, sluggishness, saturation,…

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 CONTROL LOOP SIGNALS
- Tries to detect any issue as early as possible using available signals: mandatory: controller setpoint and input; recommended: controller output and mode, variables indicating operating condition
- Historical data in all operating conditions for which you want to use anomaly detection

LOW CONFIGURATION EFFORT
- No need for any datasheets
A FEW CUSTOMER REFERENCE USE-CASES

Detection of high input travel
In example above Yanomaly shows high anomaly score and alert because the travel of controller input is higher than expected for this operating regime.

Detection of control error imbalance
Yanomaly sent anomaly alert because pressure stayed abnormally long on one side of the setpoint. Is indication of valve issue or control sluggishness.

YANOMALY IS TRUSTED BY

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 or control engineer only when detailed additional analysis or control tuning is needed

SCALABILITY

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

EXPANDABLE
Control and valve monitoring is part of the AI-for-industries software Yanomaly. It also has detectors for monitoring pumps, motors & VSDs,...