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Ingenuity for life

Valve Monitoring App

Greater plant transparency through the intelligent use of plant data

The challenge

Extensive, structured analyses of industrial plant data are now making insights possible that were previously inconceivable. The results can raise the productivity and efficiency of a production process to new levels. Especially with valves and positioners, there is frequently great potential for optimization which, with the right information, can be exploited to improve the state of whole plants.

Faultless valves are essential for trouble-free processes in a chemical plant, because the failure of a single valve can stop the entire production. Sudden valve defects also pose a safety risk to employees. In order to prevent these problems occurring, plant operators maintain their valves regularly – but this may lead to work on fault-free valves. Consequently, these preventive tactics drive up operating costs unnecessarily.

The solution

The Valve Monitoring app delivers all the information required to pursue a predictive maintenance approach that analyzes valve data to reduce maintenance costs and increase plant availability. Individually selectable key performance indicators (KPIs) – such as shifts in the end positions of valves, friction indicators and the number of valve strokes etc. – significantly increase the transparency of the plant, and offer further potential for saving maintenance and operating costs. By combining and evaluating the data from multiple plants in the cloud, optimization can also be achieved across individual plant locations.

Advantages gained by the intelligent use of plant data

- Higher plant availability and avoidance of spontaneous valve defects
- Reduced maintenance costs through predictive maintenance
- Greater transparency of valve and positioner conditions
- Detection of abnormalities and heavy wear for predictive maintenance planning
- Less wear and reduced operating costs through optimized setting of positioners
- Great potential for optimization by combining and analyzing data from various plants

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Increase your plant availability!

The clear user interfaces keep users continuously informed of their maintenance intervals and provide them with additional information about the condition of individual valves and positioners.

Transparency at plant level
with smart analyses of valve and positioner data of the entire installed base.

Smooth processes
facilitated by individually selectable key performance indicators, such as shifts in the end positions of valves, friction indicators and the number of valve strokes.

Savings potential
realized by efficiently planned maintenance tasks: no unnecessary work on fault-free valves. This reduces operating costs.

Intuitive operation
and quick installation enable customers to use the app on desktop PCs and mobile terminal devices without requiring extensive training.

Predictive maintenance
Predictive maintenance not only reduces maintenance costs and increases plant availability but also ensures greater safety by avoiding sudden valve defects.

Cloud-based application
via data analysis provided by IoT operating system, e.g. MindSphere. Unlocks further potential for optimization as part of the Asset and Process Performance Suite.