



Industry Services

Control Performance Analytics Services

Efficient plant optimization with automated control loop analysis

Industrial process applications become more and more complex, while production management targets in terms of process safety, flexibility, and product quality are constantly getting more ambitious. To successfully manage this situation an additional layer of transparency is required to detect possible areas for optimization and process fine-tuning.

The challenge

In the process industry, control performance is an important lever for reaching production targets. The single control loop is the initial core for each process application. Studies have shown that approximately half of all control loops are not well tuned, approximately 25 percent are

ineffective, and another quarter show decreasing performance. About one third of all control loops are running in manual mode and 25 percent still use the parameters defined during commissioning. In many cases, bad control performance also indicates asset problems such as static friction.

Furthermore the average process engineer in a typical large-scale process plant is in charge of hundreds of control loops. The evaluation of control performance in different process states in correlation to alarms requires a lot of time and expertise. The detection of possible areas for optimization and tuning of control loops is not a one time job due to continuous process changes and wear and tear of equipment.



The solution

Control Performance Analytics add a new layer of transparency to your process data. This supports an efficient optimization process.

Transparency is generated through:

- Automatic state detection and KPI calculation for different control states
- Hierarchical plant overview from management view to single control details
- Automated data analytics on a regular basis to support long time process optimization and fine-tuning
- Additional expert reports for critical control loops

Control Performance Analytics work fully automated to provide reliable results on a regular basis. Analytics results are provided via a secure web portal. This ensures effective collaboration of all levels - from the plant manager to the process operator. Long term availability of data ensures measurable optimization results.

Your benefits at a glance:

- Advanced transparency through a KPI-based control performance overview
- Prioritized identification of optimization potential
- Improved process knowledge
- Improved plant asset performance through the correlation between process data with possible asset problems, such as static friction
- Comparable KPI's with automatic state detection

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