

Control Performance Monitor

**Honeywell**



Advanced Solutions

**Control Performance Monitor**

POWERED BY  
**MATRIKON**

## FEATURES & BENEFITS

- Improve control loop and APC performance
- Reduce loop tuning and APC implementation costs
- Enable condition-based maintenance of control assets
- Reduce process variability

# Control Performance Monitor

Control Performance Monitor is for plant personnel responsible for ensuring process control assets remain reliable and efficient. It is a condition-based application that monitors, identifies, diagnoses and remedies control asset issues across all plant layers.

Control Performance Monitor is Powered by Matrikon, which represents vendor neutrality. This product works with third-party control systems and applications.

It is the only vendor-independent software product on the market that leverages universal connectivity and offers monitoring, tuning and modeling capabilities within one platform. Control loop tuning, modeling and multivariate step testing capabilities, coupled with the ability to automatically collect and analyze data, allow Control Performance Monitor to improve control.

## DECREASE VARIABILITY AND OPERATING COSTS

The easy implementation of Control Performance Monitor translates to overall improved operability and stability of the process, providing benefits through reduction in off-spec production, operating costs and product variability, as well as improved production rates.

### Benefits throughout the Enterprise

- Improve control performance across remote plant sites
- Reduce adoption cost through a single, best practices solution
- Minimize plant equipment degradation
- Increase efficiency and profitability

### Benefits for Maintenance

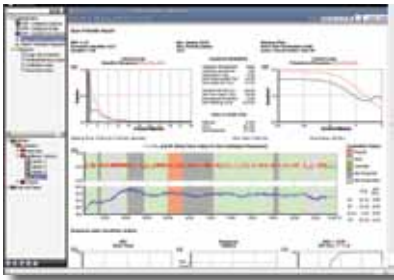
- Instantly identify and drill down to root causes of the problem
- Proactively identify under performing control assets
- Advanced control monitoring and modeling
- Automated step testing capabilities

### Benefits for Operations

- Improve process performance and plant throughput
- Reduce process variability
- Improve product quality
- Improve yields and conversions
- Reduce energy consumption
- Reduce cost through a condition-based maintenance methodology



## MONITOR, IDENTIFY, DIAGNOSE AND REMEDY CONTROL ASSET ISSUES

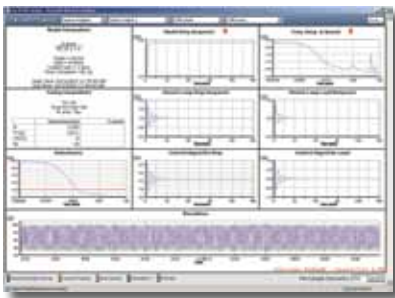


Track PID Loop performance

### Proportional-Integral-Derivative (PID) Loop Monitoring

Continuously monitor all regulatory control assets, detect and prioritize problems and notify appropriate personnel.

- Display all control assets on a single screen
- Monitor applications across remote facilities
- Track performance and identify under performing assets
- Improve model predictive control (MPC) performance through early detection of regulatory control problems



Analyze and optimize PID loops

### Proportional-Integral-Derivative (PID) Loop Tuning & Optimization

Eliminate the guesswork in control tuning and loop optimization by analyzing control performance in closed-loop conditions.

- Enable tuning through non-disruptive closed-loop testing
- Test, tune and trend multiple loops simultaneously
- Provide statistical and reporting tools
- Use TaiJi process modeling technology
- Tune operating data for secondary loops



Manage all APC assets on a single screen

### APC Monitoring and Assessment

Continuously monitor and assess Advanced Process Control (APC) performance to predict future behavior and to ensure benefit sustainability.

- Display all APC assets on a single screen
- Monitor APC applications across remote facilities
- Generate performance and diagnostic reports
- Automate the identification process from test design to model validation
- Integrate with PID loop monitoring and analyzer/estimator monitoring



Test, benchmark and improve

### Automated Notification, Benchmarking, and Integrated Workflow

Set individual benchmarks and automated notifications, and create customized workflow integration.

- Benchmark performance and relate to profitability
- Set automatic email notification
- Customize workflow integration and escalate disposition
- Use diagnostic tools to troubleshoot valve and instrument issues
- Sustain performance by generating high level management reports

Control Performance Monitor has been the missing link for our process control toolkit. Since we installed it, we've found a large number of control loops that were sick from poor tuning and instrument failures. Payback on the tool was less than three months. I am very impressed with Control Performance Monitor's capabilities and the results we obtained.





## CONTROL PERFORMANCE MONITOR METHODOLOGY

A condition-based maintenance methodology increases control performance and plant productivity, while reducing maintenance costs.

### Identify

- Identify opportunities to improve quality, yield and throughput
- Visualize, identify and prioritize problems throughout the entire plant
- Notify appropriate personnel of impending issues
- Locate the root cause of a problem

### Analyze

- Analyze and diagnose issues with online and offline reports
- Analyze regulatory controllers
- Analyze APC applications

### Improve

- Apply corrective maintenance
- Enable PID tuning, valve/sensor repair, controller redesign, MPC step testing and model identification
- Improve bad actors

### Sustain

- Track control performance
- Flag critical problems and automatically notify appropriate personnel
- Institutionalize sustainability through work-process improvements

**POWERED BY**  
**MATRIKON**

'Powered by Matrikon' symbolizes that this product/solution is system and application independent.

#### For More Information

Visit our website  
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