

Turbomachinery Advisor

A Part of Honeywell Asset Performance Portfolio

ENHANCE TURBOMACHINERY PERFORMANCE AND RELIABILITY BY LEVERAGING THE POWER OF DIGITAL AND EMBEDDED EXPERTISE

Turbomachinery Advisor is an advanced module in Honeywell's Asset Performance Management (APM) for industrials portfolio. The module can be deployed on premises or in the cloud via Honeywell Forge. Turbomachinery Advisor helps customers get the most out of CCC turbomachinery control systems with:



CRITICAL EVENT ANALYSIS

Support quicker and more thorough event investigations.



EXCESS RECYCLE MONITORING

Detect and estimate excess energy usage and associated emissions.



PERFORMANCE CONTROLLER MONITORING

Identify and address underperforming control loops.



Turbomachinery Advisor Benefits

Turbomachinery Advisor enables end users to continuously monitor CCC turbomachinery control systems for further optimization opportunities in:

- Increased Uptime
- Reduced Energy Consumption
- Increased Production

Explore Features

STANDARD MODEL LIBRARY

Out-of-the-box asset models enables faster deployment and personnel to focus on optimizing operations.

GUIDED ROOT CAUSE ANALYSIS

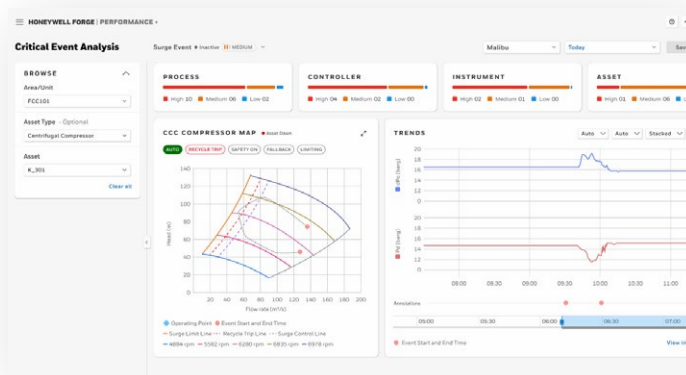
Helps shorten response time and identify the root cause of an event.

CROSS-FUNCTIONAL COLLABORATION

Includes persona-based displays and enterprise-level KPIs.

DIG DEEPER INTO NEW MODULES

Critical Event Analysis



WHO

Instrument & Controls (I&C) Engineers and Rotating Equipment Engineers can:

- Analyze critical events, including compressor surge and emergency shutdown scenarios.

WHY — Key Benefits

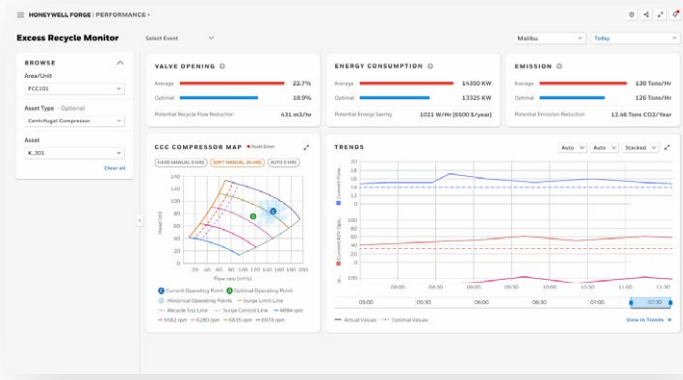
- **Timely and More Accurate Corrective Actions**
Quick access to high-quality time-series data can lead to faster restarts and prevention of secondary damages.

HOW — Important Features

The Critical Event Analysis module facilitates faster and safer process restarts by streamlining post-event analysis and provides these features:

- **Milliseconds On-Event Data**
Get access to native high-resolution data from TrainTools servers within minutes of critical events occurring.
- **Summary Score Cards**
Pre-configured analysis highlights critical control loop element performance during an event for initial insights.
- **Dynamic Compressor Map**
Displays compressor surge limit line and control lines in a dynamic form with support for data playback.

Excess Recycle Monitor



HOW — Important Features

The Excess Recycle Monitoring module identifies and quantifies energy losses and associated emissions from excess recycle and provides these features:

- Reliable Assessment**
 Automatic analysis flags excess recycle where flow through compressor is greater than process demand due to antisurge valve placed in manual mode.

WHO

Operations Supervisors and Instrument & Controls (I&C) Engineers can:

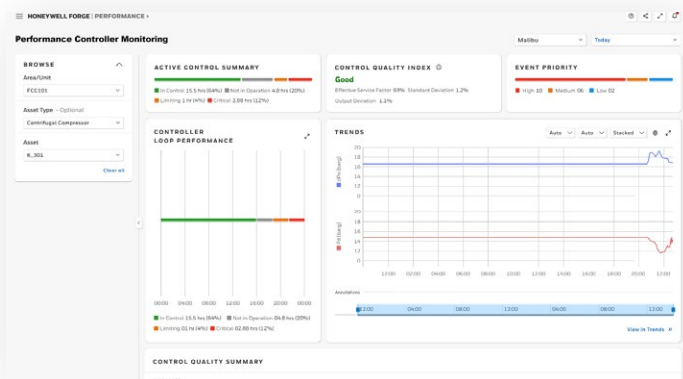
- Identify and quantify energy wastes associated with manual operation of antisurge valves.
- Calculate optimal valve opening under automatic mode to reduce energy consumption and emissions.

WHY — Key Benefits

- Energy and Cost Savings**
 Automatic detection of excess recycle conditions to prevent unnecessary energy consumption and associated costs.
- Environmental Impact Assessment**
 Estimation of excess emissions and reduction of carbon footprint through optimized antisurge valve operation.
- Process Stability and Equipment Protection**
 Prevention of delayed control responses, unstable processes and reduced effectiveness in equipment protection.

- Intuitive Visualizations**
 Transparent calculations with compressor map visualization boost confidence in data and recommended actions.

Performance Controller Monitoring



HOW — Important Features

The Control Performance Module identifies control loops that are underperforming due to various constraints, recommends corrective actions and provides these features:

- Automated Flagging**
 The model automatically flags control loops that are frequently constrained due to secondary control objectives such as limiting loops.

WHO

Instrument & Controls (I&C) Engineers and Process (Controls) Engineers can:

- Identify and optimize control loops that are underperforming relative to expectations.
- Improve operational KPIs by understanding and enhancing the efficiency of primary and secondary control loops.

WHY — Key Benefits

- Production Improvement**
 Monitoring and reviewing how control loops are performing over time can lead to insights and optimization opportunities that improve production.

- Intuitive Visualizations**
 Summary of time spent in each of the control objectives (primary vs. secondary) as well as its associated control quality are displayed.

The Trusted Name for Turbomachinery Optimization.



2 Billion
Operating
Hours



10,000+
Machines



40+
OEMs



150+
Turbomachinery
Experts



14 Worldwide
Offices



For inquiries please email: DL-CCC-Solutions@honeywell.com



USA | CCC Global Headquarters
4745 121st Street
Des Moines, IA 50323-2316 USA
+1-515-270-0857

www.cccglobal.com
DL-CCC-Solutions@honeywell.com