Performance Analysis

Robust performance calculation engine with advanced data visualization and exploration tools.

Asset-intensive infrastructures face many challenges that are a result of aging equipment, workforces in transition, tightened budgets, and increased regulatory and market complexity. Operators and engineers must keep their plants running at peak performance but are often asked to do so with limited visibility into equipment performance, asset conditions, and system dependencies. The sheer number of assets incorporated into complex infrastructures requires organizations to process mountains of data, delivered in a mix of formats and data types.

Collecting asset and process data is so demanding that the work of normalizing the data and calculating detailed performance metrics necessary to optimize performance, efficiency, and effective decision making is often overlooked. Organizations that need to calculate performance metrics often use spreadsheets to transform raw data into actionable information; this practice is manually intensive, time-consuming, and error-prone.

Performance Analysis dashboards allow you to quickly assess and evaluate the past, present, and future performance of all assets. Your team can leverage intuitive data exploration tools and real-time displays of asset performance to interpret process dependencies and interactions, gain clear and actionable asset information across all sites, and make better-informed decisions to ensure your plant is running at peak performance.

Performance Analysis’s powerful data exploration tool allows you to trend, filter, compare and visualize large data sets. Define reports and configure charts using real-time performance metrics, while removing data outliers that can skew calculations or mask anomalies. Performance Analysis lets you create and share reports and analyses easily, to ensure that everyone has the information they need to keep your plant performing at its best.

Designed to deploy in just a few weeks, Performance Analysis can help prevent costly crises by focusing your attention on data that is actionable.


Atonix Digital™ Performance Analysis is a secure, cloud-based data analytics product purpose-built to address the challenges of today’s complex and dynamic plant management environments. Built on Atonix Digital’s ASSET360® Asset Performance Management (APM) platform, Performance Analysis combines decades of industry domain expertise with advanced calculations, data visualization and exploration tools to expose actionable performance patterns from up to thousands of assets across your infrastructure. Performance Analysis’s advanced performance calculation engine and extensive library of performance calculations identify and highlight asset and process issues with precision and accuracy.

Key Benefits

- **MAXIMIZE PERFORMANCE**: Assess equipment condition and performance to improve maintenance and planning across the organization.
- **SIMPLIFY ANALYSIS**: Acquire insights at a glance, through near-real time trending and plotting across multiple data sets. Monitor asset and process behavior across plant operations.
- **INCREASE REPORTING ACCURACY**: Benchmark plant and equipment-level performance calculations, applying data validation rules to verify input accuracy and calculation reliability.
- **IMPROVE CONTROL**: Quickly identify suboptimal or aberrant behavior and monitor improvements after making process or equipment changes.
- **REDUCE COST**: Quantify and address emerging performance issues to improve reliability and avoid more expensive problems.
Atonix Digital Performance Analysis provides users with highly intuitive visualization and exploration tools that simplify the detection of equipment and process inefficiencies.

Key Features

- **ADVANCED PERFORMANCE CALCULATION ENGINE:** Use Performance Analysis’s predefined industry and asset-specific calculations to monitor, isolate, and diagnose equipment and process issues with greater accuracy and effectiveness. Benefit from built-in calculations accrued from over 20 years of delivering performance and reliability solutions.

- **ROBUST DIAGNOSTICS ENVIRONMENT:** Accelerate root-cause discovery and problem resolution with customizable displays and reports. Pre-built context trends, designed by plant engineers, bring diagnostic information to your fingertips. Quick access to design documents, system attributes, and photos help streamline issue diagnosis and problem identification.

- **POWERFUL DATA EXPLORATION:** Say goodbye to arduous, spreadsheet-based analyses. Trend, filter, visualize and compare large data sets in seconds. Dynamically pin data for fast comparisons, such as for pre- and post-event analysis. Diagnose and analyze asset performance deviations by leveraging Performance Analysis’s highly customizable reporting and exploration environment.

- **DATA VISUALIZATION:** Create customized reports and dashboards utilizing organization-defined business metrics that measure infrastructure and asset performance at each site or across all sites.

- **CUSTOM DASHBOARDING & REPORTING:** Inform your decisions, boost operational performance, and maximize plant efficiency with real-time performance dashboards and custom and standard key performance indicators (KPIs) for each asset.

To learn more about Atonix Digital™ and our Performance Analysis product, visit:

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