

# aspenONE<sup>®</sup> Process Explorer<sup>™</sup>

## Web-Based User Interface for Visualization and Analysis

In one rich, web-based environment, aspenONE Process Explorer (a1PE) is a comprehensive, flexible and connected solution that integrates full visualization and analysis tools for monitoring a wide variety of data—such as historical time series, event and batch data, from various sources in real time. It traces the path taken by a product from raw materials to finished goods, to improve quality and evaluate the manufacturing process performance with comprehensive views of data. A1PE is a fit-for-purpose application built for data visualization, data discovery, data entry, analysis and process monitoring.

### Key Benefits

#### Easy Data Access and Manual Entry

Retrieves real-time information from Aspen InfoPlus.21<sup>®</sup> and other data historians using a web browser interface, providing integrated security with role-based access. Enables users to enter real-time values from a tag list or graphic. Facilitates values or data history modification via a mobile device (tablet, hand-held or phone).

#### Flexible Data Visualization and Analysis

Works with various process historians without replicating the data, to visualize and analyze metrics, Key Performance Indicators (KPIs), records and events in real time. Combines graphics, trends, unstructured data, gauges and tables into a single dashboard. Easily displays and interacts with visualizations from external applications.

#### Data Discovery and Navigation

Works and integrates with Aspen Manufacturing Master Data Model<sup>®</sup> (Aspen mMDM), AspenTech's powerful search engine, and other third-party sources for data discovery and intuitive navigation. Provides the ability to search for any information through dashboards, plots, graphics, tag lists, charts and other documents.

### Key Capabilities

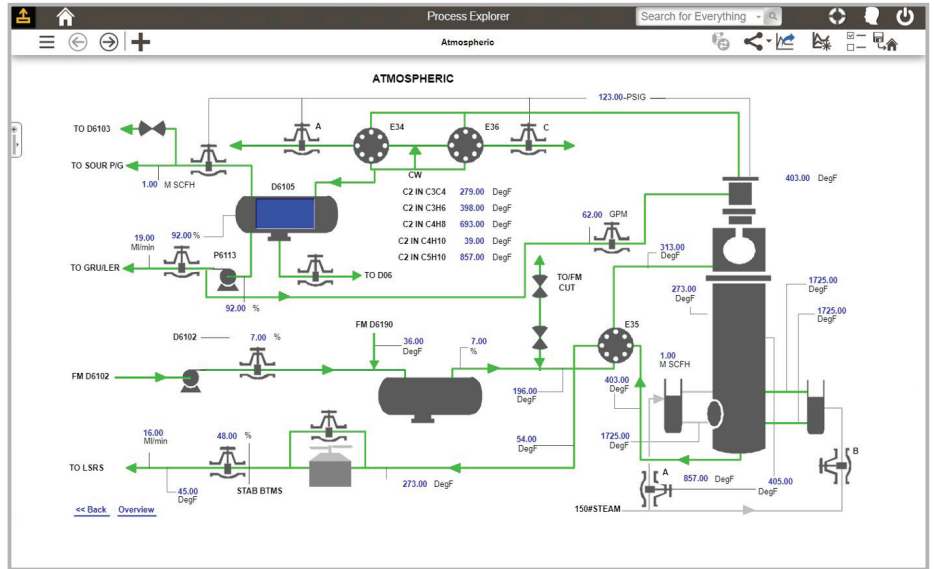
- KPI Monitoring and Dashboards
  - Provides real-time visibility of asset performance through trends and graphics
  - Dashboards, set up in templates with access to extensive libraries of equipment symbols for easy configuration, enable dynamic animation of objects based on values or state
- Real-Time Production Tracking
  - Traces progress of materials through complex batch processes, automatically detects material transfers, and performs efficient and comprehensive audits of electronic batch records
- Ad Hoc Statistical Process Control
  - Provides Process Capability (CPK) and Process Performance (PPK) analysis along with outlier exclusion, standard deviation, Cumulative Sum (CUSUM), Moving Average (MA), Exponentially Weighted Moving Average (EWMA), and other calculations
- Alarms and Alerts
  - Quickly detects problems and notifies users of deviations from acceptable process conditions

## Use Case

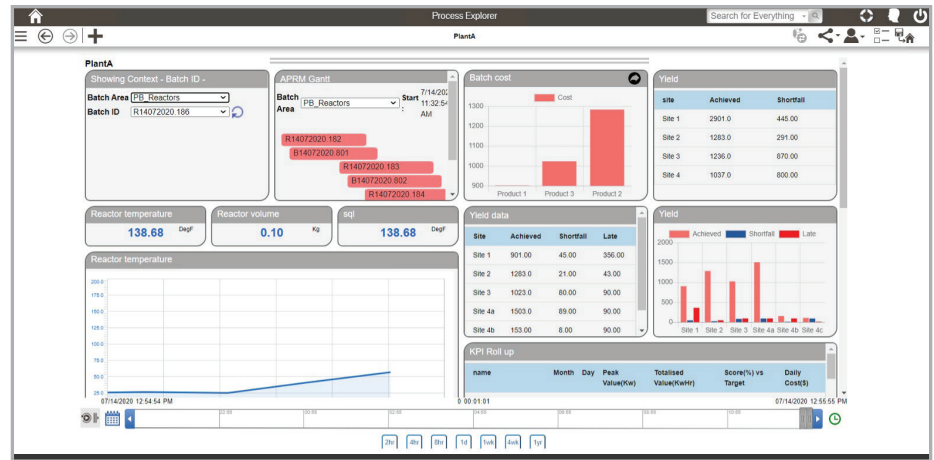
**CHALLENGE:** Stakeholders across a manufacturing organization do not have visibility into whether or not process performance metrics are within acceptable limits. It is difficult to determine where problems exist and how severe they are within the capital-intensive production process. The organization wanted to focus on decreasing variation in process, detecting problems easily, identifying opportunities for improvements, reducing internal and external failure costs, and ensuring the high quality of their products.

**SOLUTION:** aspenONE Process Explorer enables users to actively track key metrics and elevate the most severe alarms with real-time visibility into asset performance for a specific piece of equipment or across an enterprise. Users can leverage custom dashboards to identify and troubleshoot issues and root causes, and to decrease variation in process.

**RESULT:** The company was able to develop a KPI production portal, which has helped provide the focus they need to meet plant production targets. They have also achieved faster problem resolution, a higher asset utilization rate and holistic monitoring of equipment conditions and performance.



Extensive libraries of industrial symbols and graphics to represent the flow of a process with live values and updating status.



The dashboard application enables users to configure multiple linked widgets in one environment.

AspenTech DataWorks is the global leader in industrial data management from the plant floor to the board room. Our mission is to accelerate data-driven value creation in the asset-intensive industries we serve.

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