



**Cabot Improves Quality by 30%
and Reduces Variability With Global
Manufacturing Execution System**

Aspen InfoPlus.21[®] serves as the foundation for deploying other aspenONE[®] solutions, enabling long-term and sustainable business improvements.

30%

improvement in quality and 20% reduction in product variability

CHALLENGE

Improve quality and reduce variability as manufacturing transforms into a global organization.

SOLUTION

Standardize on Aspen InfoPlus.21 across all manufacturing sites to facilitate visualization of performance and integrate manufacturing information with enterprise systems.

BENEFITS

- Improved quality by 30%; reduced product variability by 20%
- Improved customer satisfaction and increased sales
- Provided a foundation for continuous improvement projects
- Provided cross-plant data and knowledge sharing

Cabot, a global specialty chemicals company, operates 39 manufacturing plants across 19 countries. Product quality and manufacturing excellence are keys to business success.

Globalization brought improvement opportunities for Cabot, including sharing production recipes and providing visibility of production metrics across sites. Rapid and accurate integration of global manufacturing data with their enterprise systems was needed to facilitate better decisions, and a robust manufacturing execution system (MES) was required to drive improved product quality.

Cabot selected Aspen InfoPlus.21 data historian as the key to its MES to integrate and visualize data across all production sites. Aspen InfoPlus.21 would also serve as the foundation for future aspenONE solutions and continuous improvement projects such as advanced process control, plant scheduling and environmental reporting.

Since implementing the Aspen InfoPlus.21 “foundation project,” Cabot has seen a 30 percent improvement in quality and a 20 percent reduction in product variability.

Globalization Poses Challenge to Manufacturing

The globalization of Cabot’s business across 19 countries posed a significant challenge for the manufacturing function. Independent site-based groups needed to transform into an integrated global organization. Access to information from different sources — including manufacturing, the supply chain and financial systems — was vital to make better, faster business decisions.

An MES could help with the transformation by integrating and visualizing information across the enterprise. To help overcome the challenge and realize the business potential, Cabot launched an MES visioning process to define the direction and business advantages for their manufacturing systems. Ultimately, they determined that their manufacturing systems would provide:

- Management flexibility through seamless integration across the enterprise
- A competitive advantage by implementing best-in-class quality control
- Differentiation in the market for their products and services



Aspen InfoPlus.21 Enables Improvement of the Global Business

Cabot standardized on Aspen InfoPlus.21 as its MES across all 39 manufacturing sites. The solution's flexibility, level of integration and services-oriented architecture are key to successful enterprise-wide deployment and the ability to share data and applications. Aspen InfoPlus.21 allowed Cabot to implement the solution to their specific business context and standardize on a common structure for every site. An important aspect of Cabot's solution was the ability to roll up site information across the enterprise to top-level corporate views, facilitating the sharing of best practices across all sites.

Steady Process and Product Improvements Realized

Over time, Cabot has used its MES foundation to create an enterprise performance management network across their plants. The network has grown to include AspenTech advanced process control and production scheduling solutions and additional applications involving recipe management, grade changes, emissions reporting, dryer controls, manufacturing process compliance, product and process metrics, lab data and ERP systems.

Use of the system and the improvements in manufacturing practices have resulted in a steady improvement in quality and reduction in product variability. Other benefits include improved customer feedback, increased sales and cross-plant data and knowledge sharing.

AspenTech is a leading software supplier for optimizing asset performance. Our products thrive in complex, industrial environments where it is critical to optimize the asset design, operation and maintenance lifecycle. AspenTech uniquely combines decades of process modeling expertise with machine learning. Our purpose-built software platform automates knowledge work and builds sustainable competitive advantage by delivering high returns over the entire asset lifecycle. As a result, companies in capital-intensive industries can maximize uptime and push the limits of performance, running their assets faster, safer, longer and greener.

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