

DuPont Improves Product Quality and Yield, While Reducing IT Support Costs up to 60%

Chemical and petrochemical leader makes better, real-time decisions across the enterprise through improved monitoring and analysis of manufacturing operations with aspenONE® Production Management and Execution (PM&E).

As a leader in the chemicals and petrochemicals industry, DuPont recognized that the next wave of business performance improvement was manufacturing and supply chain optimization, driven by operational excellence, which required a transition from the company's cost and efficiency focus. The challenge was to unify operations to optimize performance, versus the current silo-management approach.

DuPont saw a need for common ERP and MES business processes integrated across operations, with real-time performance management the primary focus for its MES work process. DuPont selected aspenONE Production Management and Execution as its performance management solution and aspenONE Integration Foundation for its real-time connected enterprise, integrating manufacturing with its SAP enterprise solution. The solution is now in operation at more than 50 manufacturing locations, helping DuPont to achieve operational excellence.

The resulting benefits have been improved quality and yield, reduced time-to-market, reduced IT development costs by 40 percent, and reduced ongoing IT support costs by 40 to 60 percent.

"The global rollout of AspenTech's real-time performance management and enterprise integration solutions across the enterprise allows DuPont to make sound business decisions quickly."

— Rolando Zamora, Division Engineer, Process Automation Systems, DuPont

Customer Profile

DuPont
Specialty Chemicals

Challenge:

Unify global operations with consistent data and models to drive manufacturing and supply chain optimization

Solution:

aspenONE PM&E for real-time performance management and aspenONE Integration Foundation for connecting the enterprise

Benefits:

- Improve quality and yield; reduce time to market
- Reduce IT integration time by 40% and ongoing support costs by 40 - 60%
- Increase throughput of Six Sigma projects
- Drive accountability through cascaded corporate strategy, business objectives, and site metrics



Meeting the Operations Management Challenge

DuPont had inconsistent business processes and disparate applications, making it impossible to provide consistent data and models. This needed to change if DuPont was to meet the challenge of unifying operations across the enterprise. So DuPont put in place a strategy to continually improve the manufacturing process and sustain excellence and value over time.

The first part of the strategy consisted of two methodologies: Six Sigma and the ISA S95 process industry standards. A second part of the strategy was to establish common business processes for ERP and MES across operations. With this new strategy and focus, DuPont had a plan to drive consistent data and models, helping it to achieve operational excellence and unify operations.

Enterprise-wide Solution Provides Common Process

For real-time performance management and integration of its manufacturing sites with SAP, DuPont selected aspenONE Production Management and Execution and aspenONE Integration Foundation. This combination provided a common platform across production sites for exchanging process and product data with enterprise systems. DuPont standardized critical work flows and data integration in business processes such as planning and scheduling, process order execution, and quality management.

aspenONE PM&E provided critical capabilities for enterprise-wide, real-time performance management: a repository for the manufacturing data, root cause analysis for continuous and batch operations, quality management, event management, and alerting. XML messaging, provided with aspenONE Integration Foundation, facilitated inter-process communications between multiple vendor solutions including AspenTech, SAP, Meridium, and numerous LIMS and shop floor control systems.

Value Gained from Real-time Performance Management

DuPont's business benefits are impressive, with payback achieved within the first year. The improvements impact operations and IT in several areas:

- Productivity is improved by automating data collection.
- Inventory management has better visibility of finished goods and raw material consumptions.
- Asset utilization is improved from visibility of shop floor production.
- Six Sigma projects have been accelerated.
- Development productivity is increased and operating and maintenance costs decreased through standardization and rollout of the new integration infrastructure.

About AspenTech

AspenTech is a leading supplier of software that optimizes process manufacturing — including oil and gas, petroleum, chemicals, pharmaceuticals and other industries that manufacture and produce products from a chemical process. With integrated aspenONE solutions, process manufacturers can implement best practices for optimizing their engineering, manufacturing and supply chain operations. As a result, AspenTech customers are better able to increase capacity, improve margins, reduce costs and become more energy efficient. To see how the world's leading process manufacturers rely on AspenTech to achieve their operational excellence goals, visit www.aspentech.com.



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