

MBDA Missile Systems Blasts the Competition

MBDA, a world leader in missiles and missile systems, is a multi-national group with near of 10,000 employees in France, the United Kingdom, Italy, Germany and the United States. It is the first truly integrated European defense company, producing 3,000+ missiles a year for more than 90 armed forces worldwide.

Out with the Old

The company was hampered by stand-alone Enterprise Resource Planning (ERP), Manufacturing Execution (MES) and Product Lifecycle Management (PLM) systems. Its internal custom MES solution was no longer practical to support, nor was it compliant with current operating systems. Further, some locations were still using paper-based tracking systems. Faced with either rebuilding or replacement, MBDA conducted an exhaustive search for an integrated solution.

“Once we reviewed and understood Apriso’s FlexNet, it became clear that we could realize significant performance improvements and cost savings by integrating our enterprise planning, engineering and manufacturing operations systems,” said Jérémie Roper, Project Manager. “Apriso’s solution handles the diverse products and types of controls we required while providing a strong foundation for tracking and tracing production and process changes. Furthermore, we appreciated that Apriso could fulfill most of our specific requirements, had a strong presence in Europe, and provided on-site experts to manage and support implementation.”

Apriso Scores a Direct Hit

“MBDA now uses FlexNet to provide a direct interface with both SAP’s ERP and Siemens’ PLM Solution Team Center 5 (TC5). First, FlexNet receives a macro routing definition from TC5 and SAP. The definition is then enriched directly in FlexNet by the engineering department; engineers add the detailed work instructions required for operator guidance, to control the full procedure. The definition of each routing is then followed by a dedicated validation workflow before being released into production.

Production orders are sent from SAP to FlexNet along with the product characteristics definition. In return, the system delivers production reporting, recorded genealogy, order status change and quality result information to SAP. In short, FlexNet ensures continuity, visibility and control – all the way from design to execution.

“All activity is now tracked and recorded, for full traceability of engineering, production and quality operations processes. Having such a detailed record of all execution data is extremely important for compliance and quality enhancement. We can easily compare as-built to as-designed parts and processes for continuous improvement,” noted Roper.



Benefits Achieved

- Full traceability of production and quality operations
- Easy generation of as-built reports
- Harmonized routing definition procedure across departments
- Leveraged links to new information systems with existing applications
- Improved operator versatility
- Reduced routing maintenance time by 50%

Top-to-Bottom Efficiencies

FlexNet Process Builder's ease of use has helped MBDA's engineers to enrich processes. They can easily create routing steps from a library of pre-defined objects, without drawing on specific IT skills, for much greater efficiencies. In addition, the library offers great flexibility, for instant modifications such as reworking or making changes in a sequence.

Further efficiencies have been realized on the shop floor. "FlexNet is directly connected with equipment like screwing machines, eliminating the need to manually re-key information or updates into the system and thus increasing accuracy. Since most information is filled in and checked automatically, operators only need to record critical data and exceptions. This frees them up for more meaningful, value-added work," Ropero said.

Innovation Through Collaboration

Thanks to the close collaboration between MBDA and Apriso, cutting-edge features were introduced into FlexNet, such as electronic work instructions, integration with its information systems, and monitoring of process flow non-conformances.

The company has also improved customer satisfaction by addressing and responding to new customer requests more quickly. For instance, one of its customers requested specific as-built reports for its missiles. MBDA was able to deliver them quickly by integrating and generating them automatically from FlexNet.

Competitive Advantage

MBDA feels that the strength of its integrated solution puts it far ahead of its competitors, some of whom are still tracking with paper. "We now have superior reactivity between process design and the shop floor, making us more nimble," said Ropero. "This allows us to be more responsive to technical innovations, essential in such a fast-changing industry as ours."

Apriso is now considered a strategic partner for MBDA, continuing to help expand adoption of process improvements that offer competitive advantage, operational excellence and an improved agility to respond faster to future unexpected events.

About Apriso

Apriso Corporation is a software company dedicated to helping manufacturers achieve and sustain operational excellence. Apriso serves 180+ customers in 40+ countries across the Americas, Europe and Asia. Learn more at <http://www.apriso.com>.

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Project Manager,
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