iBase·t

Shipbuilding

iBase-t Solutions Overview

Shipbuilding solutions for today, a growth path for tomorrow

Key Benefits of Solumina

- **Operational Efficiency:** Accelerates project timelines and streamlines change management, ensuring projects are completed on time and within budget.

- **Holistic Integration:** Seamlessly integrates with other enterprise software systems including PLM, CAD, and ERP fostering clear communication and streamlined workflows.

- **Digital Advancement:** Embraces the digital thread, enabling an integrated view of a vessel throughout its engineering, production, and maintenance lifecycle.

- **Skill Gap Bridging:** Reduces training times with an intuitive interface, making it easier to onboard and upskill new talent.

- **Quality and Compliance:** Drives first-time quality and ensures all operations adhere to stringent quality and compliance requirements, protecting reputation and bottom line.

- **Future Ready:** Anticipates industry shifts and prepares shipbuilders to leverage the latest innovations including 3D models, the industrial internet of things, AI, and more.

Challenges in the Shipbuilding Industry

The shipbuilding industry finds itself navigating turbulent waters in today's global landscape. A major challenge is the aging workforce coupled with a gap in skilled replacements, particularly in regions where shipbuilding has been in decline for years. But manpower problems are not the only hurdles. Environmental regulations are pushing shipyards towards greener innovations, economic pressures threaten order volumes and profitability, and regulatory compliance is a constant requirement.

In the best of circumstances, shipbuilding is one of the most complex industries in the world. For shipyards to meet today's challenges, digital solutions are not just an advantage, but a necessity.

How Solumina Elevates Shipbuilding

iBase-t's Solumina Manufacturing Operations Platform enables shipbuilders to tackle these issues head-on. It simplifies complex operations and radically improves a shipbuilder's productivity, quality, and compliance by giving operators, supervisors, and managers access to real-time digital data from the plant floor or shipyard.

With Solumina, work teams become more efficient through better guidance delivered via interactive work instructions, and compliance can be enforced through production and sustainment processes.

The Solumina platform is more than a manufacturing execution solution for today's shipbuilding challenges. It is an integrated manufacturing operations platform that supports the entire product lifecycle, including enterprise and supplier quality management and even maintenance, repair and overhaul (MRO) operations.

The Solumina Platform for the Modern Shipyard

The Solumina platform by iBase-t enables shipbuilders to improve manufacturing, and sustainment processes, and overall productivity, quality, and compliance.

Solumina Maintenance, Repair, and Overhaul (MRO)

Solumina facilitates better visibility, traceability, and efficiency during the execution of vessel maintenance. It replaces paper-based processes with a centralized digital platform, reducing turnaround time and lowering hourly costs. It also establishes a complete historical record supporting future traceability actions

Solumina Supplier Quality Management (SQM)

In shipbuilding, the chain of quality extends beyond the yard. Solumina helps shipyards accurately track supplier performance, minimize escapes, and reduce inspection costs. It supports better communication with suppliers and empowers them to manage their own quality processes, driving consistent delivery of high-quality finished goods.

Solumina Enterprise Quality Management System (EQMS)

Quality in shipbuilding is non-negotiable. Solumina's EQMS is embedded throughout every part of the platform to enforce quality throughout production and sustainment processes. It ensures that vessels are built and maintained to the highest quality standards while attaining efficiency and performance goals in the process.

Solumina Manufacturing Execution System (MES)

In shipbuilding, precision and timeliness are vital. Solumina offers real-time tracking and control of complex production processes and allows engineering changes to be communicated and implemented in real-time, avoiding delays and ensuring shipyards are always at the forefront of efficiency and quality.

Designed for Digital Transformation

Solumina's microservices-based, cloud-native architecture is agnostic to source systems, enabling enhanced connectivity and integration. Through integration with ERP, PLM, and other enterprise systems, it provides a path for manufacturers to move smoothly from paperless operations to the digital thread, and ultimately to a true model-based enterprise. With the Solumina platform, shipyards can harness 3D engineering models across all manufacturing processes for efficiency, quality, and continuous improvement.

AIRBUS
DEFENCE & SPACE

"Quality is key. Solumina lets us tightly control processes, validate everything, configure systems properly, and sign off quickly. iBase-t helped us do that."

LEON ROWSON, Airbus Defense and Space

About iBase-t

To learn more or book a demo visit **www.iBaset.com**

iBase-t is a software company that simplifies how complex products are built and maintained. Founded in Southern California in 1986, iBase-t delivers solutions that ensure digital continuity across manufacturing, quality, and maintenance, repair, and overhaul (MRO) operations on a global scale.

iBase-t's Solumina Manufacturing Operations Platform is a cloud-native solution that drives innovation and improves operational performance for complex discrete manufacturers. iBase-t customers include Lockheed Martin, Northrop Grumman, Rolls Royce, Pratt & Whitney, and Textron.