MARINE & OFFSHORE

BUILD FOR SEA
OPTIMIZE EXECUTION OF YOUR MARINE MANUFACTURING OPERATIONS

HOW CAN YOU DRIVE MANUFACTURING EFFICIENCY AND INCREASE CAPACITY?

As they strive to improve their competitiveness, shipbuilders must increase their manufacturing capacity and improve their efficiency. They need to rethink their business processes to streamline and optimize their manufacturing operations.

Based on the **3D**EXPERIENCE® platform, **Build For Sea** is an industry solution experience that enables manufacturing innovation and yields significant operational improvements. It provides shipyards with digital continuity from engineering to production planning and execution, enabling them to optimize production schedules and resources, manage digital work orders, and efficiently manage manufacturing execution.

DASSAULT SYSTEMES

IMPROVE DELIVERY TIME

Being able to improve delivery times for ships and platforms is a substantial benefit for shipbuilders, but achieving this, while also maintaining costs, can be difficult. Clearly, the key focus for improving delivery times is in the manufacturing of the ship or platform as this is where the majority of time and resources are spent. **Build For Sea** provides advanced production scheduling optimization tools to allow a shipbuilder to optimize shipyard human and machine resources to help improve delivery times. In addition, efficient and effective tools are provided to manage manufacturing operations activities to ensure the shipyard team stays on schedule and to adjust activities when inevitable production issues occur.

REDUCE MANUFACTURING COSTS

As the majority of costs incurred by a shipbuilder are related to manufacturing, reducing manufacturing cost is critically important to help a shipbuilding company maintain profitability. **Build For Sea** is focused on improving the efficiency of manufacturing activities and therefore enables companies to reduce their manufacturing costs. Specifically, **Build For Sea** enables shipyards to evaluate production schedule alternatives to optimize human and machine resource utilization which directly translates to reduced costs. In addition, **Build For Sea** also enables the effective deployment of shipyard automation and lean manufacturing principles which are proven methodologies to reduce manufacturing costs.

REDUCE PRODUCTION ERRORS

Managing a shipyard based on error-prone, paper-based, old processes is no longer viable. Shipbuilders need to transition to the digital shipyard. This transformation relies on digitization, automation, collaboration, and implementation of a lean manufacturing approach. **Build For Sea** provides a fully integrated workflow from design to manufacturing execution. Up-to-date information and digital work instructions are made available to the right worker at the right time. **Build For Sea** properly manages modifications to work plans and ensures that all impacted production operators are notified. Embedded knowledge rules also help reduce errors and rework while traceability helps supervisors understand issues and take appropriate corrective action as required.

INCREASE PRODUCTION CAPACITY

In an increasingly global and distributed industry, shipyards must be able to design anywhere and build anywhere to make the most of their human and material resources. In this way, they can improve build cycle time and increase production output. **Build For Sea** provides a single collaborative environment across the yard's global ecosystem with the ability to implement a master production schedule and to coordinate and monitor production in real time. Taking advantage of lean manufacturing concepts, **Build For Sea** enables shipyards to be more agile and make rapid adjustments to work order distribution to increase capacity. Schedules are optimized thanks to simulation and analysis of production activities based on the shipyard layout as this highlights snags and inefficiencies.

REDUCE THE NUMBER OF NON-COMPLIANT REPORTS

With owners demanding more quality and value from their ships and offshore platforms, shipyards have to ensure flawless manufacturing if they are to satisfy their clients' requirements and maintain their reputation. **Build For Sea** provides the ability to directly define and manage quality related activities. Specifically, quality can be managed as integrated execution tasks, as an independent campaign, or as a mix of both. Whatever the choice, this experience provides the necessary tools to document quality procedures, collect and evaluate results, and to trigger corrective actions. For example, quality processes are defined to ensure appropriate personnel are notified if a quality issue is detected to enable quick collaboration to identify and implement the proper resolution in a timely manner.

Our **3D**EXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.

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