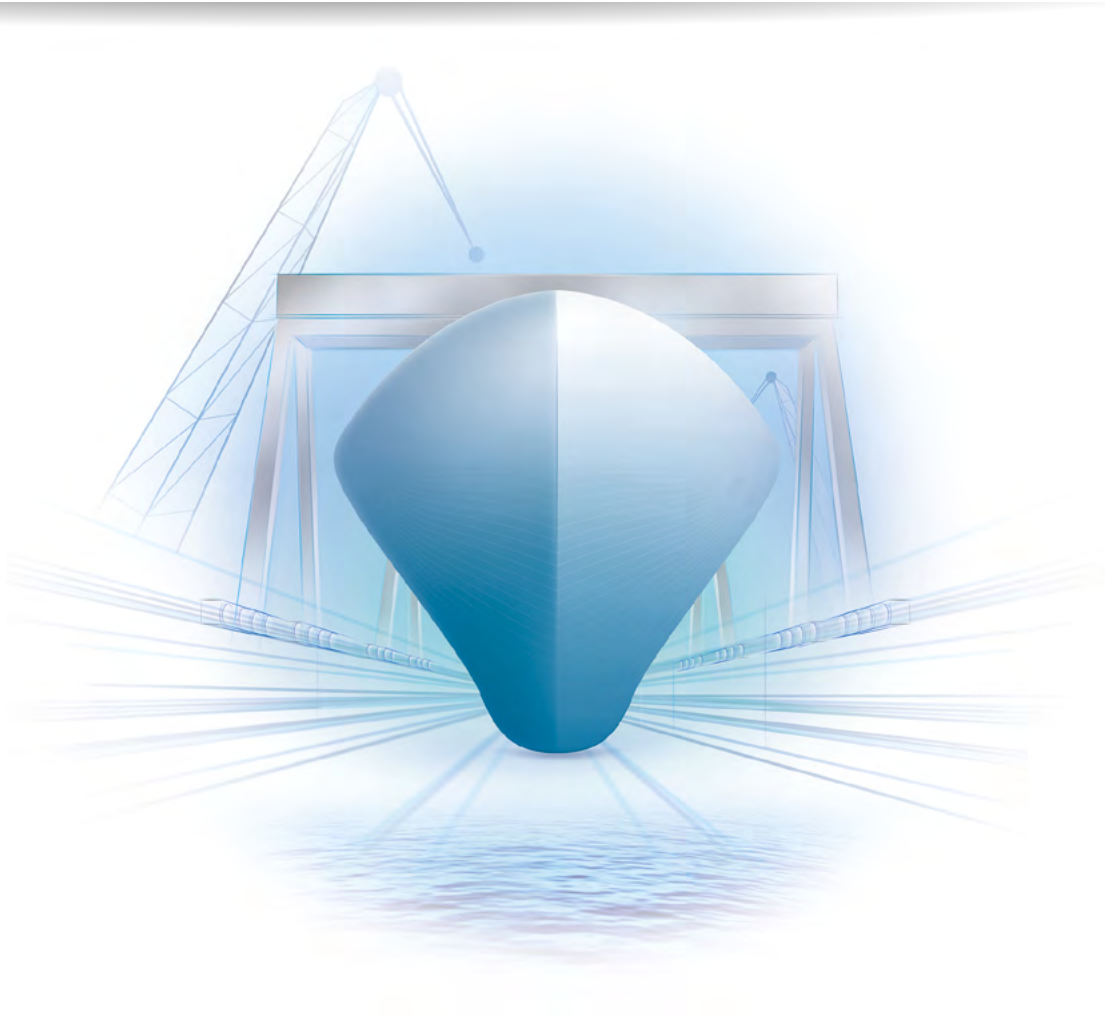




3DEXPERIENCE®

MARINE & OFFSHORE **OPTIMIZED PRODUCTION FOR SEA** Efficiently plan your marine project manufacturing



HOW CAN YOU OPTIMIZE PRODUCTION PLANNING FOR QUALITY, ON- TIME, ON-BUDGET DELIVERY OF SHIPS AND PLATFORMS?

As today's ships and platforms become larger and more sophisticated – millions of parts, multiple disciplines, hundreds of workers, numerous partners and suppliers, multiple sites – you must improve your manufacturing efficiency to remain competitive. This starts with manufacturing planning.

Optimized Production For Sea is an Industry Solution Experience, powered by the 3DEXPERIENCE® platform, that enables shipyards to perform manufacturing assembly definition, discipline-specific work preparation, process planning, interactive 3D work instructions, as well as 3D simulation and validation of production plans to help optimize production. With **Optimized Production For Sea**, shipbuilders can streamline their manufacturing planning activities, saving considerable work hours and reducing costs, while improving production quality.

IMPROVE TIME TO MARKET

One way for shipyards to improve time to market is to increase efficiency in their manufacturing processes. The challenge here is to be able to begin manufacturing planning earlier in the design cycle and to validate the process plan before execution starts.

Optimized Production For Sea uniquely provides rule-driven automation of the manufacturing assembly definition, work preparation, and process planning combined with efficient change management for all disciplines. With **Optimized Production For Sea** manufacturing information is generated automatically from existing engineering design, allowing the manufacturing planning process to start very early. Seamless integration between design and manufacturing also enables to quickly identify design changes and easily propagate them to manufacturing.

The ability to capture and reuse manufacturing know-how as well as to leverage experience from previous projects helps increase productivity and shorten the production cycle.

IMPROVE PRODUCTION QUALITY

With owners demanding more value from their ships and offshore platforms, shipyards have to ensure flawless manufacturing if they are to satisfy their client's requirements. They also need to comply with increasingly stringent regulations.

Optimized Production For Sea provides seamless integration between engineering and manufacturing information, which helps shipyards ensure manufacturing correctly adheres to design specifications.

Process plans can be complex and the ability to simulate and validate each and every step before execution starts is absolutely critical to ensure ships and platforms are built right the first time. With **Optimized Production For Sea**, production engineers can simulate and optimize all aspects of the production plan, including the assembly sequence, the required operations, and the resources that are needed to perform each operation. 3D simulation can also be used to identify interferences and perform ergonomic simulation to ensure feasibility and workers' safety.

REDUCE COST

In a highly competitive and cost-conscious environment, shipyards are seeking ways to optimize their operations and reduce costs.

Clear and comprehensive work instructions help eliminate costly rework and avoid human errors. **Optimized Production**

For Sea provides the ability to automatically generate 3D work instructions directly from the process plan to ensure consistency. Process engineers can easily describe a job, how to do it, and the safest installation approach.

Thanks to its integrated design and manufacturing environment, **Optimized Production For Sea** highly automated "design for manufacturing" rule-driven approach for work preparation results in fewer errors and reduced rework, thereby contributing to significantly reduce cost.

Optimized Production For Sea helps process planners optimize the use of the shipyard's human and machine resources.

ENHANCE ECOSYSTEM EFFICIENCY

The production of increasingly complex vessels and offshore platforms involves a very large ecosystem of many internal departments, shipyard workers, suppliers and partners, classification societies, and owners.

Based on the **3DEXPERIENCE®** platform, **Optimized Production For Sea** provides the extended ecosystem with a single access to up-to-date engineering information including requirements, production data, project schedules, and quality certification procedures, at any time and from anywhere, with proper intellectual property protection. **Optimized Production For Sea** enables high bandwidth collaboration to optimize production and operations for the entire project team.

KEY BENEFITS

- Improved productivity thanks to tight integration between engineering and production and effective change management
- Improved production quality through 3D simulation of production plans
- Accelerated time to market and reduced cost with rule-driven automation of assembly planning and work preparation
- Fewer errors and less costly rework thanks to interactive 3D work instructions
- Faster time to market and improved production quality through automation and integration of machine and robots with the manufacturing process
- Optimized use of shipyard resources
- Efficient ecosystem collaboration

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

Dassault Systèmes, the 3DEXPERIENCE® 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 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.

