



3DEXPERIENCE<sup>®</sup>

# MARINE & OFFSHORE DESIGNED FOR SEA

Design, Optimize, Validate, and Certify – Efficiently Shape Your Marine Project DNA



HOW CAN YOU DRIVE DESIGN EXCELLENCE EFFICIENTLY IN MARINE & OFFSHORE? How fast and efficiently you can deliver a **validated design** that satisfies customer requirements and complies with regulations and certification rules is critical. It requires **design integrity** across **engineering disciplines** and **efficient coordination** in a multisite, global ecosystem.

**Designed For Sea** is an Industry Solution Experience that enables you to achieve **design excellence** by defining, simulating, validating, and detailing a ship or platform design using advanced 3D design, engineering, and simulation in real time. Based on the **3D**EXPERIENCE® platform, Designed For Sea uniquely connects the dots between owners' requirements, regulations, engineering teams and suppliers with full traceability thereby improving quality, productivity, cost effectiveness, and ecosystem efficiency in an increasingly competitive Marine & Offshore environment.

### **ACHIEVE DESIGN EXCELLENCE**

As they strive to satisfy their clients' demand for more technologically advanced ships and platforms, shipyards have to strike a complex balance between the many characteristics that make up their DNA. Finding the optimal combination requires creating and testing alternative design scenarios while efficiently managing the associated complexity and risk.

**Designed For Sea** is a proven solution for innovative design. You can efficiently define and create ship spaces and lay out the general arrangement of all major equipment for space reservation, access, and validation. You can also engineer the design for all disciplines, from steel and composites structures, piping, HVAC and electrical systems to accommodation. For all disciplines, engineering teams can evaluate and validate design options in real time using advanced 3D simulation for cross-discipline interference checking, structural and systems analysis, weight analysis, penetration management, early space capture and material take-off early in the process to enhance product quality.

With **Designed For Sea**, you benefit from robust integrated requirement management with full traceability to easily monitor adherence to customer requirements and compliance to specific classification rules throughout the process for faster and more effective design validation and certification. **Designed For Sea** also provides designers with the ability to generate drawings automatically using industry standards and practices for certification and reports.

#### **IMPROVE DESIGN PRODUCTIVITY**

Intense competition creates enormous pressure to improve productivity. Getting it right the first time is critical.

**Designed For Sea** provides a unique collaborative platform to efficiently capture, reuse, and adapt proven designs, in-house expertise, and past experience to reduce cycle time. Knowledge is managed and made available anytime, from anywhere in an easily reusable form to your multidisciplinary, multisite organization worldwide. You benefit from a modular design approach and the ability to automatically generate the detail design, which is fully synchronized with the basic design, thereby improving productivity.

### **REDUCE COST**

In order to remain competitive in a cost conscious environment, shipyards need to be able to produce their design more economically. With **Designed For Sea**, you can leverage design history and experience as well as evaluate potential designs early when modifications have the least impact on budgets. Built-in marine and offshore semantics as well as company-defined design and manufacturability rules, standard catalogs, and templates help ensure designs comply with company standards and classifications, as well as ensure designs can be properly manufactured. You can easily identify changes, assess their impact, and propagate them early in the process to reduce downstream errors and alleviate costly design rework.

#### ENHANCE ECOSYSTEM EFFICIENCY

Strategic insight and careful coordination of all stakeholders are keys to success. Providing access to the latest engineering and project information for engineers, non-technical personnel, suppliers and ship owners in real-time is fundamental.

With **Designed For Sea**, all up-to-date project information is managed in a single collaborative environment and made available to project team members anytime and from anywhere with secure access to ensure intellectual property protection. You can efficiently monitor compliance to regulations and customer specifications, technical budget consumption, and delivery schedules using business intelligence tools that include real-time dashboarding and reports.

With a productive solution for intra- and cross-discipline 3D design review sessions, you can understand interactions between design elements, detect potential conflicts, and efficiently share and capture information, integrating reviewers' feedback in the 3D information and tracking resolution of identified issues.

## **KEY BENEFITS**

- Better satisfy customer requirements
- Efficiently comply with classification standards and regulations
- Improve design productivity
- Reduce design cost
- Improve intracompany and supplier coordination

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# Our **3D**EXPERIENCE® 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**.





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