## SIEMENS

DIGITAL INDUSTRIES SOFTWARE

# Set a course for the digital shipyard



#### Trends and challenges for ship construction

#### **Increased global competition**



Shipbuilders are tasked to deliver ships with a lower total cost of ownership and a shorter time to market.

As a result of intense competition, the number of overall active shipyards worldwide has decreased by 45% in less than 10 years.

Data source: Statista

#### Increased ship complexity

Shipbuilders are delivering ships that meet both the customer's requirements and sustainability targets.



New technologies are being introduced to meet stringent sustainability goals.

Source: Clarksons Research

## **Optimize shipbuilding**

A digital shipyard has a streamlined and intuitive PLM experience for manufacturing, production, simulation, design, automation and integrated planning.



Manage all design, engineering and manufacturing data in one connected environment

- Simulate and optimize manufacturing processes
- Feed production data back to the design teams
- Adopt advanced production technologies and smart manufacturing processes
- Manage quality from design to construction
- Optimize yard layout and workforce efficiency



## Realize the digital shipyard with Siemens Digital Ship Construction

Step 1: Connect design, construction and logistics processes in a centralized data backbone and link to enterprise software tools



Remove silos and barriers between these areas



Seamless information sharing



No time wasted,
fewer errors

#### Step 2: Create maximum efficiency on the construction floor



Integrate best practices in quality management



Use simulation to assess and validate processes faster

## Step 3: Adopt a virtual shipyard to optimize layout and utilization of the yard and equipment.



#### Smooth sailing ahead



Maximize efficiency and productivity in the construction process



Build complex vessels faster by eliminating process inefficiency and planning incoherence





Integrate closed-loop quality management to minimize quality issues

Become a forward-thinking technology leader in a competitive market

### What's next?

With the Siemens Xcelerator portfolio and the digital ship construction thread, shipbuilders can maximize productivity on the construction floor and deliver advanced, cutting-edge vessels in less time.

#### **More information**



© 2023 Siemens. A list of relevant Siemens trademarks can be found <u>here</u>. Other trademarks belong to their respective owners. 85437 06/23 OW For more information, visit: siemens.com/dsc