CASE STUDY

Large shipbuilder utilizes Intergraph Smart® Yard for complex cruise liner project

Key facts:

Project Location: Asia

Octave products used: Integraph Smart Yard, Forte 3D *(Intergraph Smart 3D),* OnSite Production *(Intergraph Smart Production Powered by NESTIX),* Smart LPM, 2D Schematic tools

Project summary

In 2016, a large Asian shipbuilder began a three-phase project utilizing Hexagon technologies. This project includes the production design, planning and fabrication of two Vista-class cruise ships to be delivered by 2022.

Challenges

Vista-class vessels – with more than 130,000 gross tonnage and close to 4,000 passenger occupancies – are among the largest cruise ships and to date can only be built by four shipyards in the world. This shipbuilder was a long-time user of a competitive modeling technology, but the company recognized the engineering tools used for commercial ships (tankers, bulk carriers, etc.) were not adequate for a more complex cruise liner project. While there is an increasingly strong demand for luxury cruise ships, there is a lack of engineering expertise.

Our solution

Octave helped digitally transform the shipbuilder's fabrication process. By using solutions such as Forte 3D, OnSite Production, SmartPlant® Foundation and other Octave technologies, the shipbuilder has digitalized its overall design process, production planning, shop floor management and data and material management.

Implementation of the new tools is scheduled in a phased manner and, in parallel, the footprint is increasing into new applications/areas in the shipyard based on shipbuilding consultancy and proof of concepts. After the first delivery in 2022, the shipbuilder will have an annual capacity of up to four cruise ships.

Dealing with Business Issues & Risks

- Compress schedule & control budget
- Minimize rework with efficient resource planning
- Eliminate wasted material & overrun
- Enhance quality management
- Integrate different disciplines into one platform
- Streamlined processes improve transparency
- Access to right information

Why Intergraph Smart Yard?

Intergraph Smart Yard brings together your company's engineering, procurement, project planning, fabrication and construction within a single collaborative knowledge-management environment. Smart Yard leverages a portfolio of integrated preconfigured solutions, addressing yards' work processes, reducing total cost and improving productivity across the entire project lifecycle. Large projects involve thousands of workers, millions of details and complex variables. The challenge: complete projects on time and within budget. With Smart Yard, you can consolidate project information and processes and implement solutions that reduce the total cost and improve productivity.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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