



Use of the 3D digital mockup resolves systems coordination.

# Speed, Quality and Anticipation at Heesen Yachts

By Alexander Breuning

Heesen Yachts adopts CATIA V5 for yacht design and provides its customers with insight into the final product early on in the development process.

**H**eesen Yachts is a designer and builder of high performance luxury yachts. Established in 1978, Heesen is based in the Netherlands and currently employs over 350 people.

Heesen's biggest challenge is to create a yacht that responds to the customer's vision for performance and quality, in a timely fashion. This is made possible thanks to Heesen's capacity to understand, very early in the product development process, a customer's requirements and to virtually visualize this vision thanks to the 3D capabilities of CATIA V5, before going into production.

CATIA V5 also provides, at a very early stage, interior design architects with high quality information

concerning the "net interior space" or available space inside the yacht. The architects use the 3D functional model of the boat to design the way the equipment, lighting and furnishings will be positioned.

The 3D representation of a complex digital mock-up, the use of parametric associative capabilities in modeling and the availability of functionalities specifically optimized for ship design are just some of the advantages noted by Heesen. "A 3D integrated model allows us to have more information faster and at an earlier stage than before", said Mr Boerakker, Managing Director Heesen Yachts. "This makes it possible to circumvent errors prior to production."

All the disciplines involved in the design of a yacht follow a precise and phased workflow. By providing a common vision of the process throughout the company, the relationships between product design decisions are structured and made available to all. "The functional model makes it possible for the different departments to talk to each other and to work in collaboration",

3D Space allocation provides realistic early information.



Unique custom build Main Stateroom interiors according to the owners vision.

said Mr. Boerakker. "This results in the rapid creation of complete interior layouts", he added.

The success of the initial pilot projects convinced Heesen that the time saved by using CATIA can be spent on innovation. As a result, they are currently implementing CATIA throughout the company. "We now have more insight into the product earlier than before and this inspires creativity", said Mr. Boerakker. "Plus, we can deliver drawings faster and of better quality and are able to perform feasibility studies in a matter of hours thanks to the power of 3D", he concluded.

## More about INCAT

Dassault Systèmes' partner INCAT provided Heesen with consulting and training for the preparation and execution of the pilot projects as well as the actual implementation of CATIA throughout the company. INCAT was also instrumental in helping Heesen set up templates that would significantly reduce repetitive work in the geometry creation process.  
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