

Korsö Båt

Marine & Offshore Case Study



Challenge

Family-run Korsö Båt wanted to leverage its extensive boatbuilding knowledge and expertise with the proper software tools.

Solution

The company adopted Dassault Systèmes 3DEXPERIENCE technology for boat design.

Benefits

Korsö Båt has increased innovation, reduced development times through design reuse, and streamlined its design change process.

Korsö Båt sets sail with 3DEXPERIENCE technology

An exceptional sailing experience starts with an exceptionally-designed boat. Hjørvald Sundkvist founded his boatbuilding company over 30 years ago and gradually transformed it into one of Finland's most proficient design houses. A design subcontractor to some of Finland's leading motor and sailboat builders, Korsö Båt still faces some stiff competition. "Our biggest challenge is to combine utility and good looks - every customer wants to have the best boat," Daniel Sundkvist, Managing Director, Korsö Båt said. To meet this challenge, the company relies on its greatest strength - its extensive knowledge and experience gained through years of designing boats and customers know that they can count on Korsö Båt to transform their dream into a beautifully designed boat. In Korsö Båt's woodworking department engineers also produce handmade plugs or prototypes for fiberglass molds. "We make the plugs for our fiberglass boats out of wood because it is inexpensive and easy to work with. We can, as a result, easily make changes to the boat's structure to meet client demands early on in the design process," Sundkvist explained.

3D, a competitive advantage

Daniel Sundkvist relies on 3D technology to gain the edge on competitors. Korsö Båt chose CATIA, part of the 3DEXPERIENCE Platform from Dassault Systèmes (3DS), for the design of its leisure boats in 2010 and has seen its business grow thanks to innovation. The small company increased its design capacity, confirming its

reputation as a highly-skilled design house whose boats combine traditional craftsmanship and modern 3D technology.

Korsö Båt uses CATIA to design almost all of its boat parts and to make changes rapidly. "One of the reasons we opted for CATIA was for its ability to automatically update an entire design when modifications are made," Sundkvist said. "Our previous solution could not do this. This makes a huge difference in terms of design time. It helps us innovate as it's easier to show what we have in mind and to transfer this to a 3D model." With CATIA, Sundkvist and his team focus more on boat design rather than the challenge of creating 3D data. "The development process ends up being more inspiring, creative and fun," he said. "We can also capitalize on previous know-how and customize the designs we already have to create new ones. This has considerably boosted our design capabilities."

Korsö Båt's designers focus either on one aspect of a current model, such as the cabin interior, or on designing a new boat from scratch. They work from hand sketches to confer with customers on how they want the boat to be. They then precisely create a 3D model of the hull based on hydrostatic and weight calculations. Once the hull is completed, designers then concentrate on hull stiffening and on the boat's interior. "We try to use the entire boat volume intelligently. It's a question of balancing strength and functionality," Sundkvist explained.



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Daniel Sundkvist, Managing Director, Korsö Båt



Korsö Båt has already designed two new boats since 2010 – a 39 and 36-foot model. CATIA was used from the very first hull lines to the definition of all the manufacturing drawings of the wooden interiors, fiberglass components, and metal components like the grab rails that it provides to the manufacturer. The company is still evolving. Previously the manufacturer set up the NC programming from Korsö Båt's drawings. The company is now extending its offer by supplying its own NC programs to manufacturers. Although plugs are still made by hand, Sundkvist and his team will soon use their new milling machine to create the prototypes as well. "CATIA enables us to cover more aspects of the development process than before. This means more business," Sundkvist said.

RAND Finland, a Dassault Systèmes partner contributed strongly to successfully implementing CATIA at Korsö Båt. "Their support was a big plus, right from the beginning," Sundkvist said. "They even let us test the solution for a few months before we purchased our first license. We were able to assess its functionalities and the different ways we can approach a design. We will definitely expand our use of CATIA in the future and even plan to hire more designers over the next two to three years. Just recently, we hired a designer who was used to using a third party solution for boat design. After discovering how quick and easy it is to design fillets, for example, with CATIA, he now often asks to borrow CATIA because he is more efficient than with the other software. I'm sure that he will soon use CATIA for more than creating fillets," Sundkvist concluded.

Focus on Korsö Båt

Korsö Båt Ltd. is a family-run business that designs and builds motor boats as well as boat interiors for both motor and sail boats.

Products: Fiberglass, aluminum and wooden boats
Revenue: N.A.
Employees: 6
Headquarters: Öja, Finland

For more information
www.xib.fi

Focus on RAND Finland

RAND Finland Oy is a 3D-CAD and PLM company in Finland and the Baltics with expertise in Dassault Systemes' high-end PLM solutions CATIA, ENOVIA, SIMULIA, and 3DVIA. The company provides software and services to the manufacturing and engineering industry. RAND Finland Oy provides consulting and training services and has been highly experienced with CATIA since 1988.

For more information
www.rand.fi





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