

Leisure and yachts

Frers Naval Architecture

Use of Siemens PLM Software's technology plays critical role in substantially improving operational efficiency

Product

NX

Business challenges

Meet the increasing demand for customized yacht designs

Combine the great history of yacht design that has characterized Frers for generations with cutting-edge technology and new design concepts

Keys to success

Ability to use 3D on a variety of surfaces and easily modify design parameters without having to rework the entire model

Synchronous technology

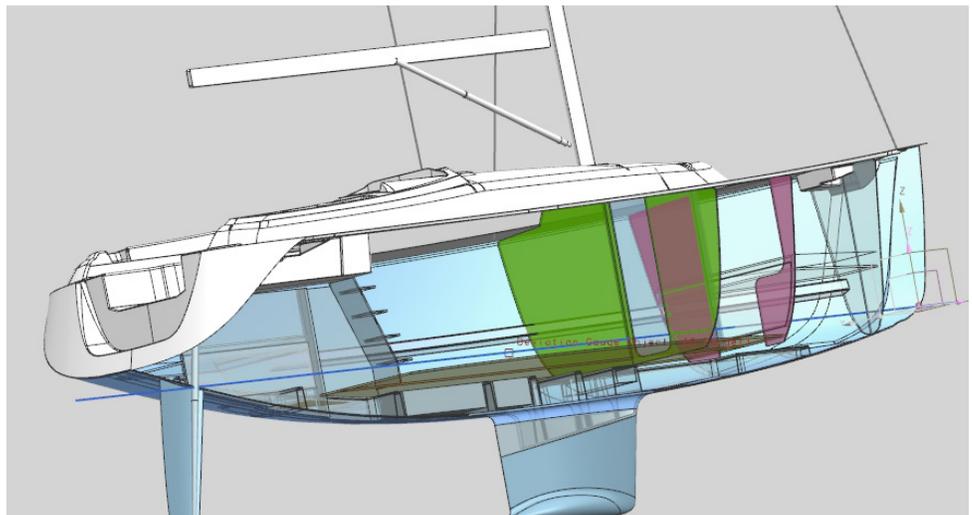
Easy collaboration among work groups by facilitating the sharing and re-using of product design process knowledge

Faster change management process

Results

Smarter overall product development decision-making

Significantly faster completion of new designs



Family yacht designer's product quality and business longevity reach new heights using NX software

A tradition of creating truly distinctive designs

Frers Naval Architecture & Engineering (Frers) is a design studio with a reputation for quality that extends across three generations. The first design was hand-drawn by Germán Frers Sr. in 1925. Since that time, Frers has created more than 1,300 designs, from small dinghies to huge mega-yachts, from hard-working production boats to fast and nimble catamarans for America's Cup, and from highly customized offshore cruisers and racers to

advanced-technology power vessels. Each design is imbued with the unique combination of Frers' design ingredients: experience handed down over generations coupled with advanced technology and concepts.

Frers' customers are diverse as well, from shipyards that require series production like Nautor's Swan to individuals who come looking for a truly exceptional design.

Identifying the problem, deploying the solution

Marketplace demands for speed and quality were increasing; moreover, Frers' previous design technology wasn't providing the appropriate functionality to quickly

Results *(continued)*

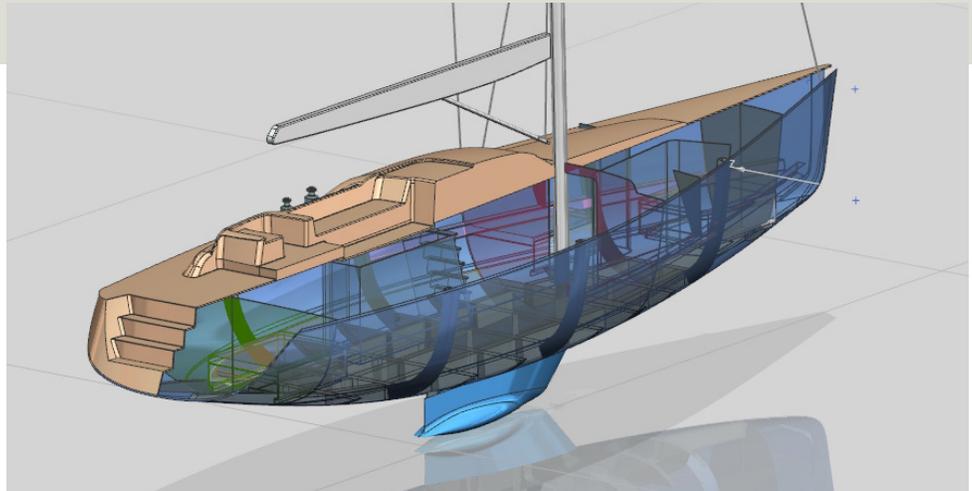
Notable improvements in product quality and innovation

Added value through better collaboration with shipyards, interior designers and other suppliers

“The synchronous technology of NX is extremely important for our work, because we save time by avoiding unnecessary steps during the design process, while making modifications and adjustments in a faster way than we used to do using the traditional methods.”

“NX has become the tool that allows us to do tridimensional work on a great variety of surfaces, enabling a great advantage: the ability to adjust design parameters without having to re-do the entire model.”

Juan Gadea
Naval Engineer Leader
Frers Naval Architecture & Engineering



create the type of high-quality products for which the company had become renowned. Making edits and changes using this system had always been difficult, because it obligated the designer to redo entire sections that needed to be modified.

In addition, the company performed an eye-opening audit. “After a thorough analysis of our design cycle, we noticed a 15 to 20 percent efficiency loss due to 2D and 3D software incompatibility,” says Juan Gadea, a naval engineer leader at Frers.

For these reasons, the company began a thorough review process that included a detailed comparison between various leading solutions available on the market. In order to meet its customers’ high expectations, Gadea notes that the team determined that it needed an advanced 3D

design solution, especially one with great parametric capabilities. As a result, Frers selected Siemens PLM Software’s NX™ software for the design and development of its internationally renowned, exclusive yachts and vessels.

Frers management noted that NX had strong credentials as a leading solution for fully integrated computer-aided design (CAD), computer-aided engineering (CAE) and computer-aided manufacturing (CAM) and is used throughout the world in the development of highly sophisticated products.

Agility transformed into speed, quality and innovation

Frers uses NX to create full 3D digital models of its yachts, from decks to bodies and appendages, such as the keel and the rudder. With NX, the company has signifi-

“The synchronous technology of NX is extremely important for our work, because we save time by avoiding unnecessary steps during the design process...”

Solutions/Services

NX
www.siemens.com/nx

Customer's primary business

Frers Naval Architecture & Engineering is a design studio with a long and successful family tradition. The company has created more than 1,300 designs since its inception in 1925, including mega yachts, catamarans, offshore cruisers and racers, power vessels, and more.

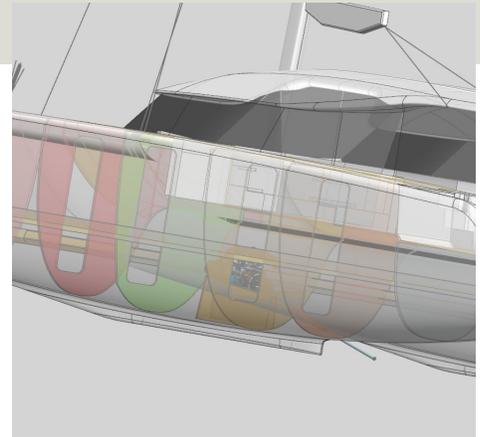
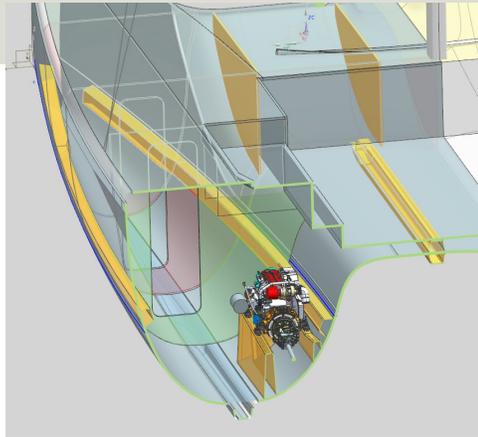
www.germanfrers.com

Customer location

Buenos Aires
Argentina

"With NX, we can seamlessly integrate 2D and 3D designs, which resolves the efficiency loss issue while enhancing design flexibility. This increased efficiency has allowed us to have better interaction with shipyards, interior designers, and other suppliers in real time, providing added value."

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"With NX, we can seamlessly integrate 2D and 3D designs..."

cantly reduced its cycle time from design through delivery. Gadea explains, "The synchronous technology of NX is extremely important for our work, because we save time by avoiding unnecessary steps during the design process, while making modifications and adjustments in a faster way than we used to do using the traditional methods. Using the powerful parametric capabilities of NX, it is much easier for us to make modifications while we are designing." He notes, "NX has become the tool that allows us to do tridimensional work on a great variety of surfaces, enabling a great advantage: the ability to adjust design parameters without having to redo the entire model."

According to Gadea, the company's engineers are pleased with the ease with which they can now make design changes and collaborate across work teams using NX. He adds, "With NX, we can seamlessly integrate 2D and 3D designs, which resolves the efficiency loss issue while enhancing design flexibility. This increased efficiency has allowed us to have better interaction

with shipyards, interior designers, and other suppliers in real time, providing added value."

According to Gadea, with product and process knowledge now readily accessible and re-usable, his team is producing a higher quality, more innovative design from the onset. Ultimately, using NX, Frers is making smarter decisions and getting better products to market faster.

"We are constantly looking for better ways to maximize the technology and solutions presented by partners like Siemens PLM Software," says Gadea. In fact, Frers' capacity to innovate, along with the company's tradition for creating elegant sailing vessels and powerful racing yachts, has been pivotal in its receiving numerous industry awards and recognitions at international events, including Volvo Ocean Race, America's Cup and Panerai British Classic Regatta.

Obviously, with NX, Frers is now a far more agile yacht designer. The family's penchant for quality yacht design and business longevity is stronger than ever.

Siemens Industry Software

Americas +1 314 264 8499
Europe +44 (0) 1276 413200
Asia-Pacific +852 2230 3308

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