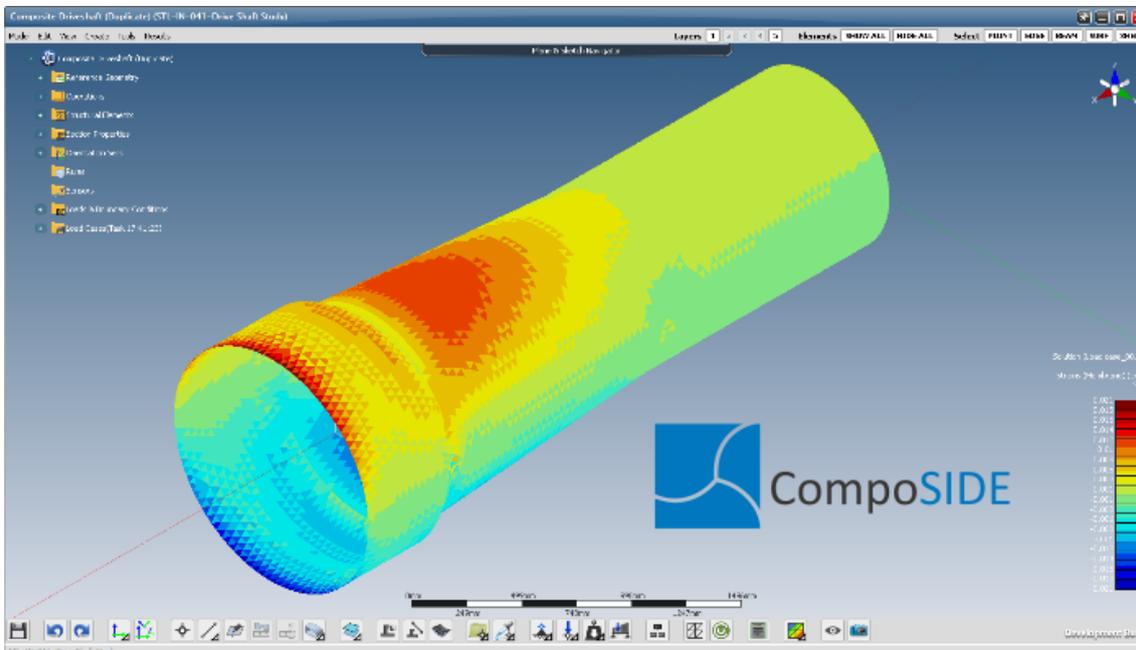


## CompoSIDE delivers up to 40% efficiency savings to composites consultants



CompoSIDE<sup>®</sup>, the innovative and game changing web based composites design engineering solution, has delivered its pilot customer time and cost savings alongside providing a source of competitive advantage. By using CompoSIDE, composites consultancy STRUCTeam has saved over £40,000 in software licensing costs in 2014 at the same time as reducing composite application design time between 25% and 40%.

“Our design teams have been using CompoSIDE for over three years during its development on a wide range of client projects with successful outcomes,” explains STRUCTeam’s Engineering Manager Chris Monk. “We have made substantial cost savings by choosing CompoSIDE instead of other commercial composites design software. And the unique functionality of the web-based solution enables us to test composites solutions collaboratively at an early stage. This saves our clients further time and money, improving the final solution and gives us a source of competitive advantage.”

According to Chris, one of the biggest challenges STRUCTeam faces is to quickly establish and develop concepts that will work: “Deriving very complex finite element analysis (FEA) solutions in the early stages of a composites application’s development is not cost effective. Yet hand calculations can be overly simplistic.

“CompoSIDE bridges the gap between hand calculations and FEA models, enabling our engineers to design from the outset for the right level for the maturity of the project and product we are developing.”

A recent example of how STRUCTeam applied CompoSIDE to a client's composites challenge that resulted in a more innovative design for a much reduced costs is the development of a novel composites driveshaft for offshore wind turbines. Chris explains: "Most of the development work for the composite components was completed using the laminate design, beam section and FEA tools within CompoSIDE.

"These tools and the integrated nature of the web-based solution enabled us to cycle through multiple design options in a very short space of time. When the laminate and overall concepts were proven by using the CompoSIDE toolsets, the information was exported to an FEA package using FELink so that detailed design work and the final verification could be completed efficiently."

STRUCTeam has also applied CompoSIDE's powerful capabilities to meeting challenges faced by its clients in the marine sector. "Many of the detailed structures within a high performance race boat can be simplified into representative beams and panels structures," highlights Chris. "We can manage the entire composites development of these structures within CompoSIDE.

"We use the software's materials database to control the project input data, the laminate design module (LAMINASpace) to derive baseline layup configurations and then we use the SECTIONSpace module to build appropriate representations of key structural areas. The fast turnaround on these activities enables our engineers to remain one step ahead of the very aggressive build schedules for these types of projects. Overall, using CompoSIDE allows us to focus on solving the real design challenges we are facing rather than on how to model a complex problem using spreadsheets developed in-house."

In addition to the competitive advantage that CompoSIDE delivers to STRUCTeam as a result of its capabilities, Chris notes that CompoSIDE's subscription model that charges according to usage has directly saved on software licensing costs: "CompoSIDE's licensing model is not based on the classic site or user license approach. Instead we pay for the calculation tools needed for each specific project and only when we use them. A huge range of functionality is included in the basic subscription.

"That means we don't have to invest in multiple mainstream FE software licences that we would not be using at full capability. The other advantage is that CompoSIDE's costs don't eat into my capital expenditure budget and my software costs can be allocated to specific project budgets.

"That's how we have saved an estimated £40,000 in 2014 by using CompoSIDE and only paying for what we use."

Chris concludes: "We find we are faster, more efficient, more profitable and deliver improved quality control alongside greater benefits to our clients when we rely on CompoSIDE as our composites project design tool."

