Sector: Rig Sail Certification

Project Challenges:

Rig Analysis in the sailing conditions established by the RINA Rig Rules guidelines, using RigEdge

Key to success:

Ability to run the structural analysis of the rig under tuning, sailing and dynamic loads

Result:

All About U2 successfully achieved certification



RINA is one of the top ranking marine certification societies in the world, and a founding member of the International Association of Classification Societies (IACS), formed in 1968. The RINA fleet is recognized by approximately 114 international flag authorities

MADAYACHTWORKS

Ada Yacht Works specializes in constructing custom steel and wooden yachts, while combining state-of-the-art technologies and innovative ideas with traditional production techniques



SMAR Azure Ltd

SMAR Azure develops innovative software solutions for the marine industry, working as technological partners to meet the needs and requirements of the industry





"All About U2" is a 50m luxury sailing yacht launched at the ADA Yacht Works in Bodrum, Turkey, in June 2019. The ship is flagged in the Marshall Islands, and classified as "commercial", therefore certification is mandatory.

RINA was approached to perform the rig certification according to the RINA Sailing Yacht Rig guidelines. For RINA to grant a sailing yacht rig certification, the rig design is verified under a variety of sailing load cases via a detailed structural analysis of the mast step and chainplates, standing and running rigging.

In 2012, RINA adopted RigEdge to certify rigs, according to the Sailing Rigs certification under MCA LY3 code. In collaboration with RINA, SMAR Azure developed the RigEdge Dynamic Module - adding the analysis of the impact of inertial loads on the rig.

Since then, RINA has certified several yachting rigs. On the occasion of this last project, we spoke with Mr Flavio Faloci, Senior Engineer and responsible for the Yachting Plan Approval, to hear how he used RigEdge for his work on the All About U2 project. Some of the main points mentioned were:

Dealing with unusual rig configurations

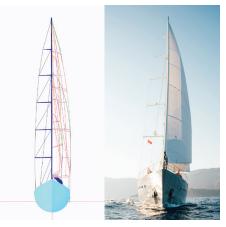
Flavio mentioned that RigEdge is very useful in dealing with unusual rig configurations – for example, in this case,



the chainplates connecting to the vertical and diagonal stays we in completely different positions.

Easy to use

RigEdge is purpose-built to analyse rigs. Compared to generic structural analysis software, changing design parameters is quick and painless, and setting up different test cases is very simple, saving the user time and effort.



Simplified certification process

RigEdge also allowed RINA to reduce the costs of certification, and make the process simpler for their customers. Due to the variety of specialized tools available in the software, the need for additional documentation and drawings from the customer is reduced.

Excellent customer support

Flavio also highlighted that he's always found the support service for RigEdge very quick and efficient which is extremely important for them. Experienced engineers are available over the phone at any time, ready to help with any issues.

Photos courtesy of Global Impact Yachting and Ada Yacht Works. Software pictures taken from RigEdge.

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