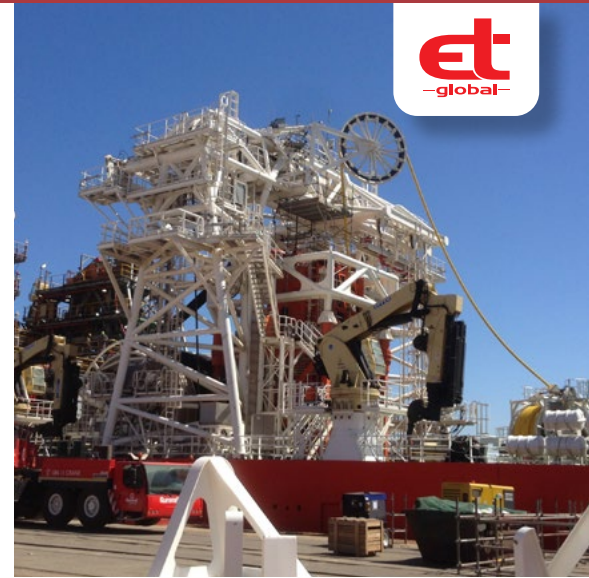


CAPABILITY STATEMENT



Marine Engineering

Design and analysis of plant structures on ships require specialist knowledge of marine engineering standards, codes of practice, ships motions and industry-specific regulations. ET-Global has been working in this domain since its inception and offers a world-class engineering service for marine engineering applications.



The Team Leaders

Mark Hewitson and Renier Esterhuizen lead ET Global's marine structural engineering team, bringing extensive expertise and a strong collaborative dynamic.

Mark Hewitson, Managing Director, was the Chief Design Engineer at De Beers Marine, where he played a key role in developing the company's structural design standards for sea-going vessels. Mark was also a pioneer in the design and development of the De Beers first sub-sea crawler. His in-depth knowledge and experience since 1995 are instrumental in guiding complex marine engineering projects.

Renier Esterhuizen has worked closely with Mark for nearly a decade, mastering the intricacies of marine structural engineering. He has been pivotal in projects such as the design and subsequent upgrades of the Coral Sea and SS Nujoma. Having worked with multiple classification societies (ABS, Llyods & Germanischer Lloyd), he is well versed in the specialist requirements of sea-going structures. Renier's practical experience and leadership ensure the successful execution of marine projects from conception to completion.

Their combined core competencies include and are not limited to:

- Finite Element Analysis of vessel super structures
- In depth knowledge of the different classification societies
- Structural safety audits & SIMM services
- Root cause investigations

Marine design project success

- SS Nujoma Structural Analysis and Design Services

Marine design competencies

- Above and below deck strengthening to classification society
- Equivalency studies
- masses & moments calculations

SS Nujoma Structural Analysis and Design Services



Project Overview:

SS Nujoma Structural Analysis and Design Services

Client:

ADP Marine & Modular

Competition Date:

2016

Project:

SS Nujoma - The World's Most Advanced Diamond Exploration and Sampling Vessel

Scope:

ET-Global played a pivotal role in the development of the SS Nujoma, offering specialized structural analysis and design services throughout the pre-feasibility, feasibility, and detailed design stages. Our work focused on both new constructions and upgrades for the vessel's materials handling supporting steelwork.

Key Contributions:

- Performed comprehensive analyses, including ship's motions, harmonic, and static analysis, of all supporting steelwork for the vessel's materials handling systems, from primary screening to final recovery.
- Ensured all analysis and designs complied with relevant SANS codes and marine classifications, including Lloyd's Register (LR) and the American Bureau of Shipping (ABS), meeting the highest standards of safety and performance.
- Provided detailed reports at each project stage, fulfilling rigorous auditing requirements set by the client and ensuring transparency and accountability in the design process.
- Our collaborative efforts with ADP Marine & Modular have contributed to the SS Nujoma's recognition as a forefront vessel in diamond exploration and sampling, showcasing our commitment to engineering excellence and innovation in marine projects.