






## Our field of expertise

# Heavy lift & transport

Saltwater is your partner for transport engineering, offering engineering support for the securement of various types of cargo aboard vessels.

## What sets us apart?

-  **Tailored solutions** for any rigging and grillage design to cater unique cargo
-  **Complete support** incl. stability, structural calculations and loading plans
-  **Safety assurance** with the help of specialized software analyses
-  **Proven expertise** with large-scale heavy lift and transport operations
-  **Focus on innovation**, reusability and efficient transport solutions





**We specialize in designing custom rigging systems, precise loading plans, and safe transportation.**

## OPTIMIZED SOLUTIONS FOR SECURE LIFTING & TRANSPORT

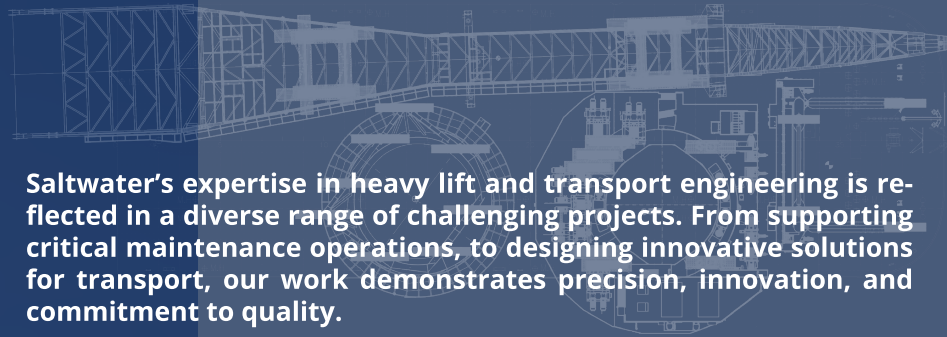

Saltwater Engineering is your partner for heavy lift and transport engineering, offering comprehensive services to ensure the safe and efficient movement of cargo across the seas. Our expertise provides securing various cargo types aboard vessels, with custom solutions designed to meet the unique requirements of each project.

We provide advanced wave load analyses to evaluate environmental conditions to ensure cargo safety under challenging circumstances. We identify and mitigate potential risks, and guarantee a securely lashed load with the use of specialized software and FEA calculations, minimizing movement and preventing damage during transit.

For heavy lift operations, we specialize in designing custom rigging systems, preparing precise loading plans, and design grillage structures to support cargo that cannot be stowed directly on the deck. Deck strength checks and stability calculations are integral to our process, ensuring that the vessel and cargo remain safe during transport.







Saltwater's expertise in heavy lift and transport engineering is reflected in a diverse range of challenging projects. From supporting critical maintenance operations, to designing innovative solutions for transport, our work demonstrates precision, innovation, and commitment to quality.

## Cadeler crane transport

Saltwater provided the engineering for the crane transport from the heavy-lift jack-up vessels Wind Orca and Wind Osprey to guarantee a safe and seamless execution.

## Why Saltwater?

Transporting the two cranes was a complex operation. These giants, with a 1,200mt lifting capacity and 132-meter reach, were dismantled and transported on multiple pontoons. At the Mammoet Terminal in Schiedam, Mammoet's PTC shore crane ensured precision during load-out.

## Our approach

Saltwater's role began with wind area calculations to secure permits for inland transportation complying with HCC regulations. We created stowage plans to optimize cargo stability, verifying overhang dimensions and load distribution.

For loading, we developed a ballasting plan and stability checks to ensure safe pontoon operations. Rigorous deck strength analyses allowed for advanced support structures to distribute the crane weight evenly.

During transit, our sea fastening plan for the A-frame used friction-based methods, whilst ensuring stability and minimizing complexity. A specialized rigging plan facilitated lifting operations that were executed with a PLM crane.

Finally, our advanced lifting plans ensured a smooth and safe operation during the placement of equipment.

## Delivering success

This project highlights our expertise to manage complex heavy-lift and transport challenges. From planning to execution, we cover every detail, empowering clients to focus on progress. Let us bring our expertise to your next project and experience the Saltwater advantage.



Are you facing a challenge?  
Get in touch with one of our consultants



Partner up with Saltwater

# Everything Is Possible



Saltwater provides customized engineering solutions for the naval and offshore industry. Understanding your challenges enables us to deliver practical, quality products and clever solutions.

## Mission

Our mission at Saltwater is to engineer and develop maritime solutions that reduce the environmental impact and support a low carbon footprint. We are committed to provide innovative and efficient engineering services that meet the needs of our clients while guaranteeing safety and quality.

## Vision

At Saltwater, our vision is to be a leading force in the maritime engineering industry, striving for positive change through socially responsible practices. We envision a future where our engineering solutions help to create a healthier and more sustainable world. We are committed to ship conversions and new vessel designs, encouraging a culture of young innovators and collaborating with our partners and clients to achieve our shared goals.

## Saltwater Engineering B.V.

Buitendijks 33  
3356 LX Papendrecht  
The Netherlands

**T** +31(0)78-205 15 00

**M** [info@saltwater.nl](mailto:info@saltwater.nl)

**W** [www.saltwater.nl](http://www.saltwater.nl)