



MALIN ABRAM

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MALIN AND FREIGHT FORWARDERS: WORKING TOGETHER

YOUR FREIGHT FORWARDER FOCUSED TEAM

WE ARE DELIGHTED TO PRESENT THE TEAM WHO WILL BE WORKING WITH YOU GOING FORWARD.

JAMES BOWIE **MANAGING DIRECTOR, MALIN ABRAM**

James began his career as a summer intern with Malin Abram, before gaining a degree in Naval Architecture and joining full time as a graduate. Having successfully worked through the graduate programme and Naval Architect stream he firstly secured the Engineering Director position in Malin Abram, before recently progressing to Managing Director. James has experience in a variety of projects from marine heavy lift transportation to design and manufacture of bespoke jigs and has been involved in major site operations worldwide.

J.Bowie@malingroup.com



STEVE THORNLEY **DIRECTOR, MALIN GROUP**

Steve joined Henry Abram & Sons in 1994 from Babcock, as a Marine Superintendent. This role involved providing engineering design packages, loading ships and barges and co-ordinating full turnkey solutions, delivering indivisible loads worldwide. Steve has since been promoted to Sales Director, with responsibility for developing the customer base and creating strong customer relationships.

S.Thornley@malingroup.com



VICTORIA WOOD **BUSINESS DEVELOPMENT LEAD, MALIN ABRAM**

Victoria joins Malin Abram with over 10 years' experience in business development and marketing across global OEM's and engineering services. Victoria brings with her expansive knowledge in strategic growth, client engagement and market expansion across engineering sectors, with a strong track record of building lasting partnerships and identifying new opportunities for growth and innovation, on a global scale.

V.Wood@malingroup.com



ALAN MUNDIE **SENIOR PROJECT ENGINEER, MALIN ABRAM**

Alan joined the Malin Abram team as a Senior Project Engineer in 2021. He has a background in the Offshore Renewables, Ship Management, and Oil and Gas sectors. Prior to joining Malin, he has been involved in a range of projects, including the transport and installation of floating wind turbines, asset management of FPSO's, and providing warranty services for offshore transportation. During his time with Malin he has been involved in a variety of short sea shipping projects and latterly focused on the delivery of major transportation projects which support the UK Defence Sector.

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SPECIALISMS TO SUPPORT FREIGHT FORWARDER'S NEEDS

Malin Abram is your trusted advocate for all things heavy lift. From the beginning as a ship delivery outfit in the 19th century, Malin Abram has evolved to a full marine engineering service, working with a variety of clients worldwide, to deliver complex projects encompassing many disciplines. We do this by focusing on what matters: you and your needs.

Malin Abram span a range of specialist services, which together draw upon a full range of skills and expertise perfectly suited to serve freight forwarder's range of requirements. This includes, but is not limited to:

· TECHNICAL

- Deck Strength Checks
- Design and Build of Grillage
- Design and Build of Lifting Beams and Equipment
- Design and Build of Transport Jigs and Frames
- Design & Build of Fabrication Cradles and Jigs
- Global Integrity Checks on Cargo
- Lifting and Deployment Studies
- Lifting and Turning Studies
- Marine Warranty Surveying
- Mooring Analysis
- Motion Response Analysis
- Roll-on/Roll-off Engineering
- Seafastening Design
- Stability Checks and Naval Architectural Services
- Stowage Plans
- Suitability Surveys
- Towage Analysis & Engineering
- Trailer Stability and Strength Checks

OPERATIONAL

- Project Management
- Ship Launches
- Site and Marine Operations Supervision
- SPMT and Crane Supply/Hire



CASE STUDIES

CONTRACT RECORD: M227



Pentagon Freight contracted Malin Abram to provide Marine Transportation Technical Support.

This involved the development of stowage plans, seafastening design, ballast calculations for barges, marine superintendence during loading and were also required to provide guidance on module modifications for sea transportation, such as securing points on the UF Skid at Buckie.

The project critical cargo was transported from various Ports in Northern Europe to a marshalling port in Holland where the cargo was then loaded to Liner vessel for final transportation to Singapore.

The seafastening designs produced by Malin had to be capable of being used on any vessel in the transportation chain without re-design.



Figures 1-4 (L-R): PWT Skid being towed Pisa to Livorno; Emergency generator loaded in Norway; Metering skid loaded in Norway; Crane body loading in Norway



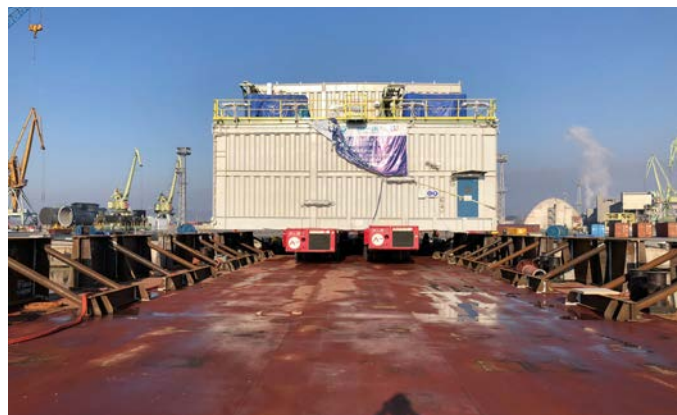
Figure 5: UF Skid being Loaded at Buckie

CASE STUDIES

CONTRACT RECORD: M356



Bertling contracted Malin Abram to provide engineering support and site supervision for the Ro-Ro loading and securing of various modules and pressure vessels for the TCO Project. The engineering support provided was with respect to ensuring seafastening and loadout methodology including grillage design, Ro-Ro ballast plans and mooring arrangements, were suitable and fit for purpose. In addition to designing grillages for different cargo types, we attended during grillage installation to supervise making sure everything was fabricated and installed as per design. Our engineers were proactive on these occasions, finding solutions when barges did not arrive in the expected condition. We were required to attend during loading operations to ensure the seafastening was carried out to the approved design and that the barge was correctly ballasted at all times. By using our experience we were able to reduce the time taken for seafastening installation and removal where possible thus saving time and money. Under the guidance of Malin Abrams Marine Surveyors the cargo was loaded, stowed, secured and discharged to both the surveyor and the client's satisfaction.



Figures 6-9 (L-R): Typical Module Loadout (Ro-Ro); Pressure vessel on trailer on quayside; Pressure vessel on barge deck departing port; Welded Seafastening



Figure 10: Example of Pressure vessel seafastening and grillage

CASE STUDIES

CONTRACT RECORD: M286



DHL contracted Malin Abram to carry out a 3rd Party desktop review of the following design documents, calculations and drawings:

- Vessel lift plans/drawings
- Vessels estimated seagoing forces (in line with industry best practice)
- Vessel stowage plan
- Vessel securing/seafastening plan
- Road Haulage/trailer plans

Malin Abram then attended on site to ensure that the agreed methodologies and procedures were followed. The following operations were therefore witnessed and approved, with advice being provided where necessary:

- Monitoring of barge stability throughout loading operations
- The transhipment of the Pressure Vessels from the barge to the Heavy Lift Vessel by way of ships crane
- Stowage and securing of the Pressure Vessels and Skids aboard the vessel
- Attendance during loading and transhipment operations

The team also provided all engineering work for the transportation of Pressure Vessels (217Te) from their fabrication facility at Morimatsu, China, with the cargo shipped by self-propelled barge to an awaiting Heavy Lift Vessel (HLV) for transhipment at Port of Shanghai.



Figures 11 & 12 (L-R): Barge loaded with pressure vessel for river transit to Port of Shanghai; Loading of skid in Avonmouth



Figure 13: HLV self loading from barge in Shanghai

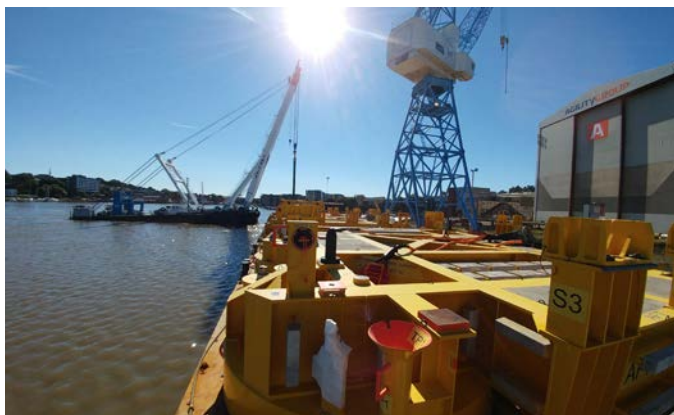
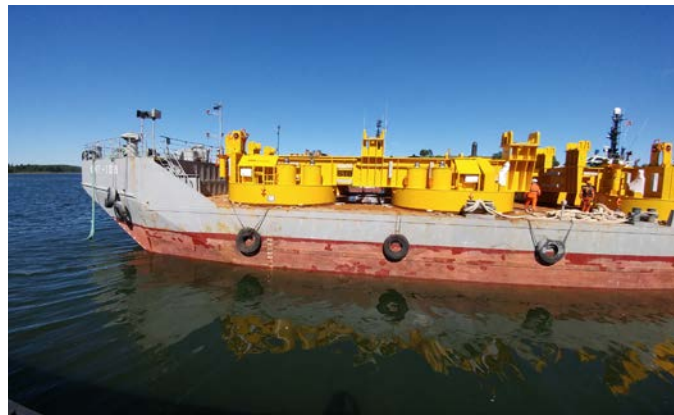
CASE STUDIES

CONTRACT RECORD: M254



Panalpina contracted Malin Abram to carry out the sea fastening design for various items of out of gauge (OOG) project cargo to be loaded at Tonsberg, Norway for the Shah Deniz 2 Project. This formed part of a 6 year long series of operations (2013-2019, involving more than 150 shipments), which Malin Abram delivered across the world.

On this particular scope, Malin Abram created a Transportation Manual to assess the sea-fastening arrangements required for securing of the cargo. This included a seagoing forces calculation on the principal items and a subsequent analysis of the proposed sea-fastenings. It also included grillage beam and barge deck strength verification. The cargo included FBS Assembly, five off and PMA, two off, at 230 and 374 Te respectively, that were loaded in Tonsberg using the Barge 2034 - Type 16801, and discharged in Baku, Azerbaijan.



Figures 14 - 17 (L-R): Grillage fitted to barge; cargo loaded to barge; seafastening

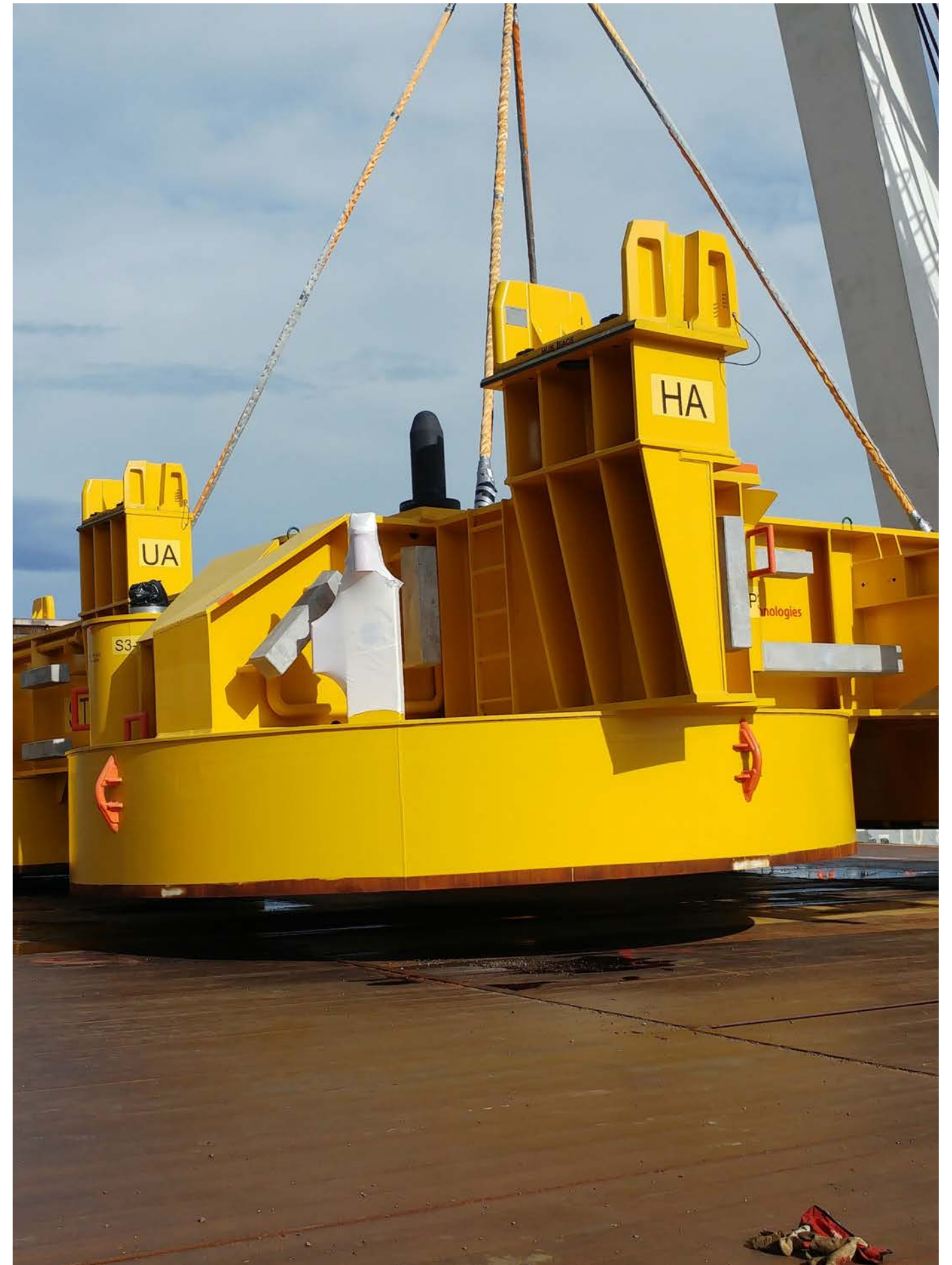


Figure 18: Cargo loaded to barge for transportation to Baku.

CASE STUDIES

CONTRACT RECORD: M430



DHL contracted Malin Abram to carry out a 3rd Party desktop review of the following design documents, calculations and drawings, for the West Nile Delta project:

- Vessel lift plans/drawings
- Vessels estimated seagoing forces (in line with industry best practice)
- Vessel stowage plan
- Vessel securing/seafastening plan

Malin Abram attended onsite to ensure that the agreed methodologies and procedures were followed. The following operations were therefore witnessed and approved, with advice being provided where necessary. This particular project formed part of a wider series of operations, delivered for the client, on a worldwide basis.



Figures 19 & 20 (L-R): Loading of Convexion Module, Ningbo, China; Chamber landed to timbers in vessel's hold, Vibo Valentia, Italy.



Figure 21: Xmas tree loading in Holsoy, Norway

QUALITY ASSURED

In working with freight forwarders - or indeed on any of our projects, quality assurance is paramount. Our quality procedures for design and implementation of technical analysis are rigorous and we pay particular attention to model quality checks and standardised use of software across our group.

Our Safety procedures onsite and while working on vessels have been formed and developed to cover the specific risks associated with our work and the expectations of our clients.

We are committed to safety & risk management at all stages of a project from concept through to detailed design and implementation to deliver a system fit for purpose. This is achieved through our phased approach to design and development together with a safety assessment process (HAZOP) to ensure that potential hazards are captured early in the design development phase and that risk reduction measures are implemented to ensure that the remaining risks are considered to be as low as is reasonably practicable (ALARP).

We hold ISO 9001, ISO 14001 and ISO 45001 accreditation with DNV GL and our fabrication facility is certified to BS-EN 1090-1 Execution Class 4 and ISO 3834-2. Our IT systems are protected and accredited to Cyber Essentials Plus.

