

# Developing Solutions for Complex Maritime Challenges



Naval Architecture & Marine Engineering

3-D Scans

Advanced Engineering Analysis & Surveying

Conversion, Modification, Retrofit & Newbuild

Environmental Regulatory Compliance

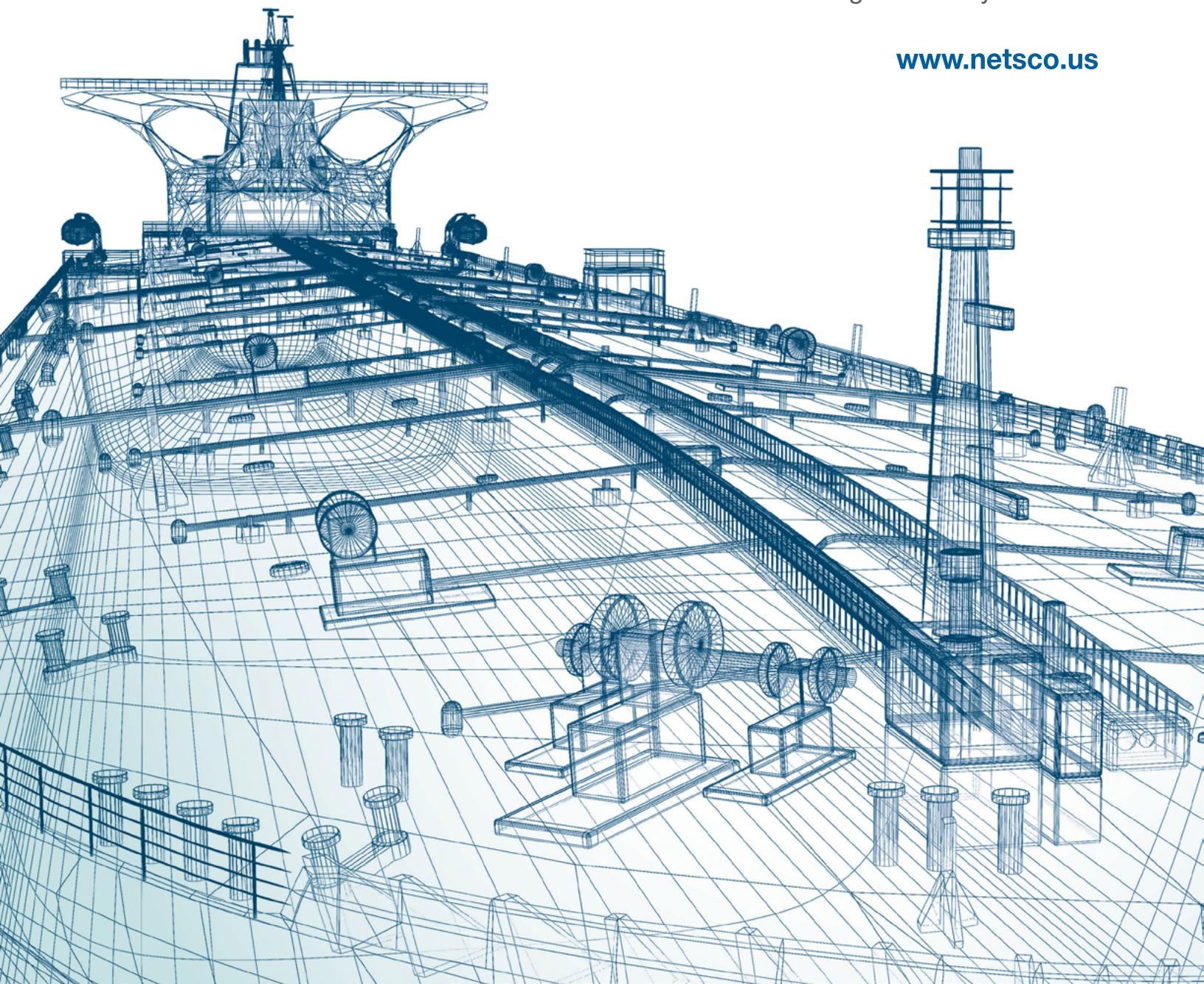
Project Management

Shoreside Facilities Services

Marine Software Development

Consulting & Advisory Services

[www.netsco.us](http://www.netsco.us)



With over 34 years of experience, NETSCo has provided a wide range of naval architecture and marine engineering services in support of vessel design, construction, conversion, modification, operation support and analysis, and maintenance. This includes detailed structural and mechanical system design, cargo securing, and self- and off-loading optimization, as well as regulatory evaluation in support of class and flag/port state requirements.

NETSCo's one-stop services go beyond typical projects for ships and boats to include naval architecture and marine engineering assistance for marine terminals and facilities.

[www.netsco.us](http://www.netsco.us)



# Services Designed to Answer Your Maritime Challenges

## Naval Architecture & Marine Engineering

NETSCo's broad range of naval architecture and marine engineering services support your vessel from concept through construction to delivery. Our engineers continuously evaluate new and emerging technologies to assess the potential for use in our client's projects.

## 3D Scans

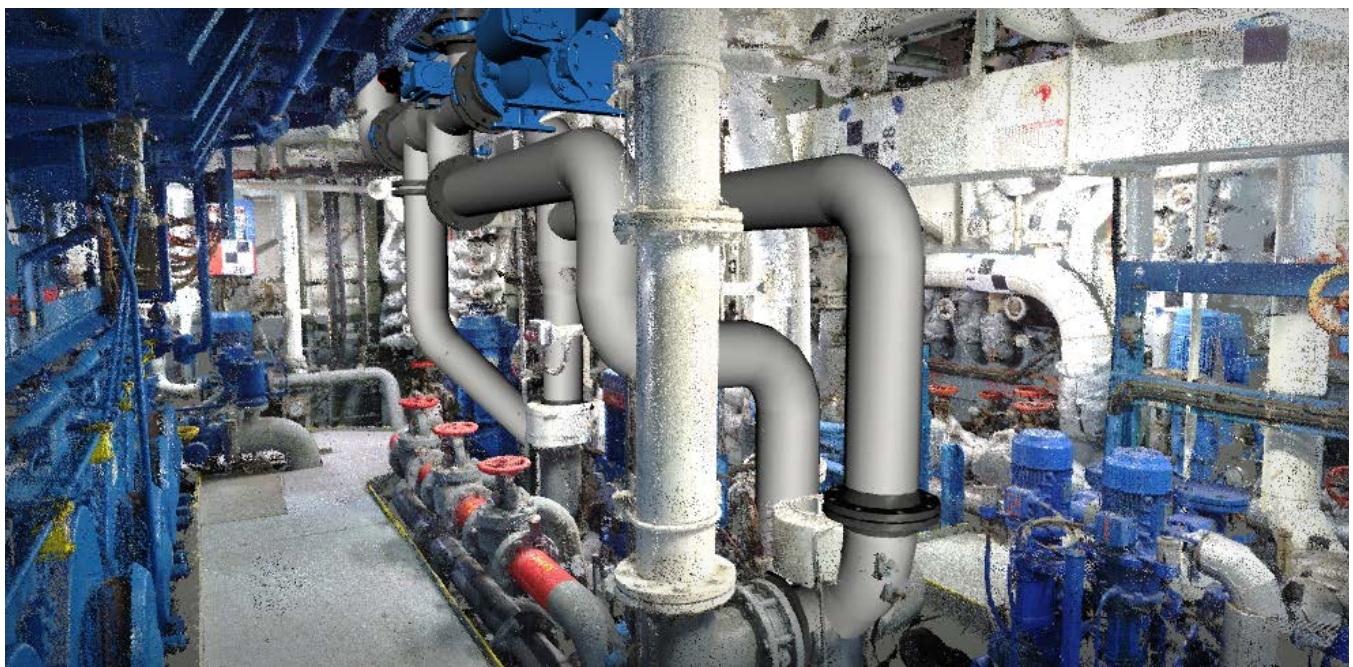
NETSCo's production engineers can take functional design to the next level by incorporating design information into a full-size 3D model of the vessel. Our team combines all the details of the structural,



electrical, mechanical and HVAC systems into one comprehensive model of your project for review early in the design process for safety, ease of construction, vessel operation and compliance with regulatory requirements.

## Conversion, Modification, Retrofit & Newbuild

NETSCo's seasoned engineers can modify vessel capacity and improve the function of the vessel for better operation. Whether it's bow and stern thrusters, engine replacement or repowering, space modifications, scrubber or ballast water treatment retrofits, mechanical system upgrades or electronic and computer system installations, shipowners need people with marine engineering experience who understand the distinctive regulatory and class requirements of the maritime industry.



# Services Designed to Answer Your Maritime Challenges

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## **Environmental Regulatory Compliance**

The NETSCo team is environmentally responsible, providing solutions that reduce the carbon footprint of ships in our oceans, lakes and coastal areas. Our compliance engineers actively participate and serve on environmental committees with a number of

regulatory bodies that include: The United States Coast Guard; ASTM; and, the American Bureau of Shipping. We provide the most up-to-date information to our clients. NETSCo can also perform an onboard assessment of vessel performance or create an environmental impact report on your ship or fleet.

## **Project Management**

NETSCo offers project management services on retrofit solutions, as well as repairs and maintenance for your fleet or vessel. We have a thorough understanding of the most current technologies used in the operation, maintenance, analysis and management associated with the equipment and systems on board a ship. With our project management experience, we can recommend when and how to best complete the necessary work with minimal impact and maximum financial return.



# Services Designed to Answer Your Maritime Challenges

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## Shoreside Facilities Services

NETSCo's technical staff has the marine and dockside experience to ensure communication between the shipboard crew and shoreside material handling team utilizing the quickest and safest cargo load or unloading process – keeping the fleet moving quickly as possible. From dock design to mooring arrangement plans.

## Marine Software Development

The NETSCo staff works with our clients to develop customized software solutions designed to fit their unique business operations. We offer a custom cargo-loading program which allows the crew to load a vessel



quickly and safely, as well as monitor cargo types. Vessel and fleet tracking

software is available that enables management to track and evaluate transit and load/unload, times, delays, fuel consumption, or any of a variety of metrics that may be important to your business.

## Consulting & Advisory Services

Our technical team has the maritime engineering and architecture experience to fully analyze each situation and its requirements for the best possible outcome. Critical issues are solved with applications to support the design of a system, component or process appropriate to marine engineering operations. NETSCo has written many application and installation guides, operations and technical specifications, plans, and manuals for vessel operators. These guidebooks are prepared by mariners, for mariners – because at NETSCo, we speak your language.

**Shipowners look to NETSCo to provide resourceful and expert engineering services that are unique to the maritime industry. Our depth of knowledge enables us to create innovative solutions designed to address any new roles of a vessel, equipment upgrade, modification or retrofit.**

## **VESSEL SERVICES**

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Tonnage Modifications

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HVAC System, Scrubber,  
BWMS Integration & Installation

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Mechanical & Electrical Upgrades

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Vessel Repower & Fuel Economy Studies

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Newbuild

## **NAVAL ARCHITECTURE & MARINE ENGINEERING**

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2D or 3D Scanning & Basic Engineering

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Detailed Engineering Design & Drawings

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Structural & Stability Analysis

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Noise, Vibration & Alignment Analysis

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Energy Optimization

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Conversion, Modification,  
Upgrade or Retrofit

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Regulatory Evaluation & Upgrades

## **FACILITY SERVICES**

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Ship-to-Shore & Shoreside  
Material Handling

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Marine Operations & Heavy Lift

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Dock Design, Modification  
& Rehabilitation

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Mooring Arrangement Studies & Plans

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Design-build Partnerships

## **SOFTWARE**

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Productivity & Vessel Efficiency Metrics

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Loading Programs for Vessel Stability  
or Longitudinal Strength

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Software Calculation to  
Prolong Vessel Life & Maximize Cargo

## **PROJECT MANAGEMENT**

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Design Specification & Contract Review

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Cost Evaluation, Bid Solicitation  
& Negotiation

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Purchasing & Procurement Support

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Shipyards Assessment  
& Detail Plan Approval

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Owner or Manufacturer  
Project Management

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Compliance Approval Packages  
for Class & Flag Societies

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Testing, Sea Trials & Delivery

## **CONSULTING**

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Valuation, Condition & Damage Surveys

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Fleet Optimization Analysis

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Vessel Life Extension Analysis

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Structural Analyses of Cargoes,  
Ships or Barges

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Independent Review of 3rd-party  
Marine Engineering or Policy Procedures

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Relocation Projects

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Load & Off-load Calculations  
& Ballast Plans

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and more . . .



**Northeast Technical Services Co., Inc.**  
**(NETSCo) was formed in 1984 to provide**  
**marine engineering, design and consulting**  
**services. Our specialists offer innovative**  
**designs including advanced technology**  
**and construction of complete ship, tug,**  
**and barge designs of all types.**

**From concept through to construction and**  
**warranty support, NETSCo delivers value**  
**without compromising on performance,**  
**safety or the environment.**



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