

Cruise Industry

ZENTECH INC.
INNOVATIVE ENGINEERING SOLUTIONS



GOVERNMENT



SERVICES



NEW DESIGNS



ENGINEERING

CONTACT US



14800 ST. MARY'S LANE, SUITE 270



HOUSTON, TX 77079



ZENTECH@ZENTECH-USA.COM



(281) 558-0290 / FAX: (281) 558-0295

www.zentech-usa.com



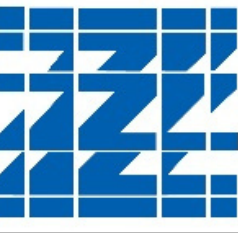
SCAN ME

**FOUNDED
1978**

**8 OFFICES IN
7 COUNTRIES**

**+ 40
PATENTS AND
TECHNICAL PAPERS**

**+ 15
INDUSTRY
RECOGNITION
DURING 2015 –
2024**



USA
Houston
World Headquarters

Mexico

Brazil

Saudi Arabia
UAE

India
Mumbai
Chennai

Malaysia
Kuala Lumpur



CITY OF HOUSTON
OFFICE
of
BUSINESS OPPORTUNITY

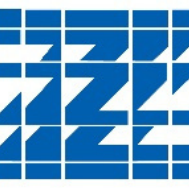


Achilles



MBE Certified

Some Capabilities



Naval Architecture &
Marine Engineering

Mechanical,
Piping & HVAC

Structural
Engineering

Electrical
Engineering

Process
Engineering

Construction/Project
Management



Maintenance &
Repairs: Cruise Ships,
FPSOs, LNG Vessels,
Drillships, and more

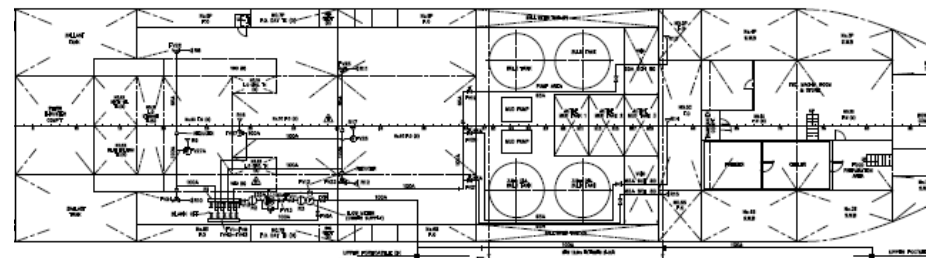
Third Party
Verification

Software Enabled
Services

Innovative Design
Solutions

Zentech Extended
Reality

Signage
Service





We deliver optimal results throughout the entire asset life



Decommissioning
Engineering & Project Management



Basic Design

Detail Design
Custom Engineering & Design



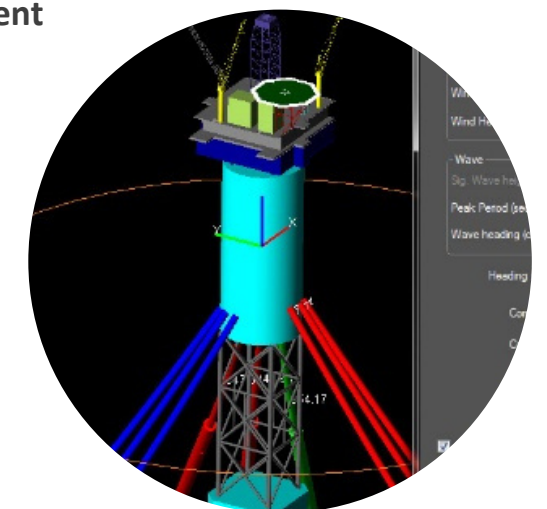
CONSTRUCT

Construction
Project Management



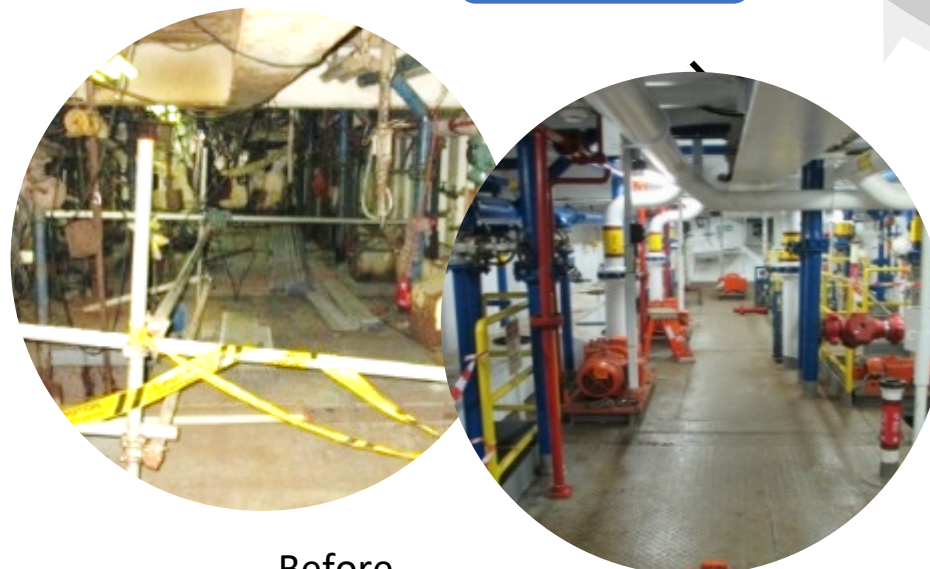
OPERATE

Operations- Solutions
Asset Management



**UPGRADE /
REACTIVATE**

Upgrades & Reactivations
Engineering & Project Management



Before

After

DECOMMISSION

EXTEND LIFE

Asset Life Extensions
Engineering & Project Management



Digital
Transformation

Engineering &
Design

Construction
Project
Management

Advisory &
Consulting

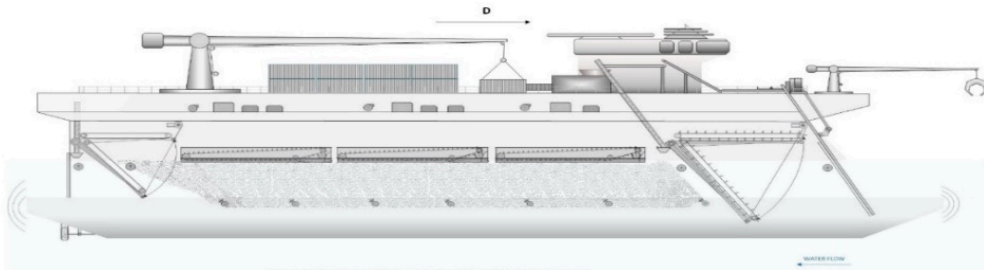
Asset
Management

**Asset Lifecycle
Management**

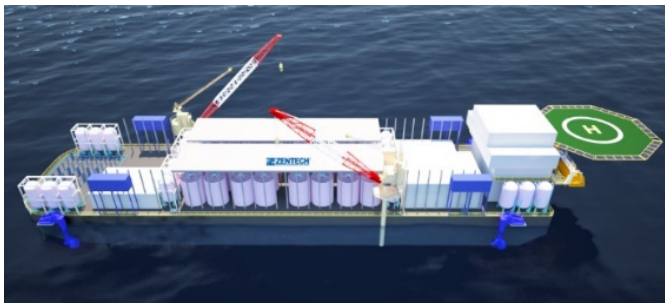
Some Designs



Marine Filtration Vessel
To clean oceans



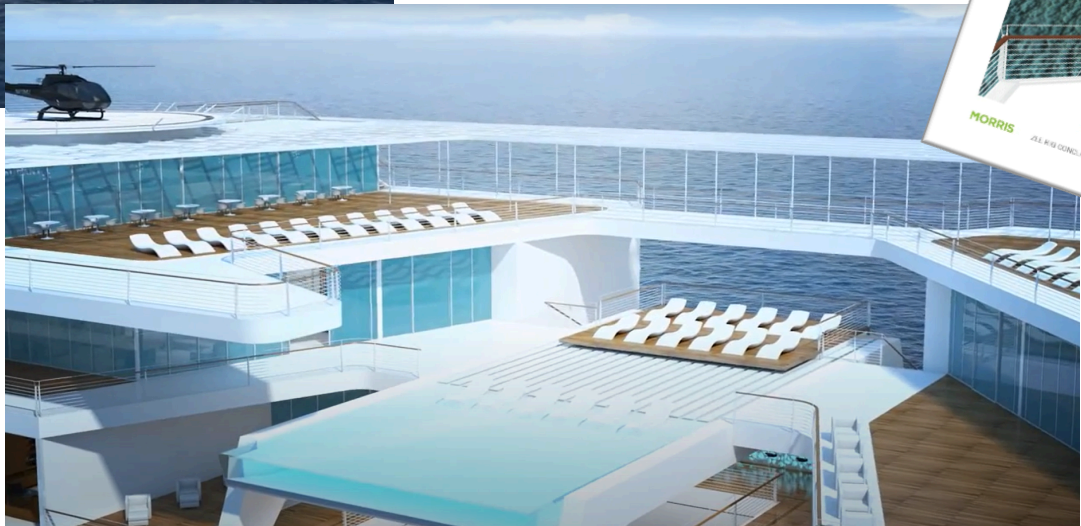
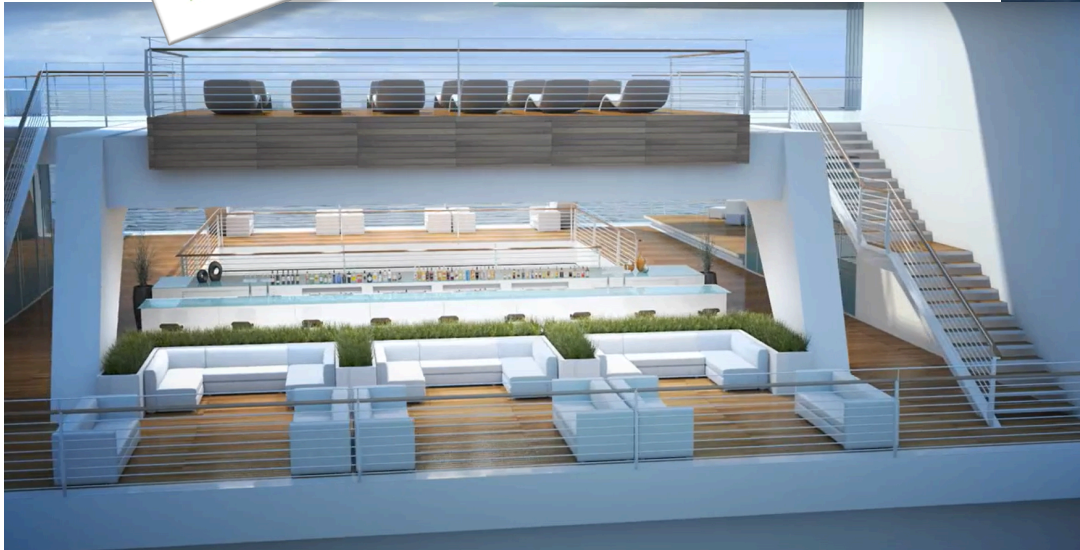
LMPV
IADC
New Technology
Petroleum Economist Award Best Project



LNG Solutions



Zee Luxury Resort





Operation

More Press Releases

The MARITIME
EXECUTIVE
INTELLECTUAL CAPITAL FOR EXECUTIVES

NEWS FEATURES PODCASTS MAGAZINE NEWSLETTER BLOGS DIRECTORY JOBS

1164

Views

4

Shares



Petrobras Awards Large Engineering Support Contract to Zentech



Source: <http://www.petrobras.com.br/>

BY [MAREX](#) 2018-09-13 18:03:39

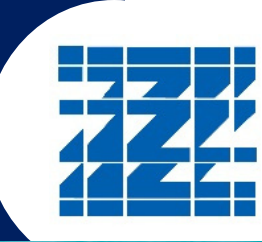
Petrobras has selected ZENTECH DO BRASIL SERVIÇOS TÉCNICOS LTDA., a subsidiary of ZENTECH, INC. of Houston, Texas, USA for a contract to provide engineering support for its fleet of Ship shape and Semi-submersible type Floating Production, Storage and Offloading Platforms along with the Fixed Gathering and Processing Platform. This award is for a three-year period, with the option to extend in the future. In addition to engineering support, Zentech will provide Virtual Reality Models of these Platforms resulting in an immersive, first-person experience allowing Petrobras access to these models anywhere and at any time.

James Richard A Cook, General Manager of Brasil commented, "We are delighted with this award as recognition of our service, quality and commitment to Brazil in general and Petrobras in particular.

Ramesh Maini, CEO of Zentech said, "Zentech provides innovative engineering solutions and asset integrity to a variety of clients. While the strength of these Zentech's services was already well established in the marine sector in Brazil, this faith that Petrobras has placed in Zentech firmly positions us in the oil and gas sector of Brazil, as well."

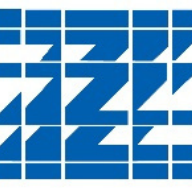
The products and services herein described in this press release are not endorsed by The Maritime Executive.

... contract to provide engineering support for its fleet of ship shape and Semi-submersible type Floating Production, Storage and Offloading Platforms...



Services Offered to the Cruise Industry

Key Services Offered to the Cruise Industry



Naval Architecture and Marine Engineering Services Smart Solutions for Complex Vessel Needs

Design & Analysis

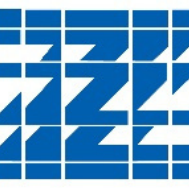
- Pre-FEED & FEED, Detailed Design
- Intact & Damage Stability Analysis
- Motion, Sloshing & Slamming Effects Analysis
- Longitudinal Strength Assessment
- Dynamic Positioning (DP) Capability Analysis
- Vessel Life Extension (ZAIMS - Corrosion Review)

and much more

Operations & Support

- Commissioning Procedures
- Operations Manuals & Stability Booklets
- Onboard Loading & Stability Software
- Mooring Advisory (Models)
- Mooring Analysis (Static, Dynamic, Fatigue)
- Deadweight Surveys & Inclining Test Execution

Key Services Offered to the Cruise Industry



⚡ **Electrical Design & Installation Services** **Smart Power Engineering for Safe & Efficient Vessel Operations**

Engineering & System Design

- Pre-FEED, FEED & Detailed Design
- Power System Design (Low & Medium Voltage)
- Energy Storage & Power Electronics Design
- Safety Systems (Fire & Gas, ESD, PA/GA, Telecom, SIS)
- Dynamic Positioning, Instrumentation & Control Systems

Analysis & Troubleshooting

- Electrical Troubleshooting & Root Cause Analysis
- Simulation of Electrical Phenomena & Custom Studies
- Power Flow, Short Circuit & Protection Coordination
- Harmonics, Motor Starting & Arc Flash Studies



Key Services Offered to the Cruise Industry



Ship Repair & Maintenance Services **Engineering-Driven Maintenance for Maximum Vessel Uptime**

Zentech supports the lifecycle of vessels with a multidisciplinary approach to repair, upgrades, and reliability engineering.

Key services include:

- FEED, Basic & Detailed Engineering
- Structural & Systems Modifications
- Construction & Commissioning Support
- General Arrangement & Layout Reviews
- Risk & Safety Studies
- Predictive Maintenance (Vibration, Thermography, EX Surveys)
- Project Management & Engineering Oversight
- As-Built Documentation & Verification



Key Services Offered to the Cruise Industry



Vessel maintenance & retrofits





Inspection & Survey



Inspection & Survey



Certified & Ready to Fly: ABS Approved UTM by Drone!

We're proud to announce
that we have officially
received ABS Certification
for Thickness
Measurements, including
Remote Inspection
Techniques using Drones

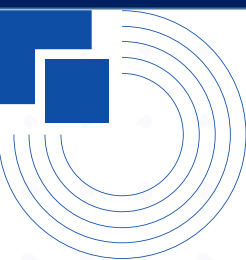


Zentech Extended Reality

www.zentech-usa.com



SCAN ME



Certificate Number 25-7047614-A
Issue Date 29-July-2025
Expiry Date 28-July-2028
ABS Port Office DUBAI, UAE
Company's Website www.zentech-usa.com

CERTIFICATE OF Recognized Service Supplier

This is to certify that

Zentech Technical Services Inc L.L.C-FZ

located at

Meydan Grandstand, 6th floor, Meydan Road, Nad Al Sheba, Dubai, U.A.E.

having been audited by ABS and having given a satisfactory practical demonstration of the service listed below, is recognized by ABS as a Service Supplier to provide services which ABS Surveyors may rely on to make decisions affecting classification or statutory surveys.

Hull Gauging

Attached Certificate Appendix provides specific scope of approval, authorized personnel, manufacturer authorizations, and subcontractors.

It is the responsibility of the Service Supplier to employ, train and qualify persons in the service provided. If the service requires approval from manufacturers, the Service Supplier is responsible to maintain contact with the manufacturer and maintain any service manuals up to date. Where required by the category of service, the Service Supplier shall provide valid evidence that it is authorized or licensed by the equipment manufacturer to service the makes and models of equipment for which approval is sought. If approval from the manufacturer is not attained, a surveyor must be present at time of survey to continue work. Alternatively, current written instructions from the flag state are to be obtained to continue work without the surveyor present. Service Suppliers must present photo identification, evidence of qualification and authorizations from manufacturers, as applicable, at the time of service.

The ABS office issuing this certificate is to be kept updated with changes to the management of the company, employees, equipment and models on the authorization list and any changes made.



Nikolaos Pasaras, Surveyor



Sanu Augustine
saugustine@zentech-usa.com

APPENDIX TO ABS SERVICE SUPPLIER CERTIFICATION NO. 25-7047614-A

Scope of Approval, Limitations or Restrictions

The service recognition is for:

- Thickness measurement of hull structure of non-ESP/ESDC
- Remote Inspection Techniques as An Alternative Means for Close-up Survey and thickness measurements of Ships and Mobile Offshore Units (Drones)

Authorized Personnel

Supervisor : Ram Mohan (ASNT Level III UT)

Operators: Sanu Augustine (MPI/DPI/RT/UT ASNT Level II) , Ravikumar Maini (Drone Pilot, ASNT Level II UTM), Singh Amit Kumar Ranbahadur (Drone Pilot, ASNT Level II UTM), Durai Bhaskar (ASNT Level II UTM), Akshay P S (Drone Pilot, ASNT Level II UTM), Pratish Malkar (Drone Pilot, ASNT Level II UTM)

Quality Manager

Mr. Sanu Augustine

Authorization(s) from Equipment Manufacturers and Flag Administrations

N/A

Subcontractor and Scope of Subcontracting Work

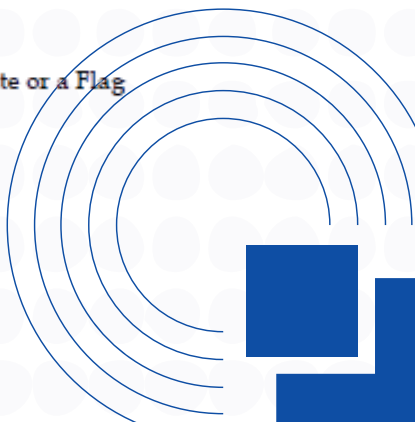
N/A

NOTE: This certificate evidence compliance with one or more of the Rules, Guides, standards or other criteria of the American Bureau of Shipping and is issued solely for the use of the Bureau. This certificate is a representation only that the Company has been assessed in accordance with ABS procedures and found capable of providing the listed service as limited by the associated recognition letter. This certificate is governed by the Terms and Conditions on the above page hereof and by the Rules, Guides or Standards of the American Bureau of Shipping, who shall remain the sole judge thereof.

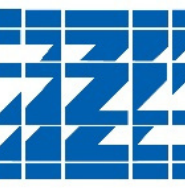
* For statutory related activities, unless specially directed by the Administration, this approval is not to be construed as a substitute or a Flag Administration's approval for the purpose of SOLAS (2020 Consolidated Edition), as amended.

The service recognition is for:

- Thickness measurement of hull structure of non-ESP/ESDC
- Remote Inspection Techniques as An Alternative Means for Close-up Survey and thickness measurements of Ships and Mobile Offshore Units (Drones)



Technical Inspection Consultancy



We provide world-class visual and corrosion inspection services to help ensure the safety, reliability and longevity of your assets, using cutting-edge technology and leading experience from over 40 years in the oil and gas industry.

How We Conduct Our Inspections

1. **Planning & Preparation:** Define the scope and objectives of the inspection, focusing areas.
2. **Use of Technology:** Use our equipment depending on the SOW.
3. **Data Collection:** Gather detailed imagery and precise measurements during a single inspection session, ensuring maximum efficiency.
4. **Analysis & Reporting:** Process and analyze the data to identify corrosion trends and/or areas of interest.
5. **Actionable Insights:** Provide detailed, actionable recommendations, if required.



Why Corrosion Inspection Matters



Preventing Structural Failures: Corrosion can lead to material degradation, structural weakening, and catastrophic failures, especially in the oil and gas sector.

Cost Savings: Early detection of corrosion minimizes costly repairs and operational downtimes.

Regulatory Compliance: Ensuring that assets and equipment meet industry safety and compliance standards is paramount to avoiding legal and financial repercussions.



ZXR - Inspection Technology

UAV Drones:

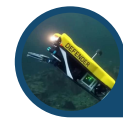
- Flyability Elios 3 w/UTI Module
- Scout 137 w/UTI Module

ROV:

- VideoRay Defender

Capabilities added to Zentech:

- UT Gauging of Steel Structures via UAV Drones
- UnderWater Inspections via ROV Drone

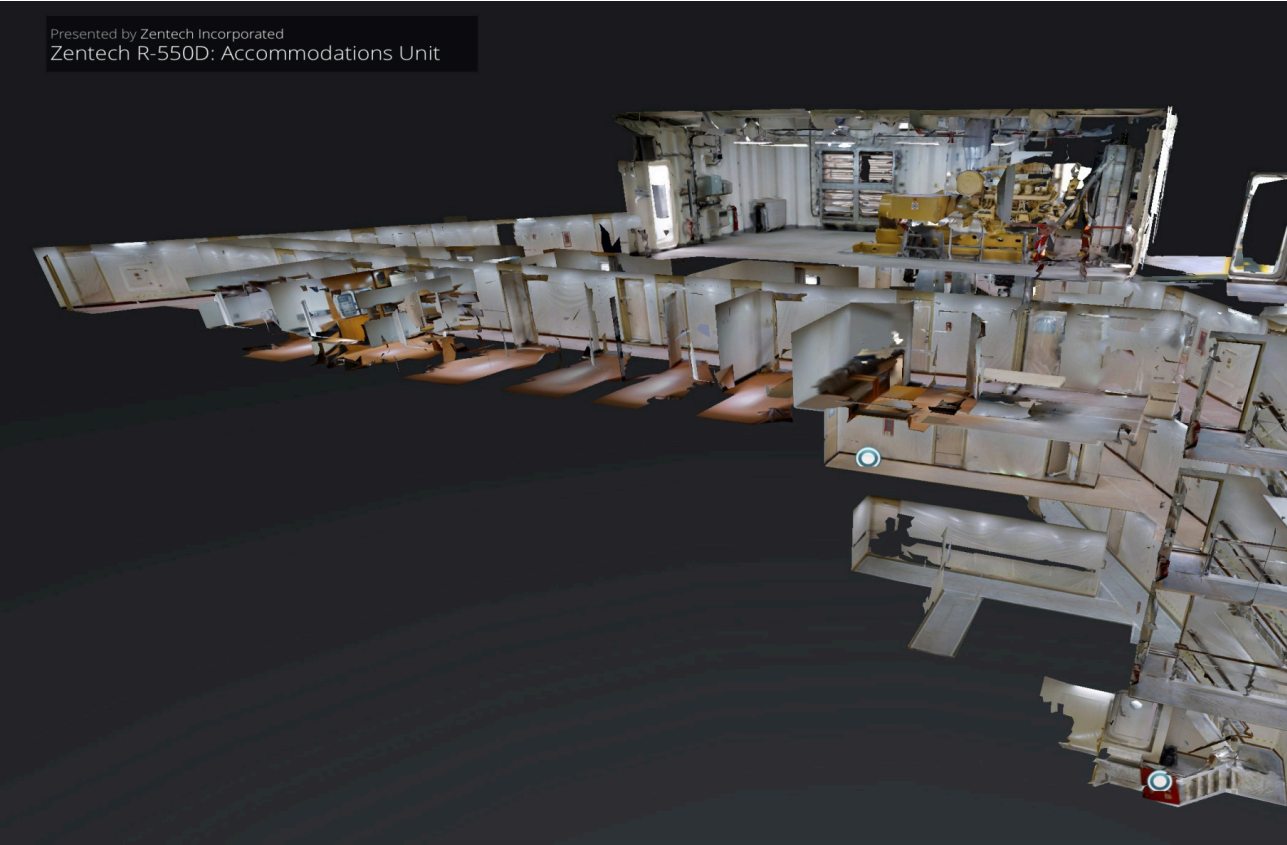


TECHNOLOGY DRIVEN INSPECTIONS

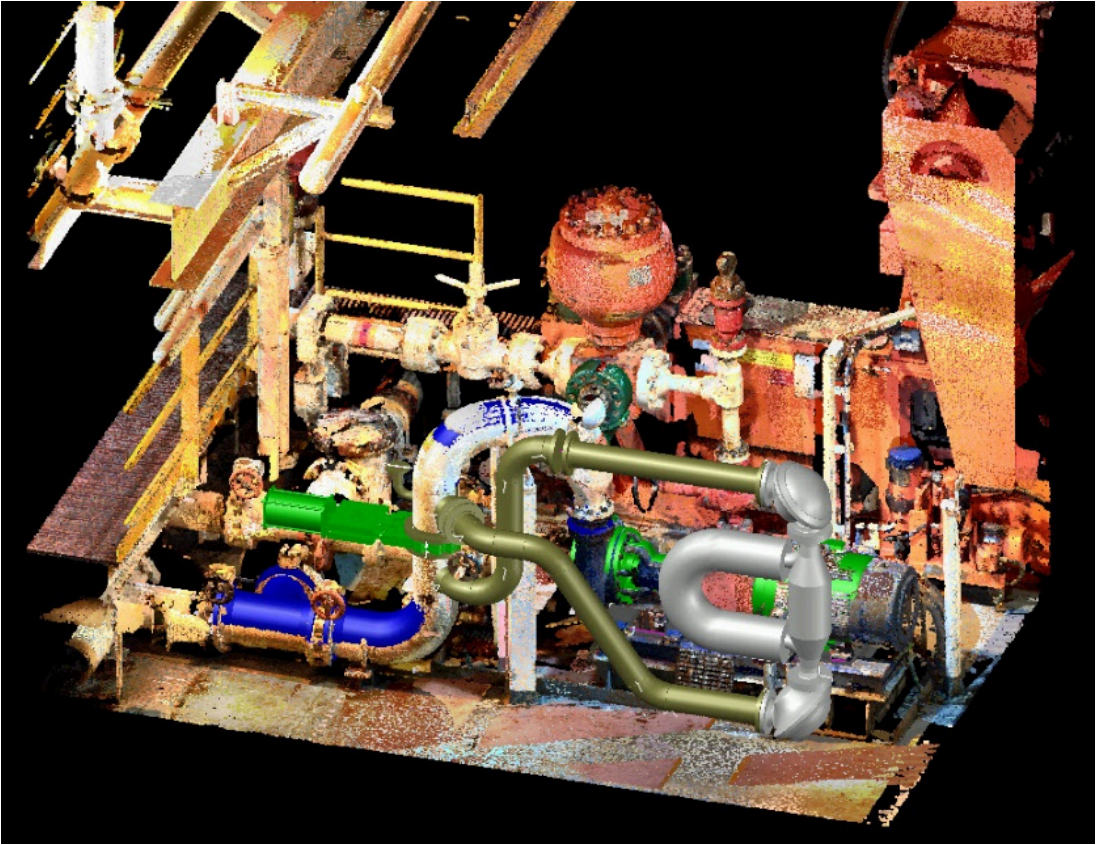
- ROV Defender by Video Ray
- Flyability Elios 3
- Scout 137 Drone System
- Other Scanning Equipment and Software:
 - FARO S120 and FARO S150
 - Leica BLK-360
 - NavVis VLX 3
 - Elios 3
 - Matterport Pro3
 - Faro Scene and FARO As-Built
 - Flyability Inspector 5
 - Autodesk RECAP



Zentech Extended Reality (ZXR)



ZXR-M Marketing



ZXR-E Engineering



ZXR-I Inspection



Zentech Incorporated
14800 St. Mary's Lane
Suit 270
Houston, TX, 77079
USA

DNV Maritime
Offshore Classification
Offshore Fleet in Service

Veritasveien 1
1363, Høvik
Norway

Date:	Our reference:	Your reference:
2023-07-07	Truls Richardsen	Ramesh Maini

Dear Zentech Team,

As a global leader in maritime and offshore classification, DNV acknowledges the increasing importance of the innovative use of drones and image/video capture technology in the evaluation and inspection of structures on offshore units. DNV is always receptive and supportive of initiatives that push the boundaries of technological advancement and enhance the quality of inspections. We believe that these advancements are not only welcome from a practical point of view, but also crucial for improving the extent, quality and historical tracking of data captured during inspections.

Zentech's pioneering image and video technology, which has been impressively demonstrated to us on two separate occasions, has proven to be an efficacious method for obtaining visual documentation of offshore units' condition. We identify a multitude of applications for this technology, including but not limited to, inspections of tanks, confined spaces, support structure, superstructure, and legs. These are areas where it can be challenging for a surveyor to get close and comprehensive access in a safe way.

It is important to note that, while we appreciate the value of Zentech's technology, it's essential to clarify that the technology alone cannot replace the role of a surveyor from the classification society. Nevertheless, the technology can provide invaluable data that can significantly aid a surveyor's decision-making process within the context of our In-Service Inspection Programme (IIP). The final decisions regarding condition and crediting of formal class surveys of an offshore unit will still rest in the hands of the attending DNV surveyor.

We look forward to the continued collaboration and witnessing the future advancements Zentech will bring to the industry. The continued commitment to technology and innovation is undoubtedly pushing the industry forward, and we are excited about the potential your technology holds.

Best Regards,



Digitally Signed By: Pedersen,
Eirik Edland
Signing Date: 07/07/2023 08:40:57

Eirik Edland Pedersen
Head of Department, Offshore Fleet in Service
Det Norske Veritas AS (DNV)
Mobile: +47 92829297
Eirik.edland.pedersen@dnv.com



Green House Gas (GHG)



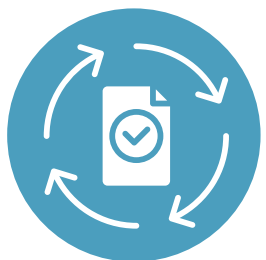
Green House Gas (GHG) Services



Carbon Footprint Accounting System (Z02), as per EPA and GHG Protocol. Carbon Capture Systems (CCS),



Assessment and improvement of energy systems for carbon reduction



Carbon footprint and lifecycle assessments (LCA)



Green Hydrogen /Methanol: EPIC of Modular Plants.



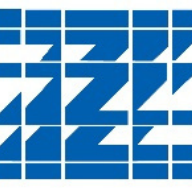
Battery Energy Storage System (BESS)





Signage Service

Signage Service



All the signages shall be customized according to client's requirement, which includes:

MANDATORY

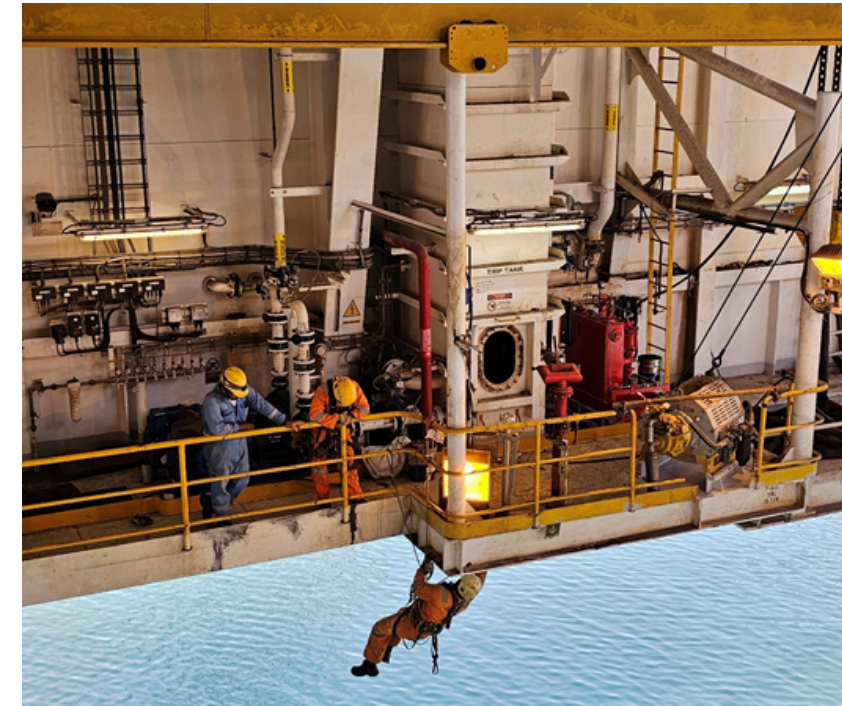
PROHIBITORY

DUAL LANGUAGE

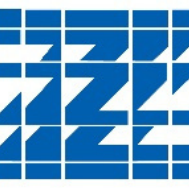
PIPE MARKINGS

**ZENTECH
SIGNAGE**

SERVICES

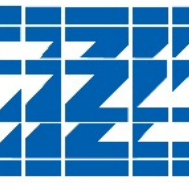


Why Zentech?



- Our goal is to supply and install scientifically more durable identification materials that meets client needs, with minimum of 5 year replacement warranty
- We are capable of doing signage survey and provide GAP analysis report in accordance with all the field and class regulations

Our products



Provide protection from sunlight and maximum resistance to acids and bases found in process operations. Service temperature range from -40 deg to 250 deg F

All signages shall comply field and class regulations

Signage installation shall be completed in committed time frame (using our rope access team)



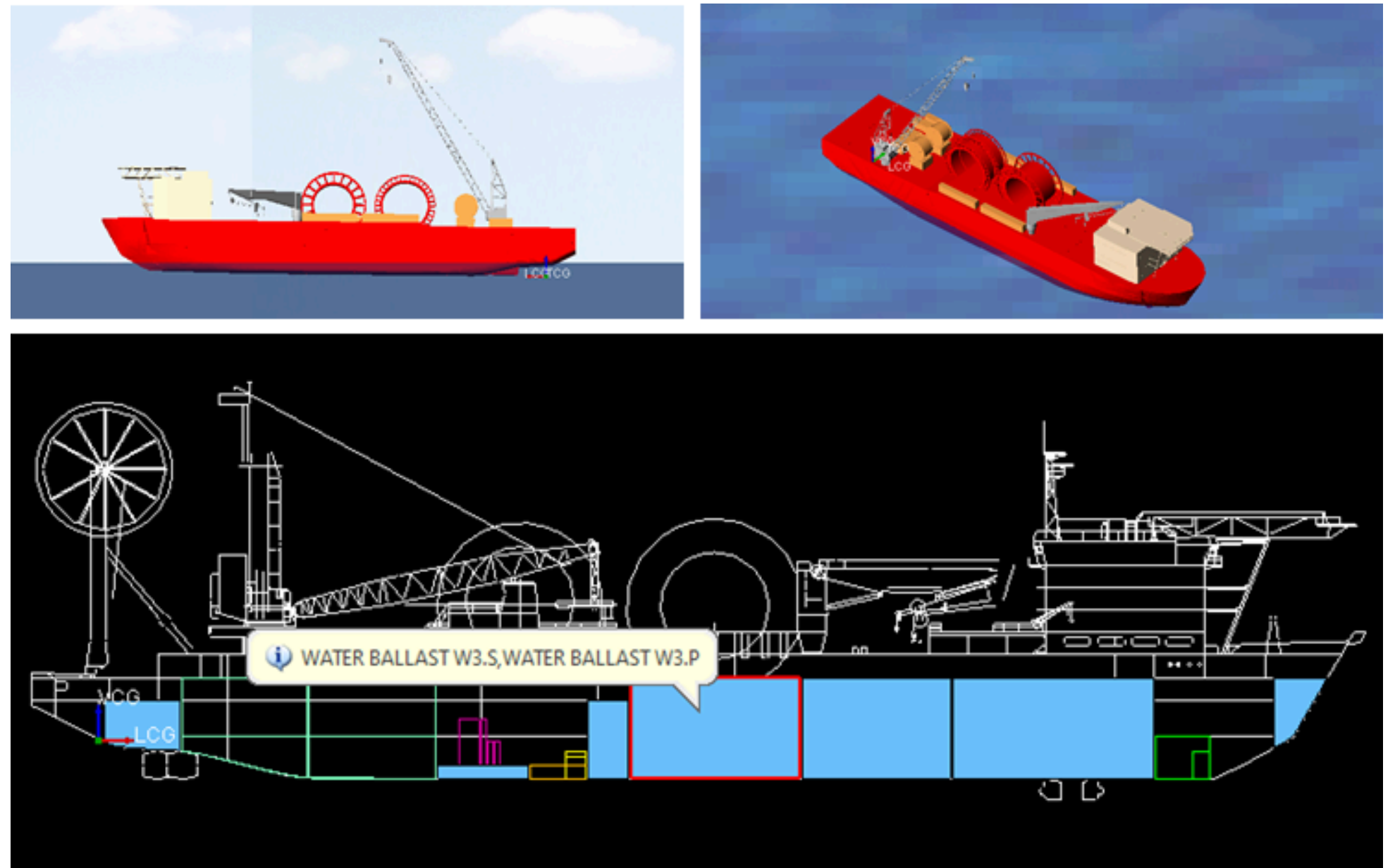


Software LoShip

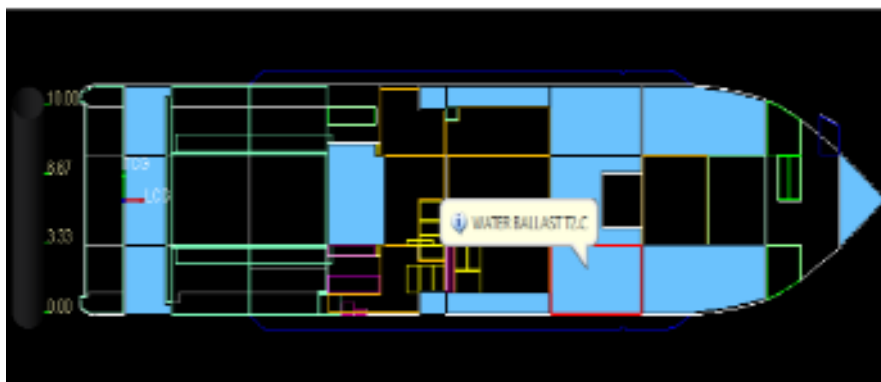
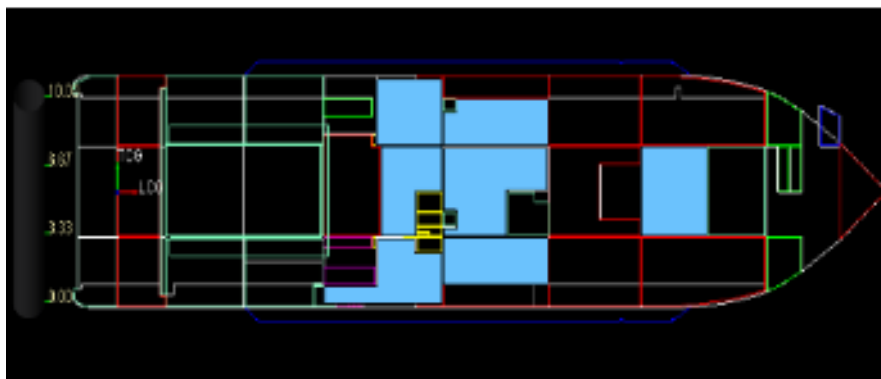
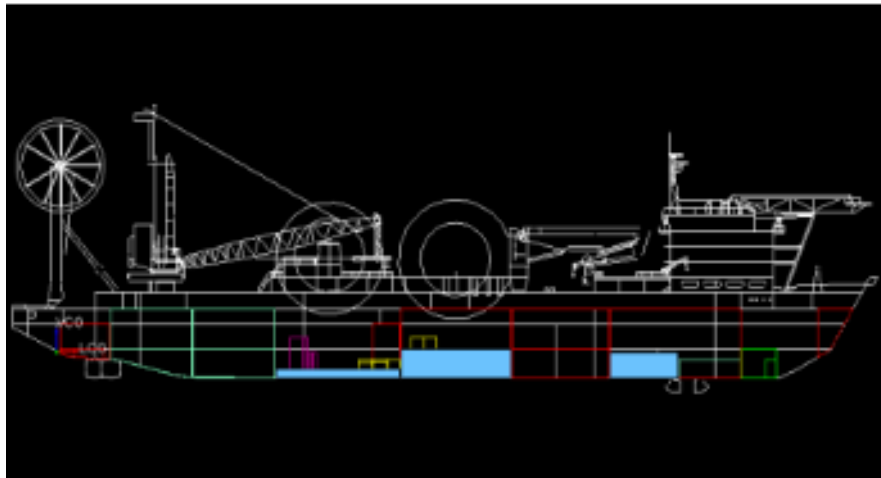
On-Board Load and Stability Proprietary Software for Ships

LoShip™ is an interactive; menu driven program used on-board ships and other offshore supply vessels to perform loading and stability calculations.

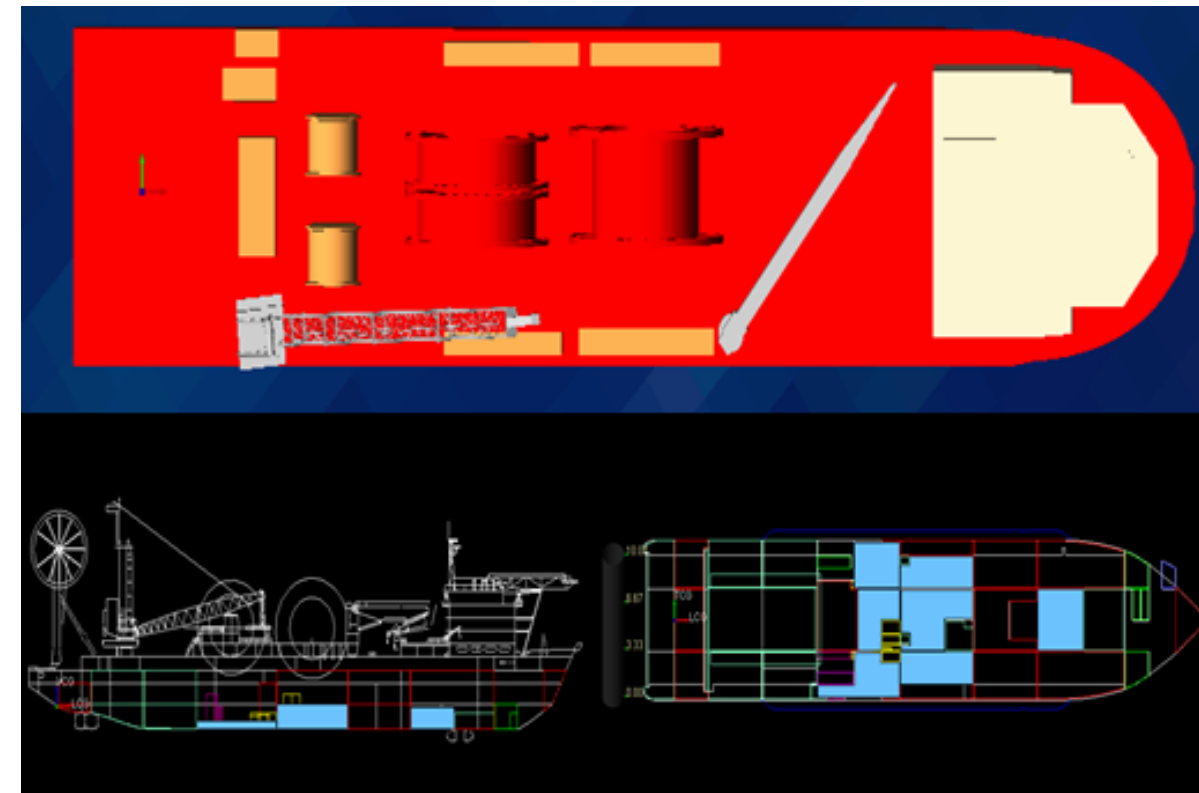
This system is a windows based application, with a user friendly interface. It has numerous error checking routines to warn the user when improper input data is used and/or limits are exceeded. The program is customized to fully comply with the requirements and procedures of the vessel's Operating Manual.

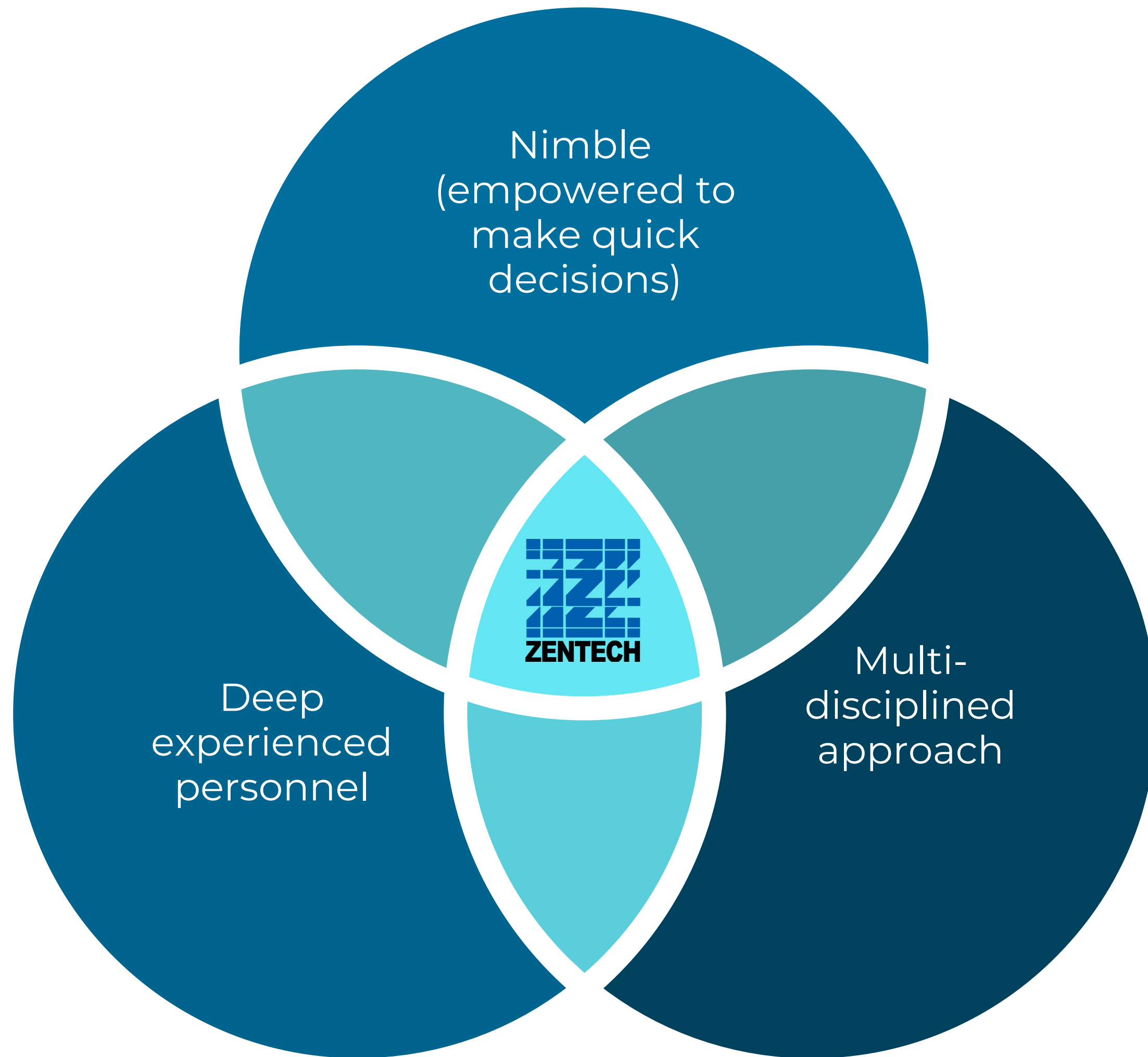


Key Highlights



- Updates of draft, trim and heel, deck loads and KG margin, 3D/2D views with every entry.
- Weight management by grouping and sub-grouping.
- Various modes of operation (Transit-Survivaland-Operating)
- Grouping of weights based on Solids, Liquids and Miscellaneous items.
- Ballasting and De-ballasting procedures and load equalization calculations
- Validates the input values and displays warning messages
- Interface with Mooring advisory software ZenMAP.
- Calculation of stability parameters.





Our Differentiated Approach to Solving YOUR' Challenges



ISO
9001:2015
certification

Proven track
record in the
maritime
industry

Staff
certified
available to
go offshore

MBE
Designation

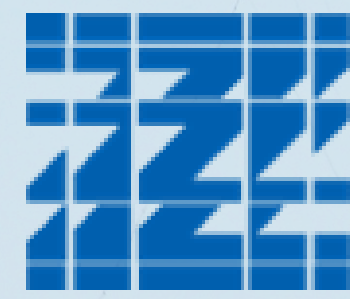
We have a
good
reputation for
reliable fleet
maintenance

Multi-
disciplinary
team of
engineers

High Skill
and
Experience

Innovative
digital value
addition

***We want to be your extended
engineering arm***
www.zentech-usa.com



ZENTECH INCORPORATED

INNOVATIVE ENGINEERING SOLUTIONS

CONTACT US

14800 St. Mary's Lane, Suite 270

Houston, Texas 77079

Tel: +1 281 558 0290

zentech@zentech-usa.com

www.zentech-usa.com



SCAN ME