



Marine & Offshore Services Pvt Ltd







Aryatech Marine & Offshore Services Pvt. Ltd. is marine and offshore engineering and Consultancy Company headquartered in New Delhi, India with offices in UAE and Egypt.

The Bentley Institute advances the infrastructure professions by empowering practitioners, students, and academic institutions through continuous learning, scholarships, internships, and applied research partnerships.

Learning is provided online, in the class room or in application, and includes publications, webinars, workflow videos, live and on-demand courses, conferences, events, and more.

The Bentley Institute advances project delivery and assest performance best proactive through Advancement Academics, partnering with leading industry organizations, project delivery firms, and Owner-operators.



Aryatech is an Engineering Consultancy Company involved in the design & analysis of fixed & floating offshore structures & onshore structures. Our expertise includes structural analysis of fixed offshore structures like jacket & jack up during all the phases of life cycle - fabrication, installation, inplace. We are also involved in the stability, motion & mooring analysis of floating offshore vessels.

Also deeply involved in performing detailed engineering analysis of subsea systems where we have expertise in dealing with Riser Analysis, Mooring Analysis, Pipelay Analysis, SPM design, fabrication, installation and verification.



Engineering Services

- a. Offshore Engineering
- b. Marine
- c. Subsea Engineering

Renewable Energy

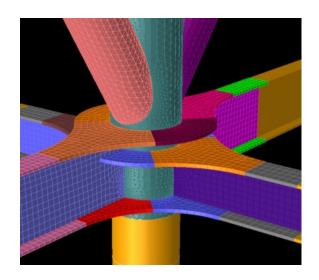
- a. Fixed and Floating Wind Farms
- b. Floating Solar Array

Software Training - Exclusive Training Institute for Offshore packages

- a. SACS Training
- b. MaxSurf Training
- c. Staad. Pro Training
- e. MOSES Training
- Software Solutions Authorized Channel Partner for Bentley Software's sales
- **OrcaFlex Training**



The Offshore Engineering division of Aryatech Engineering Consultants FZE., is dedicated in delivering the engineering requirements of Oil & Gas, Marine, and Offshore Industry. This includes Detailed Design, Various Structural Analyses, Strength Assessment, and Certification of all kinds of Fixed and Floating Offshore Structures.



Design and Structural Analysis

Aryatech perform various method of structural analysis for all types of complex offshore structures such as Fixed Platforms, Floating Vessels, and Semi-Submersible units, etc. to meet the efficient and cost-effective design requirements of our clients

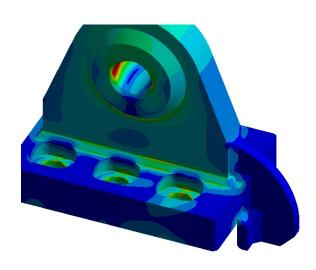


Life Enhancement and Certification

Aryatech provides services related to Strength Assessment and Life Extension of Offshore assets. Optimized strengthening solutions are provided after the Extensive Analysis, considering the Corrosive, and Operational Damages, Deterioration of Members and Joints to simulate the Exact Conditions. Generally, Structures are performed with a Global Strength Check, Pushover, Fatigue Analysis to certify fit for purpose

FEM Analysis

As a part of the up-gradation of Offshore Vessels, Aryatech is capable of conducting the FEM to assess sustainability in various Operating Conditions. Finite Element Analysis or FEA is the simulation of a Physical Phenomenon using a Numerical Mathematic Technique to optimize the designs. Global models, as well as detailed connections, are analyzed. Different comprehensive models developed to simulate actual complex Loading Conditions and extract the linear/non-linear Structural Responses. Ansys, SACS, Moses, etc. are FEM platforms that are utilized by our Team of Engineers for Finite Element Applications.



Jack Up Rigs

Aryatech has specialized knowledge gain from the previous projects completed for various Jack-up Rig designs. We have involved in providing Technical Consultancy on various projects like Conversion of Slotted Rig to Cantilever-type Jack-up Rig, Leg Length Modifications, Constructional details of Wind wall, Shale Shaker House, Arrangement, and Foundation details of BOP Crane, Riser Gantry Crane, Knuckle Boom Crane, Framing Plan, and details of Moonpool Deck, Transformer Room Roof, SCR Room Roof, Pipe Rack Storage Deck, Riser Rack Storage Deck, etc.

CAD-CAM Consultancy

Aryatech has an esteemed pool of engineering personal handling various Drafting and Technical Drawings projects using software programs like AutoCAD. The basic overview of the work carried out is;

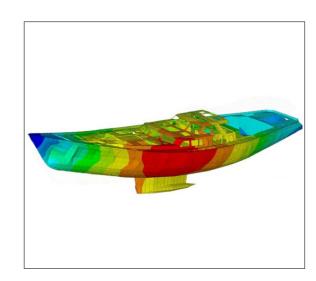
- 1.Basic Design Drafting
- 2. GA's
- 3. Construction Drafting
- 4. Bill-of-Material Preparation (SPM)



Aryatech has a fleet of experienced professionals to fulfil all the client requirements related to the Design and Analysis of all kinds of Operating and Coastal Marine Assets. With vast work experience in the field, we are committed to providing our clients with engineering solutions that are Qualitative, Innovative, and Cost-Effective.

Engineering Analysis

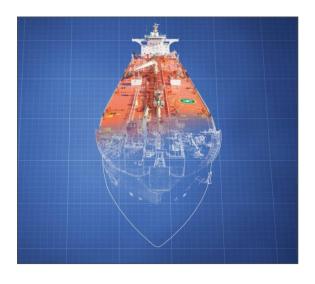
Aryatech team provides services related to complex Analysis and Design of Marine Vessels. We are experienced in Modeling and Analyzing Structures for various needs of our clients such as Local and Global Strength Checks, Fatigue Analysis, Vibration Studies, Supports and Foundations Design for all on-board equipment, Mooring and Connection Analysis, etc.



Hydrostatic Stability Analysis

Aryatech carries out CoG &CoB Calculations, Stability Control for all kinds of Marine Vessels. Stability Analysis carried out are according to procedures and standards established by various International Rules and Guidelines





Ship Design

Aryatech is specialized in Engineering and Design Services for the Marine Industry with its wide range of Services and Products Catering to Ship Design. We involve in the design process comprehensively by catering to owners' requirements at all phases of a Ship Design and Shipbuilding Process.

ARYATECH SUBSEA ANALYSIS & DESIGN

Aryatech provide Technical Consultancy services for various Subsea Pipeline Operations and Designing Subsea Hardware Systems and Ancillary Equipment used for Subsea Production and Completion Operations.

MOORING AND RISER ANALYSIS

Mooring Analysis has become an essential tool to simulate complex nature of Station Keeping to ensure safety and to reduce risk during Offshore Operation. Aryatech's in-depth Technical Expertise and Industry Knowledge has the capability to undertake a variety of complex projects;

- 1. Mooring Analysis of Offshore work-cum-**Accommodation Barges**
- 2. Pipe Laying Analysis
- 3. General Line Dynamics and Motion Prediction
- 4. Spread Mooring Systems

- 5. Jetty Mooring Systems, Turret (External and Internal) Moored Systems
- 6. Single Point Moorings (SPM), CALM Buoys, SPAR buoys
- 7. Cable Lay

ARYATECH

Renewable Energy

With vast work experience in the field of Marine, Aryatech has a Fleet of Experienced Professionals to fulfill all the client requirements related to the Design and Analysis of all kinds of Operating and Coastal Marine Assets.



Fixed and Floating Wind Farms

Aryatech provides the Design and Analysis of Offshore Wind Turbine Structures subject to Wave, Wind, and Mechanical Loading. The analysis approach is capable of predicting both Fatigue and Extreme Loads for the Substructure and Non-Linear Foundation Systems.

Floating Solar Array

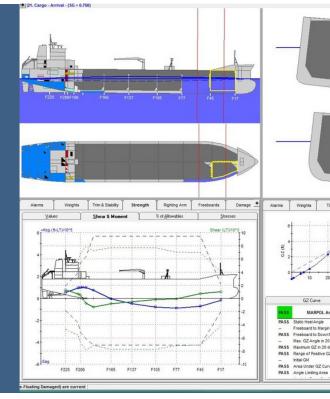
Aryatech with its partner Company Stewart Technology Associates USA is carrying out "Anchoring and Mooring of Floating Solar Array" for the 50 MW Rihand Dam project in India using the OrcaFlex & MOSES software.



ARYATECH Software Solutions

Aryatech Marine & Offshore Services Pvt. Ltd is an authorized Channel Partner of the Bentley software SACS, Staad.Pro, Microstation, MOSES & MAXSURF in India & Middle East (UAE, Qatar, Egypt, North Africa, and Turkey). Aryatech has been providing Bentley software to customers from several Industries, Building a Premier relation for the Past Decade.

SACS **MOSES MAXSURF STAAD PRO MICROSATION**

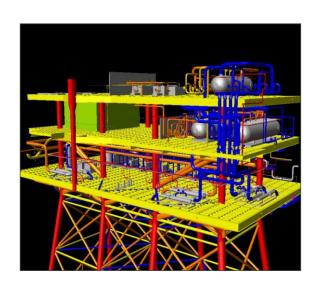


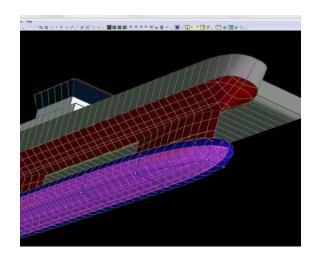


Aryatech serves as an Authorized and Exclusive Training Institute for various Bentley software in India & Middle East (UAE, North Africa, Qatar, Turkey & Egypt), helping people to achieve Excellency in their Careers and Academics.

SACS Training

SACS is an integrated finite element structural analysis package of applications that uniquely provides for the design of offshore structures, including oil and gas platforms, wind farms, and topsides of FPSOs and floating platforms. SACS software has been used by offshore engineers around the world for nearly 40 years. Many of the world's energy companies specify SACS software for use by their engineering firms across the lifecycle of offshore platforms.



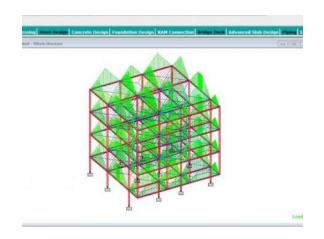


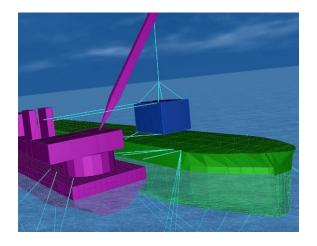
MaxSurf Training

Maxsurf is naval architecture software ideal for the design of marine vessels. Maxsurf includes capabilities for hull modeling, stability, motions and resistance prediction, structural modeling, structural analysis, and export to vessel detailing. Maxsurf operates from a single parametric 3D model in order to ensure smooth communication and coordination across various involved in the project

Staad. Pro Training

STAAD is a comprehensive structural finite element analysis and design application that allows users to perform analysis on any structure exposed to static, dynamic, wind, earthquake, thermal, and moving loads. STAAD comes in different variations so you can choose what's best for you.



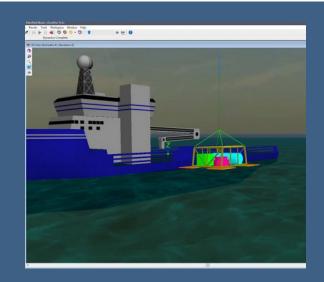


MOSES Training

MOSES is an advanced package for Hydrostatic and Hydrodynamic Analysis that provides the accurate calculation and simulation of Offshore Floating Systems.

OrcaFlex Training

OrcaFlex is the world's leading software package for the Design and Analysis of Offshore Marine Systems, including all types of Marine Risers, Mooring systems, Installation Procedures, and Towed Systems. OrcaFlex is primarily used by Naval Architects, Engineers, Consultants, and Designers to analyze and solve engineering problems.





ARYATECH LOCATIONS

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