

3D Laser Scanning and Engineering Services

Albion Marine Solutions provides 3D laser scanning, 3D modeling, design and drafting services to maritime, offshore, construction and oil and gas industries.

We specialize in 3D laser scanning for maritime and industrial engineering and design applications. Every scan measures millions of discrete points and each point is allocated in its precise position in space. The three dimensional Point Cloud that is created can be navigated, drafted, and modeled in popular CAD and other applications.



The possibilities are endless; from Site Surveys, Damage Investigation to Conversion Plans, Reverse Engineering, Conceptual Designs and Detailed Engineering.

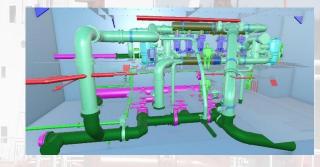
3D Laser Scanning

Our team are factory trained and experienced professionals in 3D Scanning. We utilize top of the line scanners with sub-millimeter accuracy. A number of 3D Scans are combined in a Point Cloud and represent the exact geometrical detail of the surrounding objects. From a Point Cloud the designers develop a model of the Machinery, Plant Piping , Structure, Equipment for the Concept Design, Basic, Detailed and As-Built Engineering. www.albionmarine.com 24/7 line +1 778-994-9993 info@albionmarine.com



3D Modeling

Our designers use the latest 3D CAD Modeling software to prepare 3D Concept Models and Detailed Fabrication drawings for ship conversions, and plant upgrades including Custom Part and Assembly modelling, Prototype Design, Complex Construction Design, Structural Layouts, and Machinery.



Plot Plans

The laser scans of the plant, machinery, electrical cabling, piping systems and structure are extracted from the Point Cloud to create isometric drawings. Our designers use AutoCAD software to create these Plot Plan drawings.

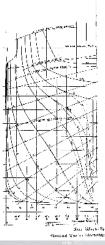


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Vessel Hull Lines

The 3D laser scan of the vessel's hull technique is used to develop the hull surface from the laser scan Point Cloud. This data is utilized for development and checking of the hydrostatic and stability.



Engineering Drafting

The 3D laser scan data is an irreplaceable tool in developing engineering

design packages. Our designers combine the processed scan data, 3D models, existing arrangements, engineering design, and client requirements to create the required engineering deliverables: Conversion Specifications, Plans, and Detailed Fabrication drawings.

Vessel Retrofits Detailed Design

We use 3D modeling to develop an engineering design package and conversion specifications. Engineers prepare detailed machinery, steel work, pipe piece design and layout.

- Provide Material take-off list.
- Complete documentation packages to satisfy the Class and Regulators.
- Our team will also develop the Yard Specifica-



Offshore Conversion

3D scanning and modelling is a valuable tool in complex, multidisciplinary projects where precise cut out and fitment of new offshore equipment is a common Scope of Work.

Our personnel have extensive experience in offshore conversions and new builds: FSO, FPSO, FSRU, shuttles, oil rings and platforms.



Damage Assessment and Survey

Albion Marine utilizes 3D scanning and modeling for a Damage Survey of the hull and machinery. It helps to capture accurate data including changes in hull geometry and the disposition of damaged objects. In conjunction with a survey conducted by our experienced surveyors it provides concerned parties with the information required for investigations and remedial actions.

