PORTABLE 3D MEASUREMENT SOLUTIONS





Through its Metrology Services division, Creaform offers its expertise, its renowned know-how and its knowledge of current 3D technology to companies from the naval industry. The Creaform team is able to meet the high quality, accuracy and responsiveness standards of this industry.

3D SCANNING AND REVERSE ENGINEERING

Engineering time for developing mechanical and naval products can be significantly optimized through using accurate, representative digital models, which our experts can create.

- Acquiring data on very large, complex systems through 3D scanning (3D scanners, long-range scanners)
- Design intent, "as is" actual state, or congestion simulation
- Stress, deformation and product specifics analysis
- Reverse engineering for structures, engines, hulls, pilot house or bridge, production tooling, etc.
- Assessing as-built / assembled conditions



BUOYANCY STUDIES

Ship owners must comply with laws and regulations in effect in order to obtain the necessary navigation rights and certifications. Conducting a buoyancy study is one of the steps needed to ensure that the ship is compliant. The Creaform 3D scanning technologies make it possible to acquire a ship's measurement data quickly, which proves to be a considerable benefit when the ship has limited availability. This data will make the buoyancy analysis easier, and facilitate the certification process.

- Scan data conversion in 2D vertical sections
- Results recognized by maritime authorities
- Data can be imported in all CAD software



AS-IS CONDITION ANALYSIS

Marine equipment tends to corrode because of underwater conditions, which affect the integrity of components. Through modern tools, it is possible to predict mechanical failure. By combining scanned data, real break test results and finite element analysis, Creaform provides customers with a deep understanding of mechanical behaviors.

- High accuracy and resolution
- Corrosion and deterioration follow-up
- Identifying and understanding of failure causes (manufacturing, internal stress, corrosion, etc...)
- As-is surfaces for FEA



