SMART STRUCTURAL HULL MONITORING

LIGHT STRUCTURES Passion for Monitoring

Digitalizing stress and fatigue data

Smart Functions redefine the possibilities of maritime operations, paving the way for a safer, more efficient maritime industry.

Smart Functions deliver heightened operational efficiency with innovative capabilities that transform traditional processes, empowering crew members and support personnel ashore to work better according to dependable data. The SENSFIB™ Structural Health Monitoring (SHM) system features Smart Functions that help to optimize safety at sea and unlock powerful insights that can significantly reduce the lifetime maintenance expenditure of a ship or maritime asset.

SENSFIB[™] is the only SMART SHM system recognized by class. Enabled by sophisticated data infrastructure, SMART (SHM) certified SENSFIB[™] installations leverage robust software integrity and cybersecurity measures to ensure seamless integration into wider digital systems.

SENSFIB[™] harnesses data from unique fiber optic sensors strategically placed around a ship. As part of a SMART (SHM) system they produce data that can inform advanced analytics and simulation techniques in order to empower stakeholders with actionable data that facilitates informed decision-making and swift operational responses.

SMART Structural Health Monitoring

According to ABS, Structural Health Monitoring (SHM) monitors structural loads, responses, and health conditions to assess structural integrity, provide structural health awareness, and help reduce the potential for structural damage.





Acquire. Analyze. Act.

Acquire precise structural stress and fatigue data



Analyze acquired data & deliver to any digital platforms

Act on insight from reliable structural monitoring data



SENSFIB[™]: ABS SMART SHM CERTIFIED

Digitalizing stress and fatigue data



The SENSFIB[™] Tier 3 Smart Structural Health Monitoring system employs an industry-leading, fiber optic, sensor-based approach for structural health assessment and prediction, calibrated and verified using high-fidelity data for improved accuracy and reliability.

SENSFIB[™] systems provide dependable and real-time information about stress on a vessel's hull from cargo loading, weather, and sea conditions, enabling navigators to act on warning alarms to reduce damage and improve safety. As part of a smart digital or cloudbased system, SENSFIB[™] can also provide deep insight into accumulated fatigue, which can be used to optimize maintenance and reduce lifecycle operational expenditure.

Vessels fitted with the SENSFIB[™] Tier 3 Smart Structural Health Monitoring system will be eligible to receive the ABS Class notation SMART (SHM) with vessel records indicating Global Hull and Fatigue, Tier 3.

By unlocking the ABS SMART (SHM) notation, Light Structures connected systems can prepare any ship or fleet for digital operations.



Total solutions for complete structural integrity at sea

As a total solutions provider in maritime and energy sectors, Light Structures tailors solutions to each customer's needs. Choosing Light Structures for SMART (SHM) certified installations means investing in a future of enhanced asset value, efficiency, and a commitment to safety and sustainability.

SENSFIB[™] sensors & solutions optimize the lifecycle maintenance costs of your ships and fleet

> Contact Light Structures Sales & Marketing to find out how our SMART (SHM) certified solutions can help protect your ships, offshore vessels, and maritime assets.

sales@lightstructures.com

+47 2389 7133



SCAN ME

lightstructures.com