

Testing & Monitoring

**Your technical engineering partner for the full vessel lifecycle.
Built on three principles : Prevention, Protection, Performance**

What we do

Marine Mechanics delivers navigation and communication services, safety systems, calibration IHM preparation and maintenance, testing and monitoring, machinery spares, and mechanical care under one roof. Every service is compliance-driven and lifecycle-focused, built around the disciplines of prevention, protection, and performance.

At sea, reliable testing depends on more than laboratory analysis. Correct sampling, preservation, transport and timing all determine whether a result can stand up to survey and regulatory scrutiny.

From potable water and environmental discharges to firefighting foam, we manage sampling, accredited analysis and certification to keep your vessel compliant wherever it calls. What goes over the side is regulated as tightly as what stays on board. Marine Mechanics samples, tests and reports across your vessel's water compliance obligations — with laboratory results your Flag and Class can rely on.

Compliance watch – PFOS & PFAS Testing

Is your foam clean, and can you prove it?

Since 1 January 2026, SOLAS prohibits the storage and use of PFOS-containing firefighting media in fixed systems and portable equipment, with a limit of 10 mg/kg (0.001%). We test existing foam, verify replacements and provide the documentation needed to demonstrate compliance.

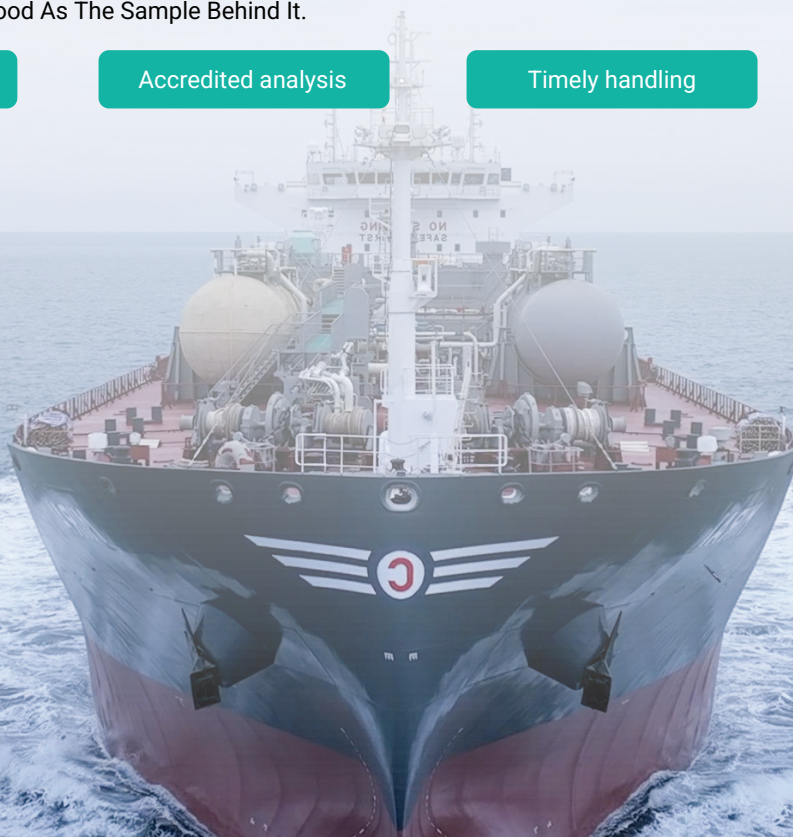
MSC.532(107)
PFOS-FREE VERIFICATION
10 MG/KG LIMIT
CEN/TS 15968
POST-REPLACEMENT TESTING
COMPLIANT FOAM & DISPOSAL

A Certificate Is Only As Good As The Sample Behind It.

Correct sampling

Accredited analysis

Timely handling



Foam Analysis

Physical properties
Density, viscosity, pH and solution concentration.

Stability & contamination
Stability, sedimentation and surface/interfacial tension.

Foam performance
Expansion ratio, drain time and burn-back resistance.

All foam types
Low-, medium- and high-expansion foam concentrates.

Potable water

Microbiological analysis
Testing for E. coli, coliforms and other key pathogen indicators.

Standards alignment
Testing aligned with WHO, MLC 2006 and applicable Flag State requirements.

Chemical & physical
Analysis of pH, chlorine residual, metals and other essential parameters.

Routine monitoring
Testing programmes planned around your vessel's trading pattern and schedule.

US EPA VGP

Onboard sampling
Trained attendance for onboard sampling and field testing using EPA-designated methods.

Time-critical logistics
Samples are transported within the required windows and conditions to protect testing integrity.

Reporting & guidance
EPA-ready reporting with regulatory guidance to help your team maintain compliance.

Sample handling
Correct sampling bottles, containers and preservation procedures for every required analyte.

Accredited analysis
Testing is carried out by accredited laboratories using applicable EPA methods under 40 CFR 136.3.

IMO / MARPOL

Bilge water - ows effluent
Verify that your oily water separator achieves the required 15 ppm discharge limit.

Sewage - treatment effluent
Performance verification of sewage treatment systems against applicable MEPC effluent standards.

Ballast water - d-2 compliance
Analytical testing confirms treated ballast water meets the applicable D-2 discharge standard.

Scrubber washwater - discharge monitoring
Testing verifies wash water performance against IMO discharge criteria for exhaust gas cleaning systems.



Verify what matters

To know more visit: www.marinemechanics.biz
Our Locations: China | India | Singapore | UAE | USA
24/7 Support: (+91) 782474440

Contact us
mmsafety@marinemechanics.biz