

**Michael Banning**

MSc, CEng, CMarEng, MIMarEST

Job Title	Managing Marine Engineer Fuel Specialist
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Michael Banning is a Chartered Engineer and Chartered Marine Engineer with 20 years' experience working within the marine industry. His sea-going career spanned both the Royal Navy and Merchant fleets, having sailed on a variety of vessels including Warships, Very Large Crude Carriers, Liquid Natural Gas Carriers, Product Tankers, General Cargo Vessels and Ro-Ro ferries.

Michael expanded his technical knowledge and expertise ashore working for a fuel additive manufacturer, holding the position of Technical Service Manager Marine and as a Technical Consultant, Fuel Specialist and Surveyor at a London based consultancy. Michael's experience includes fuel analysis, product formulation and development, failure analysis, incident investigation, standardisation and specification, energy efficiency management, project management and consultancy.

Michael is an active member in ISO working groups responsible for the Classification and Specification of both traditional and alternative Marine Fuels amongst other industry technical committees. He has assisted the industry with the aim of improving overall fuel quality mitigating risks onboard being involved in the 2017 revision of ISO 8217 and PAS 23263 in the run up to 2020. Michael has continued his committee work and has a renewed focus on 2030 and 2050 CO₂ reduction targets, having been involved in setting up the framework for the inclusion of Biofuels and Alternative Fuels onboard marine vessels in the latest version of these standards.

Professional Qualifications

Chartered Engineer – Engineering Standards Council

Chartered Marine Engineer – Institute of Marine Engineering, Science and Technology

MCA OOW Engineer III/3 Unlimited (Motor)

Dangerous Cargo Endorsements for Petroleum and Liquefied Gases

Academic Qualifications

M.Sc., Engineering and Management, University of Portsmouth, UK, 2017

Professional Memberships

British Standards Institute (BSI) – Member of Technical Committee PTI/002 Liquid Fuels

International Organization for Standardisation – Member of Technical Committee TC28/SC4/WG6 – Classification and Specification of Marine Fuels

International Organization for Standardisation – Member of Technical Committee TC

28/SC 4/WG 18 Specifications of Alternative Fuels for Marine Applications

Institute of Marine Engineering, Science and Technology (IMarEST) – Member

IMarEST Special Interest Group – Fuels and Emissions

International Bunker Industry Association (IBIA) – Member

IBIA Future Fuels Working Group – Member

Surveying and Consultancy Employment

Technical Consultant, Fuel Specialist and Surveyor, Exponent, 2021 - 2022

Technical Service Manager – Marine, Innospec, 2013 – 2021

Sea going Employment

Marine Engineering Officer, BP Maritime Services, 2010 – 2013

Marine Engineering Officer, Foreland Shipping, 2010

Marine Engineering Officer, Bibby International Services (IOM) Ltd, 2007 – 2009

Marine Engineering Artificer, Royal Navy, 2004 – 2006

Surveying and Consultancy Experience

- Bunker Quality Disputes
- Main and auxiliary engine failure investigations
- Shafting failures
- Opinion work on machinery failures and fuel quality issues
- Machinery repairs, inspections, assessment of costs, etc.
- Engine/vessel performance assessment

Types of main and auxiliary engines:

- Sulzer
- Wärtsilä
- Win GD
- MAN
- MAN B&W
- MAK
- Caterpillar
- Deutz
- Yanmar
- Daihatsu