



*Engineering solutions*



## Expertise. Innovation. Value.

AMOG is a leading global solutions provider to the energy, resources, defence and maritime construction industries. We combine the expertise of qualified, practised and forward-thinking engineers with the power of our international network.

We solve complex, challenging engineering problems. We engineer solutions by intimately understanding the breadth and depth of each issue; applying science, technology and clever thinking; conducting modelling, simulation and testing; and utilising our experience to get it right the first time. We deliver our industry-leading engineering know-how to projects of any scale.

Our clients trust in our cutting edge solutions to help them operate more effectively, safely and profitably.

That's how we add outstanding value.



## Specialist Engineering Design & Analysis

Leading edge engineering design and analysis in specialist fields are at the core of AMOG's services. Drawing on theoretical and practical insights, our team thrives on the application of advanced analysis techniques and design practice to complex engineering problems.

Specialist areas of application include floating production systems (moorings, risers, turrets, platforms), aged fixed production platform structures, subsea pipelines and submarine cables, offshore renewable energy, numerical modelling of fire and blast effects, seawater intakes, ocean outfalls, bulk material handling equipment, rope technology, exhaust and discharge dispersion, seakeeping, and mine blast effects.

Specific services include:

- Mooring Design & Analysis
- Field Architecture
- Pipeline & Cable Protection
- Riser Analysis (VIV)
- Hydrodynamics
- Naval Architecture
- Coastal Engineering
- Computational Fluid Dynamics
- Fire and Blast Modelling
- Finite Element Analysis
- Physical Model Testing

## Risk Assessment & Safety Engineering

AMOG leads the field in the provision of value-added safety engineering and risk services to the defence, transportation, marine, rail and energy sectors. From the development of entire Safety Cases and associated Safety Management Systems to qualitative/quantitative risk assessments and consequence modelling, we deliver proven and fully-compliant solutions.

Specific services include:

- Risk Assessment
- Major Hazard Facility Audits
- Consequence Modelling
- Safety Case Development
- HAZOP/HAZID Facilitation
- Software Assurance
- SIL Assessment
- FMEA/FMECA
- Training

## Installation Engineering & Support

With experience in the installation of mooring systems, floating structures and shore crossings in conditions ranging from those in the Gulf of Mexico and West Africa to South East Asia and the North West Shelf, our engineers have the global field know-how to deliver practical operational support for:

- Installation Analysis
- Installation Procedures
- Equipment Specification
- On-Site Management



## Infrastructure Support & Upgrade

We apply experience, expertise and innovation to support the management and upgrade of mechanical and structural infrastructure. Particular areas of application are bulk materials handling machinery, wharfs and berthings, mooring systems, road and rail tunnels, and rail rolling stock.

Services include:

- Inspection & Audit
- Condition Monitoring
- Forensic Investigation
- Upgrades & Life Extension

## Legal & Expert Witness

Our principals have significant experience in preparing briefs and assisting clients in legal proceedings.

Our leading edge analysis techniques can provide the evidence to support your case.

Owing to the specialised nature of much of the Company's work, AMOG Consulting is frequently engaged to undertake failure or incident investigations, provide expert opinions and appear as an expert witness. Matters include legal cases, insurance claims, Government and Coronial Inquiries, as well as investigations on behalf of owners and operators to ascertain incident sources and identify rectification measures.

## Software

AMOG has developed a number of software packages for use in the analysis of structural integrity, safety risk, pipeline and cable protection, mooring system design and riser configuration development.

In addition to those advanced analysis tools used exclusively in-house, we offer sales and support for the following packages:

- SITREP (Risk Assessment and Safety Management)
- Shear7 (Vortex Induced Vibration Prediction)
- SIAFEM (Structural Analysis)

## Training

Training is integral to our ethos. We share our knowledge and insights through the regular delivery of training courses.

Current public courses include:

- System Safety Engineering Course
- Container Inspection Course

In addition, AMOG directly supports a number of industry bodies and research societies, presenting regularly at workshops and conferences.



## Experience

The AMOG team of consulting engineers, project managers and technicians has been solving big problems for over two decades.

From our early days as the Australian Marine and Offshore Group in Melbourne, Australia, we have grown into a global network, evolving our capability and resources to meet increasing demand from a range of industries, governments and enterprises.

Our reputation is well-earned – thriving in extreme environments, thinking holistically, working smarter and generating change.

From the beginning, our approach was to own problems and deliver leading solutions. It still is.



## **Our Mission is:**

To provide outstanding value to our clients through the application of our deep skills and knowledge in scientific and engineering principles to produce the best possible solution within the available cost and time constraints, whilst providing a professionally stimulating and rewarding place of work for our employees.

## **Our Vision is:**

To be the leading specialist engineering service provider in our fields.

## **Our Values are:**

- Owning the problem
- Technical excellence
- Hard, smart work but fun
- Honesty & integrity
- Loyalty - Up, down & sideways
- Sense of urgency
- Professionalism
- Respect & equality
- Competitiveness
- Just reward for our efforts

Learn more  
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[www.amog.consulting](http://www.amog.consulting)