
Naval Architect

Reports to: Director of Naval Architecture

Direct Reports: None

Working arrangements: Glasgow office-based

Company Overview:

Founded in Liverpool in 1903, Brookes Bell is a leading multidisciplinary technical and scientific consultancy serving the global maritime and energy industries. The firm is widely recognised for casualty investigation, forensic analysis, technical dispute resolution, expert witness work, and the delivery of practical solutions to complex technical problems. Its specialists work across interrelated disciplines including marine and mechanical engineering; master mariner services; naval architecture; salvage and wreck removal; cargo science; fuels and liquid cargoes; fire and explosion investigation; paint and coatings; metallurgy; inspection and non-destructive testing; and laboratory and technical services.

Brookes Bell supports P&I clubs, shipowners, charterers, underwriters, hull and machinery insurers, cargo interests, law firms, salvors, shipyards, government departments, and other organisations operating across the maritime and energy sectors. By bringing together experts from complementary disciplines, the firm can investigate matters from multiple technical perspectives and coordinate substantial or complex assignments through a single point of contact. This integrated capability is particularly valuable in high-value casualties, major claims, litigation, salvage operations, and projects requiring rapid mobilisation, robust evidence, and clear, independent conclusions.

With teams located in strategic maritime and energy centres across the UK, Europe, Asia-Pacific, and the Americas, Brookes Bell combines international reach with local knowledge and can deploy appropriately qualified specialists wherever assistance is required. Its wider capabilities include The Lab at Brookes Bell, which provides materials testing, failure investigation, forensic analysis, and related scientific services, and 3D Marine, its full-service consulting business in the Americas. Across its work, Brookes Bell emphasises excellence, integrity, independence, innovation, impartial advice, and the recruitment and development of leading technical experts.

Overall Objective of Role:

The overall objective of the role is to provide high-quality naval architectural analysis and practical technical advice in support of forensic investigations, marine casualties, salvage and wreck removal projects, and a broad range of design and consultancy assignments worldwide. The role holder will apply sound engineering principles, specialist analytical methods, and professional judgement to assess vessel stability, structural strength, lifting and transportation arrangements, and other complex marine engineering matters.

The work will involve reviewing technical records and evidence, undertaking calculations and modelling, attending vessels and casualty sites where required, and presenting clear, accurate, and well-supported findings to clients and other stakeholders.

Working independently and as part of multidisciplinary Brookes Bell teams, the role holder will contribute to the effective delivery of assignments from initial instruction through to completion. This includes understanding the client's requirements, defining and managing allocated work, identifying technical risks and information gaps, communicating progress and emerging findings, and delivering outputs within agreed timescales and budgets.

The role is expected to uphold the company's standards of technical quality, independence, integrity, confidentiality, and health and safety, while developing trusted working relationships with colleagues, clients, insurers, legal advisers, classification societies, regulatory authorities, contractors, and other interested parties.

Through technical review, knowledge sharing, continuous professional development, and lessons learned from completed assignments, the role holder will also support the continuing development of the Naval Architecture team and the wider business.

Duties & Responsibilities:

- Undertake intact and damage stability calculations in support of marine casualty investigations, salvage operations, wreck removal projects, and other technical assignments, using appropriate analytical methods and specialist software.
- Develop and assess lifting, lowering, load-out, transportation, and weight-control arrangements, including the calculation of centres of gravity, sling loads, crane loads, and supporting reactions.
- Carry out structural strength assessments for ships, offshore units, and other marine structures, using hand calculations and finite element analysis where appropriate.
- Review vessel plans, technical specifications, loading information, survey findings, class records, statutory documentation, and other available evidence to establish relevant facts and identify areas requiring further investigation.
- Support forensic investigations into marine casualties by analysing structural failures, stability events, groundings, collisions, and other incidents, and by developing technically reasoned conclusions based on the available evidence.
- Attend vessels, shipyards, ports, casualty sites, and other locations worldwide, sometimes at short notice and for extended periods, to carry out inspections, take measurements, gather evidence, and liaise with relevant parties.
- Plan and undertake site work safely and efficiently, following company procedures and local site requirements, identifying hazards, and raising any health, safety, or operational concerns promptly.
- Apply classification society rules, international conventions, flag-state requirements, recognised engineering standards, and good naval architectural practice when completing technical assessments and design work.
- Prepare clear and accurate CAD drawings, sketches, calculation packages, technical notes, specifications, and supporting schedules suitable for internal review and client use.
- Produce well-structured technical reports that explain the scope of work, information reviewed, methodology, assumptions, calculations, findings, limitations, and conclusions in language appropriate to the intended audience.
- Provide practical, proportionate solutions to non-standard technical problems, exercising sound engineering judgement where information is incomplete, conditions are changing, or time constraints apply.
- Work effectively with limited supervision, particularly during site attendance, while recognising when matters should be escalated or when additional specialist input is required.
- Collaborate with naval architects, marine engineers, master mariners, scientists, surveyors, legal advisers, insurers, owners, operators, contractors, classification societies, and regulatory authorities as required by the assignment.
- Communicate progress, emerging findings, technical risks, information gaps, and anticipated changes to scope, cost, or timescale to the project lead and other relevant stakeholders.
- Manage allocated work in accordance with agreed priorities, budgets, and deadlines, maintaining accurate records of time, expenses, calculations, correspondence, and project documentation.
- Maintain the confidentiality, integrity, and secure handling of client information, evidence, technical data, and commercially sensitive material throughout each assignment.
- Contribute to internal technical reviews, lessons-learned discussions, knowledge sharing, development of calculation tools and procedures, and the continuous improvement of the Naval Architecture team's services.

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- Maintain and develop professional competence through relevant training, technical reading, industry engagement, and progress towards or maintenance of appropriate professional registration.
 - Undertake other duties that are reasonably within the individual's skills and capabilities and that support the effective delivery of client assignments and the wider objectives of the business.

Person Specification:

- A degree in Naval Architecture, Naval Architecture and Marine Engineering, or a closely related discipline, together with typically four to five years' relevant post-graduate experience.
- Sound knowledge of ship stability, hydrostatics, structural mechanics, weight control, lifting and transportation arrangements, classification rules, statutory requirements, and recognised industry standards.
- Practical experience of stability and finite element analysis software, with competence in CAD and standard Microsoft Office applications.
- Strong analytical, problem-solving, and report-writing skills, with the ability to explain complex technical matters clearly to technical and non-technical audiences.
- Experienced in attending ships, yards and other industrial settings to conduct surveys safely and effectively.
- A proactive, organised, and collaborative approach, with the judgement to work independently, manage competing priorities, meet deadlines and budgets, and seek guidance or escalate issues when appropriate.
- Strong interpersonal skills and a commitment to technical quality, integrity, impartiality, confidentiality, health and safety, and the secure handling of client information and evidence.
- Progress towards professional registration with an appropriate engineering institution; Chartered Engineer status would be advantageous.
- Willingness to travel in the UK and internationally, sometimes at short notice, and to attend vessels and operational sites as required.
- Based within practical travelling distance of Glasgow and able to work from the Glasgow office.

Behaviours:

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| • Managing Relationships | Expected |
| • Communicating and Influencing | Expected |
| • Drive and Resilience | Expected |
| • Planning and Accountability | Expected |
| • Analysis and Judgement | Expected |
| • Commercial Awareness | Expected |
| • Change and Innovation | Expected |