

Position Description

Job Title: Structural Engineer
Department/Program: Naval Design and Engineering Centre
Reporting To: Lead Structural Engineer
Location: Docklands, Melbourne
Level/Salary Range: TBC
Level: Staff

SUMMARY OF POSITION

The Senior Structural Engineer is responsible for working within the Structural Engineering division of Navantia Australia’s Naval Design and Engineering Centre to deliver structural elements and analyses for naval ships. System responsibilities include:

- Hull structure (plating, primary and secondary members);
- Equipment foundations (major and minor);
- Major support structures (walking platform, construction jig, transport cradles etc.).

DUTIES AND RESPONSIBILITIES

- Complete structural systems design for naval ship systems, applying robust systems engineering process;
- Support technical investigations, root cause analysis and solution identification;
- Undertake Structural Engineering tasks, including:
 - Perform first principle structural calculations to the required standards;
 - Perform Finite Element Analysis (using ANSYS software package) for complex tasks;
 - Produce technical reports with sound findings and recommendations.
- Deliver technical documentation in accordance with established Navantia and customer standards;
- Work effectively within the structural engineering division at the Navantia Design and Engineering Centre; and the broader Navantia Engineering Team to engage with different engineering disciplines in the development of new and maintenance of existing naval ship platforms;
- Support engineering projects from concept through to delivery, including the development of project plans, schedule and engagement of internal and external stakeholders;
- Plan and administrate design coordination and review meetings with engineering project stakeholders;
- Provide assistance to junior structural engineers

QUALIFICATIONS AND POSITION REQUIREMENTS

- Experience:**
- Bachelor Degree - Engineering (Naval Architect / Structural)
 - 8 years of experience as a professional engineer desirable but exceptional candidates with at least 5 years’ experience will be considered;

- Proven skills and experience in a Structure and/or Naval Architecture function;
- Strong analytical and problem solving skills, both first principles and FEA;
- Experience in the naval/defence industry is desirable;
- Demonstrated understanding of structures (particularly, ship) and material (particularly, steel) properties
- Project Management, including management of task schedule and progress monitoring and reporting
- Strong work ethics and interpersonal skills;
- Demonstrated ability to operate autonomously using initiative, sound reasoning, listening and decision making skills;
- Demonstrated ability to deliver results in a high pressure environment;
- Ability to manage, prioritise and complete multiple tasks concurrently;
- Ability to communicate effectively and build positive relationships within the organisation and with clients.

COMPETENCIES

Technical:

- Ability to read and understand engineering drawings;
- Proficiency in fundamental and complex structural analysis concepts (e.g. strength assessment, stiffness, natural frequency, buckling, fatigue, shock, etc.);
- Experience in bolted and welded connections;
- Experience in Finite Element Modelling and Analysis (preferably ANSYS);
- Ability to understand and apply relevant Australian Standards, Classification Society Rules and Regulations (Lloyd's Register in particular), various Defence and Naval Standards (e.g. DefAUST, NAVSEA);
- Experience with Computer Aided Design (CAD) packages (MicroStation, Rhino desirable);
- Capacity to provide technical assessments and produce engineering reports based on engineering calculations.

Management:

- Demonstrated ability to manage minor to moderate projects;
- Ability to work independently and communicate with stakeholders;
- Demonstrated ability to manage self (time, conduct).

Behavioral:

- Good written and oral communication;
- Positive attitude and strong work ethic;
- Ability to communicate effectively and build positive relationships at all levels;
- Ability to operate in a team environment and autonomously as required;
- Demonstrate behaviours that promote positive team morale;
- Demonstrate Navantia values at all times and encourage others to do so;
- Develops relationships based on trust and support.

Leadership:

- Promote a high performance culture.

Security:

- Ability to gain Baseline defence security clearance as a minimum.
- Able to work under the United States' International Treaty in Arms (ITAR) nationality restrictions

Pre-employment Medical / Background Checks :

- Reference Checks, Employment Verification Check, AFP Police Check, Qualification Check

APPROVED

Approved by: Managing Director - Alfonso Garcia Valdes	Signature / Date:
Approved by: Human Resources - James Cowie	Signature / Date: