



## **Marine Engineer / Naval Architect**

We know that air pollution is cutting short people's lives and causing health problems, that greenhouse gas emissions are warming the planet and drastically changing our ecosystems, and we know that the emissions from the world's maritime fleet is a major contributing factor in all of this. We also know how to solve this problem. Our mission is to enable marine operators of all kinds to enjoy the benefits of zero emission hydrogen fuel cell technology. We are building the first commercial hydrogen fuel cell ferry in the world and that is just the beginning. Let's get this done together.

### **Role**

You're happy getting your hands dirty whether in the shipyard, on a customer's vessel, or in the shop building the most advanced marine powertrain in the world. You're comfortable at a desk making your own designs for repowers/refits and new builds while applying the latest rules and regulations. You enjoy meeting with operators to understand requirements and constraints and finding solutions that work. In short, you are our technical point person for everything maritime, enabling vessel operators everywhere to eliminate air pollution from their vessels.

### **Responsibilities**

- Prepare calculations, drawings, and cost estimates for repower projects, including: structural modifications, stability assessments and submittals, electrical systems, various piping systems, fire protection and suppression design, integration with existing ship systems.
- Prepare notional/conceptual designs of new vessels incorporating the features and advantages of hydrogen fuel cell systems.
- Interface directly with customers and customer's naval architect and/or builder to answer questions, resolve comments, and present solutions.
- Support product development and prototyping efforts with design and hands-on work.
- Perform calculations to support design decisions and research and resolve technical problems
- Prepare USCG and/or Class submittals
- Perform ship checks, field visits, etc. at shipyards and pier side to understand customer requirements and verify accurate repower work.
- Work with our Marketing, Product, and Sales staff to develop market- and customer-specific solutions.
- Communicate easily with customers, strategic partners, and other stakeholders regarding the details of GGZEM's core hydrogen technologies.
- Stay up-to-date on the latest maritime rules and regulations and participate in development of new ones.
- Moderate travel required.

### **Job Qualifications**

Minimum qualifications:

- Bachelor's or Master's degree in marine engineering, marine engineering and naval architecture, or electrical or mechanical engineering with equivalent technical marine experience.



- Experience creating new vessel and modification designs for a variety of craft, including on-board systems, arrangements, structures, stability, and powering.
- Computer skills including AutoCAD, 3D modeling software, e.g. Solidworks, Rhino, etc., Naval Architecture analysis software, e.g. GHS, Rhino Marine, NavCAD, etc.
- Knowledge and experience researching and applying USCG-inspected vessel regulations, Class rules (ABS, DNVGL, LR, etc.), and military and/or commercial technical standards
- Physically able to conduct ship checks including being in confined spaces, climbing narrow ladders, and lifting up to 50 pounds
- Experience preparing clear written summaries and giving presentations
- Proactive, innovative, and flexible mindset
- Comfortable working as a key contributor in a small startup team
- Open minded to occasionally work outside your specified role to help the company do what it needs to do to meet deadlines and scale quickly
- Experience with and enthusiasm for with tinkering, making, hacking, hands-on hobbies and projects, etc.
- Legal authorization to work in the United States

**Preferred qualifications:**

- Multidisciplinary abilities as evidenced by additional major/minor degrees, job training, and/or experience in one or more of the following:
  - Mechanical engineering: fluid and heat transfer system design, air handling, energy systems, etc.
  - Electrical engineering: high voltage (up to 1,000 V) AC and DC, power conversion and regulation, batteries and capacitors, motors, etc.
  - Control system engineering: instrumentation and sensors, PLC programming and algorithmic software, digital and analog signal acquisition, data logging
- Working familiarity with common engineering design codes and standards (e.g. ASME, ASTM, CGA, NFPA, etc.)
- Professional Engineering (PE) License or Engineer-In-Training (EIT) Certificate

**Perks**

**GGZEM provides:**

- Full benefits package
- Equity ownership in a high-growth company
- Competitive salary with bonus structure
- Flexible work hours and environment
- Training and growth opportunities
- Minimal bureaucracy
- Empowerment to do your job
- Fun, challenging work with a purpose