

# **Staff Structural Design Engineer Job Posting**

rev. 05-15-2024

#### **Boos Navarre Company Overview**

Boos Navarre is a prominent, globally recognized professional consulting engineering firm in the container handling and bulk material handling industries. Boos Navarre maintains professional engineering licenses in 13 states and serves projects and clients in 25+ countries. Even as a small, privately owned firm, Boos Navarre serves clients, such as port authorities, port owners, terminal operators, and terminal maintenance departments, with full service multi-discipline professional engineering solutions for container handling and bulk material handling equipment and facilities.

#### **Position Summary & Primary Responsibilities**

The Staff Structural Design Engineer ("Engineer") will:

- Maintain responsibility for the structural design services of the firm, including all aspects of structural engineering
- Perform, review, and/or approve structural engineering work performed by the firm
- Establish and maintain standards for the firm's structural design and analysis
- Lead and/or support structural discipline projects
- Manage project structural design execution in accordance with project budgets and schedules
- Interface with firm personnel, clients, equipment manufacturers, suppliers, and other engineering firms to support the firm's services
- Other duties as assigned to support the success of the firm and its clients
- Maintain professional engineering licensure in good standing, maintain continued professional development, and stay current on structural design and industry standards and technological advancement

# **Typical Duties**

- Prepare structural design packages (new designs, repairs, refurbishments, etc.) including calculations, drawings, technical specifications, and related documents for container handling cranes, bulk material handling cranes, and similar terminal equipment
- Perform structural design analysis, static & dynamic FEA, and develop solutions to complex structural failures
- Review equipment manufacturer structural design submittals for technical specification compliance



- Perform structural condition assessments, witness and evaluate NDT results, and review structural fabrication, assembly, and testing for container handling or bulk material handling cranes and equipment
- Attend design and technical review meetings at project locations, client offices, and equipment manufacturers offices
- Perform site inspections for project equipment

# **Minimum Required Qualifications**

- Bachelor's of Science Degree in Civil Engineering with structural coursework from a university with an ABET accredited engineering program
- Current active Professional Engineering (PE) License, in good standing, in Civil/Structural
  Engineering with commitment to maintain licensure
- 5+ years of full time experience in heavy equipment or steel structure design and finite element analysis (FEA) of structures
- Proficiency (3+ yrs.) with structural FEA software, drafting software, and Microsoft products
- Working knowledge of FEMAP, Ansys, SolidWorks 3D, AutoCAD
- Knowledge and application of design codes such as IBC, ASCE, AISC, ACI, etc.
- Analytical/critical thinker with problem solving focus and ability to make decisions in a timely manner
- Effective communication and technical writing skills with proficiency in English
- Ability to work self-directed on multiple projects
- Self-disciplined, driven, high moral and ethical standards, and work well in a team environment
- Ability to travel globally (up to 15% travel) for trips typically 1 week or less, but periodically up to 2
  weeks
- Ability to climb OSHA compliant access systems and enter internal structural members on cranes or fixed structures with heights up to 200 ft.
- Ability to work in the US without a current or future need for visa sponsorship

#### **Preferred Qualifications**

- Proficiency with specific software: FEMAP, Ansys, SolidWorks3D Simulation, and AutoCAD
- Proficiency with civil/structural design of marine terminal structures and foundations including wharf/dock design, pile and soil support systems, foundation systems, seismic design, etc.
- Aptitude and knowledge of mechanical equipment interface with structural design
- Experience with container handling and bulk material handling equipment and terminal civil design
- Local to the Mobile, Alabama vicinity
- Ability to travel globally more than 15% with trips up to 2 weeks



#### **Employment Details**

- Boos Navarre is an Equal Opportunity Employer and does not discriminate on the basis of race, color, religion, gender, age, national origin, disability, sexual orientation, or marital status.
- Salary is viewed as very competitive in our industry and commensurate with industry experience and technical expertise
- Boos Navarre offers an extensive, competitive benefits package including health insurance, dental
  insurance, vision insurance, 401k, travel compensation, paid sick time, paid vacation time, paid
  holidays, and more.
- Employment at Boos Navarre is "at will" in accordance with the State of Alabama

# **To Apply for this Position**

If you are interested in and exceed the minimum required qualifications for this position, please e-mail a resume, cover letter, contact information, and any other relevant details to <a href="mailto:info@boosnavarre.com">info@boosnavarre.com</a>.

