

[www.barnhartcrane.com](http://www.barnhartcrane.com)



**Position:** Marine Architect / Engineer

**Date:** 09/01/2011

**Location:** Memphis, TN / BSC

**Posting #:** 12 - 063

**Job Description:**

- Perform design calculations relative to barge operations related to heavy haul & lifting operations. These calculations include, but are not limited to: ballast calculations to determine trim and list, structural calculations of barge internals to verify / evaluate suitability for heavy transport loads, motion force analyses for open water / blue water shipments, barge hydrostatic assessments.
- Perform field walk down assessments of barges to determine suitability and condition of nominated barges to perform BCR's work. Candidate must be familiar with on-hire / off-hire type condition reports and be able to produce the same or similar type reports for BCR's records
- Have a working knowledge of barge logistics, inland waterways, intracoastal waterways, U.S. river and lock systems, U.S. ports, waterway tidal / pool fluctuations, etc
- Have a working knowledge of marine terms / terminology (see <http://www.mcdonoughmarine.com/terms.htm>)
- Utilize BCR's existing internal standards for marine operation and help develop additional standards as well as modify existing standards
- Train other Barnhart engineers barge operations, etc
- Manage engineering related tasks as they interface with project work to produce engineering deliverables on-schedule
- Candidate should also be versed in structural analysis and have a strong background and education in strength of materials type content and structural / stress analysis methods
- Perform design engineering tasks on multiple heavy lift/heavy transport projects
- Function as reviewer of calculations, drawings and project information produced by other engineers
- Work at the direction of the corporate Engineering Design Manager
- 25% of the time is expected to be travel away from the office
- Full-time salaried position, excellent benefits package, 401K up to 10% match

**Qualifications:**

- Bachelor's degree in Marine Architecture, Civil/Structural Engineering or Mechanical
- Engineering from an ABET accredited 4-year university with a minimum overall 3.25 GPA
- Showing evidence of passing the Fundamentals of Engineering (FE) / Engineer-in-Training exam as administered by the NCEES is preferred (or similar type exam)
- 4 years minimum experience in marine architecture work showing knowledge of marine design, civil/structural mechanics, strength of materials design or related type projects
- Strong mathematics and analytical background
- Must be able to work on multiple tasks with little supervision in a fast paced environment
- Ability to lead and grow as well as develop other engineers
- Good written and verbal communication skills
- Experience with AISC Steel Code and AWS Welding codes preferred
- Experience with Finite Element Analysis methods preferred
- Experience with heavy transport as it related to marine operations highly preferred
- Experience with engineering software such as MathCAD and RISA-3D preferred
- Must have working knowledge and experience with AutoCAD
- Must be able to pass a Barnhart administered skills/knowledge test given at time of interview
- Must pass drug tests, fitness-for-duty exam and background check

Contact [hr@barnhartcrane.com](mailto:hr@barnhartcrane.com) with any questions or submit your resume via email.

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Barnhart is an EEO/AA/Minority/Women/Hispanic/Veteran Employer**

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