JOB DESCRIPTION

SENIOR ENGINEER (STRUCTURAL)

Education	Experience
Bachelor Degree in Civil / Structural / Naval Architect Engineering. (or Diploma with addl. 7+ years experience)	7+ yrs with Consultants or EPC contractor in Oil and Gas / Petrochemical / Chemical / Power / Infrastructure industry.

Additional Skill Sets

Good knowledge of structural design techniques and analysis methods, fabrication yard procedures and onshore / offshore equipment. Exposure to statutory requirements and codes applicable to onshore / offshore Oil and Gas industry.

Reports To	Supervises
Lead Engineer	Engineers / Lead Designer / Designers

Coordinate With

Other Engineering Disciplines, Document Controller, Project Engineering, Customer Discipline Engineer, Construction and vendors.

Responsibilities and Authorities

Familiarize with the scope of work. Monitor changes in scope of work and raises change notification to the Lead Engineer.

Prepare / Review of engineering documents like calculations, specifications, philosophies, datasheets and drawings to ensure compliance with specification and functional integrity.

Provide technical directions and inputs to drafting personnel.

Carry-out single discipline checking of discipline documents / deliverables for the project.

Carry-out IDC for other discipline document / deliverables as per the approved IDC matrix.

Co-ordinate with other discipline / departments.

Attend Project review meetings and project co-ordination meetings in the absence of Lead Engineer.

Participate in technical review meetings (like piping 3D model review etc.)

Review of Vendor documents.

To implement QMS within the discipline.

To ensure Quality Control throughout the discipline, works with the Quality Management System and participate in regular quality audits.

Follow all applicable procedures and work instructions.

Keep continual improvement as a goal and apply Lessons Learnt on the past projects for better performance.

Prepare / Review / Approve design analysis, calculations and procedures for discipline deliverables such as:

- Structural design basis, Material Specification

- In place structural analysis (Operating, storm, damage, blast), Transit / Transportation analysis
- Lift engineering / Weighing analysis, Plastic analysis / Dropped object analysis
- Seismic analysis, Pushover analysis, Fatigue analysis (Simplified/ Deterministic/ Spectral)
- Joint and connection designs, Equipment integration/ foundation design
- Design of plant and non-plant buildings.
- Structural analysis by first principles and using tools such as SACS, FEMAP etc.
- Weight Control Report, Structural Analysis Report
- Prepare and provide inputs for the preparation of deliverables / drawings such as Primary/ Secondary MTO , Plating Grating, Handrail, Lifting Configuration drawings, Joint details, Equipment integration drawings, Material handling drawings, deck connection details, under deck strengthening, major piping supports etc.
- Review package / skid vendor drawings for structural interface.