Job Title: Pipe Stress & Structural Analyst IO1023

Requisition ID **4202** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Construction and Installation** - **New Posting**

The ITER Organization brings together people from all over the world to be part of a thrilling human adventure in southern France—building the ITER Tokamak. We require the best people in every domain.

We offer challenging full-time assignments in a wide range of areas and encourage applications from candidates with all levels of experience, from recent graduates to experienced professionals. Applications from under-represented ITER Members and from female candidates are strongly encouraged as the ITER Organization supports diversity and gender equality in the workplace.

Our working environment is truly multi-cultural, with 29 different nationalities represented among staff. The ITER Organization Code of Conduct gives guidance in matters of professional ethics to all staff and serves as a reference for the public with regards to the standards of conduct that third parties are entitled to expect when dealing with the ITER Organization.

The south of France is blessed with a very privileged living environment and a mild and sunny climate. The ITER Project is based in Saint Paul-lez-Durance, located between the southern Alps and the Mediterranean Sea—an area offering every conceivable sporting, leisure, and cultural opportunity.

To see why ITER is a great place to work, please look at this video

Application deadline: 08/08/2021
Domain: Construction
Department: Plant Construction
Division: Mechanical Implementation
Section: Cooling Mechanical & Welding
Job Family: Project Engineering
Job Role: Engineer - 1
Job Grade: P2
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

In this role, you will perform the pipe stress analysis, and structural analysis of relevant supporting structures (both primary and secondary support) for Component Cooling Water System (CCWS) of ITER project
You will write the technical specifications for procurement of pipes, fittings & flanges, primary support, and secondary support in respect with construction requirements.

Background

The CCWS of ITER is one of the largest systems for the ITER Machine, which manages 500 MW of thermal power rejection. The system has the highest number of clients including several interfaces. It is distributed throughout the plant system to specified location in several buildings on the ITER site. The system is classified as both Protection Important Component (PIC) and non-PIC.

Major Duties/Roles & Responsibilities

- Performs the pipes stress analysis using specified software as per the defined load specifications and prepares reports;
- Performs Structural analysis of secondary and primary supports and justifies the mechanical loads on the Embedded plates/ Post Drilled Plates and prepares reports;
- Verifies the Embedded Plates/Post Drilled Plates loads with the approving the authority;

- Contributes in the preparation and reviewing of the Engineering Work Packages, in terms of mechanical design;
- Prepares the technical specifications as per the Bill of Materials (BoM) for pipes, fittings, secondary and primary supports as per specified codes according to the best quality engineering as well as industrial standards and released;
- Participates in call for tenders as Technical Responsible voting member to award contracts for the components/equipment, and follows-up on contracts, in collaboration with Procurement & Contracts Division;
- Ensures that deliverables are supported by high quality documentation according the ITER standards and quality requirements;
- Supports the mechanical design team on analyses clarifications required for the construction;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- May be required to work outside ITER Organization reference working hours, including nights, week-ends and public holidays.

Measure of Effectiveness

- Develops accurate piping and support stress reports within the defined timeline and efficiently solves issues;
- Implements on time preparation and completion of Engineering Work Packages (EWP) for the relevant construction according the baseline schedule;
- Produces high quality and on time the technical specifications for pipes, fittings, primary and secondary supports;
- Ensures on time and high quality delivery for components under the defined scope of responsibilities, in compliance with quality and safety requirements.

Experience & Profile

- ***Professional Experience:***
  - At least 5 years' experience as piping and stress analyst engineer having experience on procurement of pipes, fittings, primary and secondary supports in the field of Nuclear Power Plant, or Oil & Gas industry.
- ***Education:***
  - Master's degree or equivalent in Mechanical Engineering, Nuclear Engineering or other relevant similar discipline;
  - The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.
- ***Language requirements:***
  - Fluent in English (written and spoken).
- ***Technical Competencies and demonstrated experience in:***
  - Pipes stress and structural analysis:
    - According to ASME B 31.3 and AISC, ASCE, ASTM or European codes;
    - Using CESER and STAAD-PRO analysis software.
  - Writing technical specifications, in particular for pipes and fittings;
  - Procurement of components and equipment (i.e. pipes, fittings & flanges etc.) is required: knowledge and practice of procurement procedures, delivery, management of external parties, and implementation within contractual requirements;
  - Quality Assurance and Quality Control: knowledge of requirements for international quality standards (for both management and product), methods, and practices;
  - Multi-CAD system (AVEVA E3D/CATIA/ENNOVIA).
- ***Behavioral Competencies:***
  - Collaborate: Ability to facilitate dialogue with a wide variety of contributors and stakeholders;
  - Communicate Effectively: Ability to adjust communication content and style to deliver messages to work effectively in a multi-cultural environment;

- Drive results: Ability to persist in the face of challenges to meet deadlines with high standards;
- Manage Complexity: Ability to analyze multiple and diverse sources of information to understand problems accurately before moving to proposals;
- Instill trust: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.

The following important information shall apply to all jobs at ITER Organization:

- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, ITER Values (Trust; Loyalty; Integrity; Excellence; Team mind set; Diversity and Inclusiveness) and Code of Conduct;
- ITER Core technical competencies of 1) Nuclear Safety, environment, radioprotection and pressured equipment 2) Occupational Health, safety & security 3) Quality assurance processes. Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members;
- Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;
- May be requested to work on beryllium-containing components. In this case, you will be required to follow the established ITER Beryllium Management Program for working safely with beryllium. Training and support will be provided by the ITER Organization;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- Informs the IO Director-General, Domain Head, or Department/Office Head of any important and urgent issues that cannot be handled by line management and that may jeopardize the achievement of the Project's objectives.