Job Title: Mechanical Engineer IO1089

Requisition ID **5782** - 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: 10/04/2022
Domain: Construction
Department: Plant Construction
Division: Field Engineering Installation
Section: Mechanical & Pip. Inst. Surveillance Section
Job Family: Construction
Job Role: Engineer – 3
Job Grade: P3
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As a Mechanical Engineer, you will lead the Engineering Work Packages (EWP) produced by the Mechanical and Piping Installation Surveillance Section, in particular for the mechanical shielding devices, such as the bio-shield plugs, the port cell doors shielding, shielding in the drain tank room, and other local shielding, etc.
You will organize the procurement process of the design shielding devices and optimize the installation sequence, taking into account the overall assembly sequence, in-kind contributions availabilities and the buildings availabilities

Background

The Mechanical and Piping Installation Surveillance Section *(MPIS), integrated within the Field Engineering Installation Division in Plant Construction Department, performs operator surveillance during installation activities of mechanical and piping systems in different plant areas. Field Engineering and Installation Division is responsible for the design of several transverse functions like penetrations, platforms and shielding assemblies.*

Key Duties, Scope, and Level of Accountability

- Provides technical leadership to the team in charge of shielding devices design.

- Assures the availability and maturity of input data for the design and coordinates with diverse stakeholders within the project to consolidate the design input.
- Manages the interfaces with other systems verifying the correctness and maturity of these interfaces;
- Selects appropriate materials and configurations that are already qualified as per ITER requirements or can be qualified in short term to achieve project goals
- Coordinates the preparation of design reviews and manufacturing readiness review for the assigned scope, assuring availability, quality and completeness of the Hand over Packages for construction;
- Organizes the procurement of the shielding devices, including preparing technical specifications and tender documents and participating in Call for Tenders;
- Performs surveillance activities during installation and issues inspection and observation reports when and where required;
- Provides expert criteria for mechanical discipline related problems and follows-up on the resolution of the field engineering changes and installation non-conformances;
- 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

- Achieves the Final Design Review and the Manufacturing Readiness review as per construction schedule for the assigned scope.
- Anticipates or resolves interface and integration issues promptly to minimize disruption to the schedule;
- Reports on the status of the design, fabrication and installation in a timely and accurate manner Coordinates the handover of Engineering Work Packages (EWP) to CMA in good time, ensuring the proper transfer of information;
- Establishes cooperative relationships with potential future suppliers of radiation protection materials
- Controls, monitors and respects the cost and schedule for the execution of procurement and contracts;
- Maintains effective communication and excellent relations with interfacing teams within ITER and with external contractors/suppliers;
- Provides sound technical advice and ensures decisions are made in line with safety and quality standards.

Experience & Profile

- ***Professional Experience:***
  - Minimum 8 years' experience in design, procurement, fabrication and installation supervision of mechanical structures and equipment, as well as piping systems in the field of nuclear power plants within complex international environments or projects.
- ***Education:***
  - Master degree or equivalent in Mechanical Engineering, with competences field or other relevant 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:***
  - Specialized Domains of Expertise (Mechanical Engineering): Fabrication and installation procedures for mechanical assemblies as well as welding techniques, testing and NDT techniques, including knowledge of piping design codes;
  - Structural static analysis and seismic analysis, with proven experience in identifying and applying different loading conditions under different postulated accidents according to

Accidental Analysis Report;
    - Eurocode and Nuclear Plants structural codes such as ASME BPVC Section III - NF, AISC N690 or similar;
    - Radiation protection technologies/ materials, and relevant experience in the qualification of shielding materials in nuclear plants;
    - Design: Practical design of safety shielding items for nuclear facilities, with knowledge of different available shielding solutions;
    - Interface Management: Identify, resolve and maintain technical and functional interfaces;
    - Project and Contract Management: Planning, measuring of project work, managing risks/costs and reporting on progress;
    - Quality Control: Verifying the compliance of the procedures for the installation of mechanical components and piping systems with all applicable requirements;
    - ANSYS, GT Strudl, SAP 2000, or 3D CAD plant software (AVEVA and Catia or Smartplant) is advantageous;
    - Fusion related technologies and systems will be considered advantageous.
- ***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.