Job Title: Mechanical Engineer, Plant Installation & Mechanical Equipment IO0654_IO0972

Requisition ID **8080** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Construction and Installation** - **New Posting**

Fusion, the nuclear reaction that powers the sun and the stars, is a promising long-term option for a sustainable, non-carbon emitting global energy supply.

The ITER Organization (IO), based in the southern France, welcomes best talents who can together prepare the way to this new energy in a truly multi-cultural work environment.

We offer challenging assignments in a wide range of areas and encourage applications from candidates will all levels of experience. Applications from under-represented ITER Members' nations and women candidates are strongly encouraged, as IO strongly believes that a diversified, equitable, and inclusive workplace is crucial in solving one of the most complex scientific and engineering projects in the world today.

As the IO attracts and retains people coming from a vast array of different backgrounds and cultures, discrimination and exclusion cannot be tolerated. The IO believes it is our diverse perspectives and background that gives unique strength and value to the ITER mission, regardless of race, member nation, gender, religion, status, sexual orientation, or disability - all are welcome and respected at ITER.
The IO is committed to fostering a fair and equitable environment across all areas of the project, including compensation and benefits.
ITER CARE Values (Collaboration / Accountability / Respect / Excellence):
We perform our work with care, we care for the well-being of colleagues, our families and ourselves, and we care about the health of the planet for generations to come. CARE drives our work and our behaviors at ITER.

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

Application Deadline: 26/10/2025
Department: Engineering Services Department
Division / Program:
Section / Project:
Job Grade: P1/P2 (SALARY SIMULATOR)
Language Requirements: Fluent in English (written & spoken)
Contract Duration: Up to 5 years
*The selection process will be conducted with the objective of filling **the below multiple positions** with also the purpose of drawing up a reserve list of rostered candidates for future vacant positions. The reserve list initially remains valid for two years, with the possibility of extension at the Director-General's discretion.*

Please note that the entry grade of this position begins at P1 and the final grade offered to the selected candidate is subject to the decision of the IO Director General.

Overview

Are you looking for an exciting opportunity at the heart of an ambitious fusion energy project? Join our Design Office and Mechanical Engineering (DOME) Division within the Engineering Service Department (ESD) as a Mechanical Engineer.

As a **Mechanical Engineer,** your goals will include:
- Performing the entire engineering life cycle (specification, design, qualification, procurement, installation, integration, commissioning and maintenance) for the scope of activity.
- Providing engineering input and technical support for the scope of activity.
- Ensuring deliverables are produced according to project schedule and budget, within a quality-assured environment that requires rigor and a systematic way of working.
- Developing, under the leadership of your discipline manager, your skills and experience for the benefit of the Project.

The ESD provides the required skilled engineering resources or services, which are necessary for the successful completion of the ITER Project.
The DOME Division provides technical support to the ITER project in the field of mechanical structures engineering. Being a member of the DOME Division, you will have the opportunity to share and develop your expertise with other colleagues working in the same discipline in different ITER units.

The initial scope of activity for each position is:

1. **Surveillance and resolution of in-field changes during the installation of piping systems, pressurized equipment and platforms in nuclear and non-nuclear buildings.**

2. **Complex mechanical systems and components including lifts, hoists, cranes and confinement/shielding doors in nuclear and non-nuclear buildings.**

Key Duties & Responsibilities

Primary Responsibilities:
- Contributes to the delivery of mechanical designs and supports engineering activities for the scope of activity (e.g. vacuum, cooling, buildings, remote handling, rotating machinery etc.).

- Performs mechanical analyses, in addition to thermal and structural analyses of piping systems and mechanical components to validate the design.
- Writes technical documentation as required for the procurement, fabrication, qualification and testing of the equipment, prepare relevant tenders, and updates documents as needed.
- Follows up on the manufacturing for the scope of activity including qualification tests and final acceptance tests (FATs).
- Collects and verifies input data for the design of the assigned scope and reviews the deliverables produced by external design contractors.

Additional Responsibilities:
- Provides assistance to the Domestical Agencies, contractors and ITER groups to carry-out engineering, R&D, interface control and procurement work as required.
- Reviews detailed workshop drawings or any Installation Procedures, Inspection & Test Plans and the installation testing issued by the installation Contractor.
- 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.

Please note that job descriptions cannot be exhaustive, and the staff member may be required to undertake other duties, which are broadly in line with the above primary responsibilities.

Experience & Competencies

Essential:
- **Proven experience** in Mechanical Engineering and/or mechanical components in the field of nuclear installations, within complex international environments or projects.
- **Stress Analyses:** Modeling the structure, analyzing its response to loads using various methods like finite element analysis, calculating stresses, evaluating against design criteria, and optimizing the design based on analysis results
- **Mechanical Engineering:** Specifying, designing, testing, installing and maintaining mechanical components, systems and interfaces.
- **Manufacturing Follow up:** Experience in the follow-up of manufacturing of mechanical parts, including working knowledge of mechanical manufacturing techniques.
- **Continuous Improvement:** proposing changes to processes and systems to enhance efficiency, quality, and productivity over time.
- **Quality Management Systems (QMS):** apply the applicable procedures related to your field of activity.

Desirable:
- **Software:**
  - Mechanical engineering (e.g. ANSYS, ABAQUS, CAESAR II, STAAD PRO or similar).
  - CAD activities (e.g. CATIA (ENOVIA), SMART PLANT, AVEVA E3D/Diagrams or similar)
- **Codes & Standards:** Understanding and applying industry, discipline or job-specific codes, standards and regulations to ensure that products, services, and processes comply with applicable requirements and legal frameworks such as ASME, RCC-MR or similar.
- Experience with materials joining and non-destructive testing techniques.
- **Organizational Savvy:** maneuvering comfortably through complex policy, process, and people related organizational dynamics.
- **Optimizes Work Processes:** knowing or identifying the most effective and efficient processes to get things done, with a focus on continuous improvement.

Qualifications

Essential:
- Master's degree or equivalent in Mechanical Engineering or other relevant discipline.
- *The required education degree(s) may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.*

The following items apply to all jobs and job holders for the duration of tenure at ITER Organization:

- **The CARE Values are a framework of principles that guide our actions and define the culture and spirit of the ITER Project:**

Collaboration: We collaborate with commitment and flexibility using the power of teamwork, building partnerships, and working with others to reach shared objectives;

Accountability: We are accountable for the whole project - we take responsibility for our specific actions and are transparent in our daily work, holding self (ourselves) and others accountable to meet commitments;

Respect: We treat each other with respect and dignity at all times, knowing that all of us belong here. We appreciate the value that our multicultural and diverse community brings to the ITER Project;

Excellence: We are driven by excellence; we are agile and innovative while maintaining the highest standards of safety, quality and integrity;

- **ITER Core Technical Competencies**:
  1) **Nuclear Safety, Environment, Radioprotection and Pressured Equipment**
  2) **Occupational Health, Safety & Security**
  3) **Quality Control & 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 perform other duties in support of the project as defined by your line manager, and when relevant upon the request of the matrix manager;

- May be requested to work outside the ITER Organization reference working hours, including nights, weekends and public holidays, due to business needs - this may include on-call, shift work, etc.
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- For staff expected to perform on-call, shift hours, or other work outside ITER Organization reference working hours, including nights, weekends, and public holidays, **the possession of a driving license valid in France is required. no commuting vehicle will be provided by the ITER Organization.**
- Informs management of any important and urgent issues that cannot be handled by line or matrix management and that may jeopardize the achievement of the Project's objectives;

The ITER Organization (IO) is an Equal Opportunity organization committed to diversity and inclusive in the workplace.