

# Job Title: Mechanical Technician IO0687

Requisition ID **6840** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Engineering of Systems - 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.

ITER Organization (IO) is an Equal Opportunity/Inclusive organization committed to diversity in the workplace, with diversity and Inclusiveness being one of the ITER Values.

As IO attracts and retains people coming from a vast array of different backgrounds and cultures, bias and exclusion cannot be tolerated. IO believes it is our diverse perspectives and backgrounds 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.

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:** 12/03/2023

**Domain:** Engineering Domain

**Department:** Engineering Design Department

**Division:** Fuel Cycle Division

**Section:** Tritium Plant Section

**Group:** Atmospheric Detritiation System

**Job Family:** Engineering

**Job Role:** Technician – 3

**Job Grade:** G4

**Language requirements:** Fluent in English (written & spoken)

**Contract duration:** Up to 5 years

## **Purpose**

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As a Mechanical Technician, you will provide technical support for the Tritium Plant piping and plant systems design, integration, procurement and construction.

## **Background**

The Tritium Plant comprises the tokamak fuel cycle processing systems, as well as tritium confinement and detritiation systems. The equipment ranges from ultra clean small bore tubing inside gloveboxes to more industrial scale piping and HVAC equipment. The majority of the plant is at preliminary design stage, though some equipment is in final design and some equipment is undergoing installation. As such

there is a need for a mechanical technician to support the Section to deliver the design and realization of the Tritium Plant.

### **Key Duties, Scope, and Level of Accountability**

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- Provides technical support to monitor and inspect piping and equipment installation activities to confirm compliance with the technical and quality requirements;
- Assists in the review of contractor technical documentation related to the installation of piping and equipment, including work and test procedures, inspection & test plans and as-built document files;
- Assists in the follow-up and resolution of technical issues related to the installation of piping and equipment including Deviation Requests and Non-Conformance Reports;
- Designs and analyses piping networks and associated support structures, in addition to reviewing load calculations and stress reports;
- Prepares schematic drawings, PFDs, P&IDS, 3D layout, BoMs and descriptive technical documentation for Fuel Cycle systems design and interfaces;
- Supports management of material procurement, construction, installation and testing of Detritiation System pipe work within the Atmosphere Detritiation System Project;
- Provides technical support and input for the technical specifications for external contracts;
- May be required to work outside ITER Organization reference working hours, including nights, week-ends and public holidays.

### **Measure of Effectiveness**

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- Elaborates clear and thorough documents;
- Delivers high quality and timely work products;
- Finds practical, cost-effective, manageable and efficient solutions to issues;
- Communicates professionally and efficiently with personnel associated with interfacing systems and management;
- Performs work safely and with regard for safety in designs;
- Works effectively in teams and contribute to the overall success of the Fuel Cycle design/build project.

### **Experience & Profile**

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- **Professional Experience:**
  - Minimum 5 years' experience relevant to mechanical piping and plant design, integration and construction of complex gas/liquid handling facilities within complex international environments or projects.
- **Education:**
  - Bachelor degree or equivalent in mechanical engineering 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:**
  - Plant design and construction in mechanical and piping fields;
  - Large design/build projects through all phases, i.e. conceptual, preliminary and final design, followed by manufacturing, installation and commissioning;
  - Writing & Presentation: Providing high quality technical and verbal reports with clarity and precision;
  - Capability in using software to perform mechanical & structural analysis, including finite element analysis (e.g. Caesar II, Ansys, GT Strudl);
  - CAD capability (2d and 3d), in particular AVEVA products as well as CATIA tool would be advantageous.
- **IO Core 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/define problems accurately before moving to proposals;
  - Instill trust: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.
  - **Additional Behavioral competencies:**
    - Action Oriented: Pro-active attitude in addressing issues.
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***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 (Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members) :
  - 1) Nuclear Safety, Environment, Radioprotection and Pressured Equipment
  - 2) Occupational Health, Safety & Security
  - 3) Quality Assurance Processes
- 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.
- 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.