

Job Title: Process Engineer IO1085

Requisition ID **5780** - 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.

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: 03/04/2022

Domain: Construction

Department: Plant Construction

Section: Supply & Service Installation

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 Process Engineer, you will oversee the design, installation and commissioning for the Heating, Ventilation and Air Conditioning (HVAC) Building Services associated with the ITER project. Throughout your activities, you will ensure that project objectives in terms of cost, schedule, nuclear safety compliance, investment protection and performance are achieved.

Background

The Tokamak Supply & Service Installation Section (TSSI) is responsible of the HVAC, Relief Panels, Fire Protection (Extinguishing and Detection), Nuclear Drainage, Electrical systems (Class II/III SR, IP and Class IV), Liquid Leak Detection, Seismic Monitoring, Hydrogen Monitoring, Cranes, etc. included in the PBS 62 systems and the Liquid & Gas Systmes (PBS 65), in nuclear and non-nuclear buildings. The Section is also responsible of Installation/SAT/Commissioning of the above systems and the surveillance of PIA activity for

the design/ procurement from EU-DA. In addition, the Section is also in charge to manage the installation of Cables Trays and Power Supply.

This position is assigned to the Process HVAC, Fire & Electrical Systems Group.

Key Duties, Scope, and Level of Accountability

- Takes a leading role for the HVAC Building Services designs, testing and commissioning for nuclear buildings and as required for non-nuclear buildings;
- Generates acceptance plans, conducts technical reviews, participates in design reviews and writes acceptance reports for the designs prepared by the Domestic Agencies (DA) and their contractors.
- Generates, issues, approves and propagates Nuclear Safety Requirements in compliance with ITER Organization procedures.
- Performs the installation, testing and commissioning for HVAC Nuclear Buildings in conjunction with EU-DA management, including liaising with contractors and producing test and commissioning documents as required;
- Reviews Quality Plans and procedures/ method statements and reviews/ specifies intervention mark-ups for Control Plans for qualification, installation and commissioning, including the generation and issue of corresponding supervision plans, records and reports;
- Analyses and prepares technical impact assessments of Project Change Requests (PCRs), Deviation Requests and conducts technical reviews of Non Conformance Reports (NCRs);
- 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

- Prepares technical specifications, plans and procedures for HVAC testing and commissioning within the defined cost and schedule;
- Coordinates HVAC commissioning within the defined cost & schedule, ensuring that all necessary resources are available;
- Reviews the HVAC design with particular attention to safety and performance requirements;
- Ensures proper functional and physical integration of HVAC system with interfacing systems;
- Performs accurate HVAC functional analysis;
- Successfully completes HVAC building services manufacturing, installation and commissioning activities demonstrated by the issue and approval of relevant Surveillance Reports, Hold Point Clearances and Handover/Taking Over Certificates;
- Ensures the proper implementation of the ITER management policies, procedures and work instructions in particular those relating to Quality Assurance (QA) and safety taking into account the specific requirements of the French legislation pertaining to Nuclear Installations.

Experience & Profile

- *Professional experience:*

- Minimum 8 years' experience in design testing and commissioning of HVAC systems in the field of nuclear installations within complex international environments or projects;
- **Education:**
 - Master Degree in Nuclear Engineering or Process Engineering Field or other relevant disciplines.
 - 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:**
 - **Design** of HVAC systems: (functional analysis, lines / in line components / equipment sizing, Piping and Instrumentation Diagrams (P&IDs) development, etc.) for nuclear installations;
 - **Project Management:** Planning, measuring progress of project work, managing risks / costs and reporting on progress;
 - Development of test and commissioning procedures, test performance coordination, preparation and review of test and commissioning reports;
 - **Interface Management** (identifying, resolving and maintaining technical and functional interfaces);
 - Use of computer software commonly used for design and verification of HVAC systems (e. g. Sylvia, THBAT, Flowmaster, etc.) or other Computational Fluid Dynamics (CFD) software;
- Knowledge of 2D-3D CAD software is considered as an advantage.
- **Behavioral Competencies:**
 - Collaborate: Ability to 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/solutions;
 - 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.