Job Title: Manufacturing Engineer TCWS-041

Requisition ID **6200** - 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: 05/06/2022
Domain: Construction Domain
Department: Plant Construction Department
Division: Mechanical Implementation Division
Section: Tokamak Cooling Water System Section
Group: TCWS Delivery
Job Family: Construction
Job Role: Engineer – 3
Job Grade: P3
Language requirements: Fluent in English (written & spoken)
Contract duration: 3 years
***Specific note*: This vacancy is for less than 4 years, the employment contract is valid until December 2025, while it will be subject to the contract renewal process according to the staff regulations.**

Purpose

As a Manufacturing Engineer, you will oversee the procurement, fabrication and installation of the Tokamak Cooling Water System's (TCWS) related mechanical equipment and piping.
You will manage manufacturing contracts and ensure a smooth integration of on-site activities for the related mechanical equipment/piping of the TCWS.

Background

The TCWS is the primary cooling water of the ITER machine, designed to evacuate up to 1 GW of thermal power. Many components, which are subject to European Pressurized Equipment Directive (PED) and the French Nuclear Pressurized Equipment Directive (ESPN) are employed to accomplish this function. These components include tanks, heat exchangers, pumps and valves.

Key Duties, Scope, and Level of Accountability

- Is Technical Responsible Officer for the manufacturing contract(s) for manufacturing activities;
- Prepares the technical specifications and tendering documents required for the procurement of the TCWS mechanical equipment/piping, and follows-up on the procurement process;

- Collaborates with the supplier to define the best technical solutions during the detailed design / manufacturing of the components;
- Follows-up on the manufacturing process by reviewing all supplier documentation/drawings, integrating updates from design/site construction, attending manufacturing hold points, coordinating between the Agreed Notified Body (ANB), the supplier and the ITER Nuclear-Non Nuclear Pressurized Equipment Network, etc.;
- Assesses deviation requests and non-conformities and proposes solutions by minimizing their impact(s) on cost and schedule as well as on already designed, manufactured and installed components;
- As Technical Responsible Officer for manufacturing contracts, ensures technical interfaces between TCWS and all other stakeholders, both within IO and industry;;
- Prepares the Manufacturing Readiness Review and the Delivery Readiness Review and makes sure that all identified issues are timely solved;
- Issues inspection and observation reports for supervision activities during manufacturing;
- Assures consistency among the mechanical and piping systems in his/her area of responsibility in installation phase and the engineering work packages issued by Engineering Departments;
- Follows the resolution of non-conformances related to his/her area of responsibility;
- Assists during testing and commissioning of components that are installed under her/his responsibilities and alerts line management when necessary;
- 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

- Issues/reviews and approves technical specifications in an accurate and timely manner;
- Efficiently manages the contract for manufacturing activities within the define cost and schedule;
- Assures timely delivery of components which are also compliant with all the requirements;
- Timely and accurately reports on the status of the fabrication and installation;
- Ensures the efficient execution of actions related to construction for his/her scope of activities, within the defined cost, scope and schedule;
- Effectively manages the interfaces associated with his/her scope of activities and proactively ;
- Contributes efficiently to ensuring satisfaction of safety and functional requirements flow-down.

Experience & Profile

- ***Professional Experience:***
  - Minimum 8 years' experience in supervision of manufacturing of nuclear components (heat exchangers, tanks, pressurizers) for nuclear plants or oil & gas within complex international environments or projects.
- ***Education:***
  - Masters' degree or equivalent in mechanical or nuclear 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);
  - French language skills would be advantageous.
- ***Technical competencies and demonstrated experience in:***
  - Specialized Domains of Expertise: Nuclear Mechanical Equipment/Components: heat exchangers, tanks, pressurizers, including their fabrication processes and installation procedures, as well as welding techniques, testing and non-destructive techniques;

- Interface Management of mechanical equipment/piping with structural supports systems, steel structures construction, as well as fixation systems for nuclear plants;
- Contract Management and Execution for complex mechanical components and/or piping systems;
- Construction Oversight: In-field installation supervision of complex static and rotating plant equipment;
- Commissioning and operations of mechanical components and piping systems, including safety relevant components;
- French ESP/ESPN regulations and their practical application will be considered advantageous;
- Managing relation with Notified Body will be considered an advantage;
- 2D-3D CAD software (AVEVA PDMS, Intergraph Smartplant or Catia) will be considered an advantage.

- ***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.