Job Title: Mechanical Engineering Responsible Officer IO0626

Req ID **2640** - Posted **12/11/2020** - (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: 13/12/2020
Domain: Construction
Department: Machine Construction
Division: Sector Modules Delivery & Assembly
Job Family: Project Engineering
Job Role: Coordinating Engineer
Job Grade: P4
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As a Mechanical Engineering Responsible Officer, you will manage technical aspects related to the Vacuum Vessel Assembly Welding (VVAW), such as assembly design, welding configuration and the management of documentation, non-conformities, integration, nuclear safety, quality, schedule, etc. You will ensure that knowledge and lessons learned are transferred effectively between the relevant teams and industry suppliers to optimize the VVAW process.

Background

The VV is being manufactured by several industries from Korea, Europe, Russia, and India under domestic agencies (DA) management in collaboration with the ITER Organization (IO). The manufactured VV components are currently being manufactured and will be assembled on site under IO direct management. This position is assigned to the In-Vessel Assembly Group.

Major Duties/Roles & Responsibilities

- Manages technical activities including integration and interfaces;
- Manages progress of assembly activities including quality control, schedule, and project management activities (risk management, resource planning and allocations, etc);
- Coordinates and controls assembly activities from preparation to completion of assembly including reports;
- Manages VV Pit assembly welding activities throughout the entire lifecycle, including documentation, end of manufacturing reports (EMRs), inspections and tests (including non-

destructive testing);
- Reviews and/or approves pit assembly process/procedures and inspection test plans, and makes improvements or suggestions for optimization where necessary;
- Manages pit assembly welding activities between sectors and ports so as to optimize VV torus tolerances, as per reverse engineering analysis result;
- Manages contractor activities related to the VV assembly such as fit up, inspections, cleaning, reporting, etc.;
- Manages non-conformities during assembly so as to satisfy nuclear and quality management regulations, as well as ensuring the functionality of systems;
- Drafts replies to the Agreed Notified Body in response to questions or requests for clarification;
- Develops justifications for any deviations which may occur during VV welding activities;
- Supports the preparation of the VV torus pressure tests, licensing and integrated commissioning;
- Contributes to the development of operation and maintenance of the VV system including in-service inspection plan;
- Regarding VV components:
    - Assists when needed at Site Acceptance Tests and fixes problems;
    - Supports segment assembly design and related jig & fixture design;
    - Supports Factory Acceptance Tests and End of Manufacturing Reports and proposes/follows-up on corrective action plan;
    - Supports the design of final packing and transportation frames / covers;
- 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.

Note: 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.

Measure of Effectiveness

- Manages quality and schedule of VV assembly welding activities efficiently, by ensuring regular monitoring and reprioritization of tasks as necessary:
- Ensures the proper implementation of welding requirements by anticipating, and/or altering and fixing technical issues promptly;
- Manages reverse engineering effectively to achieve the required tolerances by drawing from experience and collaborating well with appropriate colleagues;
- Efficiently propagates and transfers knowhow of VV sector manufacturing knowledge and experience to all concerned internal and external stakeholders;
- Ensures that corresponding Engineering and Construction Work Packages are well detailed and available on time;
- Maintains effective communication and excellent relations with interfacing teams within ITER and with external contractors;
- Complies with applicable welding procedures, nuclear Codes & Standards, and nuclear safety regulations, and propagates their use where necessary.

Experience & Profile

- ***Professional Experience:***
    - At least 10 years' experience working as a Mechanical Engineer for Vacuum Vessels, Pressure Vessels and/or Nuclear Pressure Vessels.
- ***Education:***
    - Master degree or equivalent in mechanical engineering;
    - A qualification/certification in welding would be advantageous (Welding Engineer, etc.);
    - 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).
  - Working knowledge of French would be considered advantageous to deal with French Nuclear regulation topics.
- ***Technical Competencies and demonstrated experience in:***
  - Design:
    - Nuclear Codes and Standards such as ASME and/or RCC-MR;
    - Application of the French Nuclear Pressurized Equipment Law (ESPN) in design and manufacturing would be advantageous;
  - Construction Oversight:
    - Welding qualification and specification;
    - Non-destructive examination, in particular Phase Array Ultrasonic Examinations;
    - Managing schedules and quality of construction activities;
  - Specialized Domains of Work and Technical Expertise: Welding:
    - Understanding and reviewing technical instructions, documents and providing advice for welding procedures;
  - Anticipating complex and challenging technical issues or problems, drawing on experience and expertise.
- ***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, **r**adioprotection 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 lline management and that may jeopardize the achievement of the Project’s objectives.