Job Title: Cryostat & Auxiliaries Group Leader IO0517

Requisition ID **3560** - Posted **25/01/2021** - (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: 07/03/2021
Domain: Construction
Department: Machine Construction
Division: Ex-Vessel Delivery & Assembly
Section: In-Cryostat, CTS & Auxiliaries
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 Group Leader of the Cryostat & Auxiliaries (CA) group, you will be responsible for leading the procurement and assembly of the cryostat and associated penetrations, like Bellows and the Torus Cryo-Pump Housing (TCPH).
You will ensure the successful completion of the In-Kind procurement, design, management of all technical interfaces, and the construction, assembly & testing of the Cryostat, the Cryostat Thermal Shield, all Ex-Vessel piping and some associated tools.
You will also coordinate and supervise the group's activities, in addition to supporting the line management for resourcing and performance management.

Background

The Tokamak Machine is composed of many systems to ensure the plasma operation inside the Vacuum Vessel with superconducting magnets. The In-Kind procurement of these first of kind components from our domestic agencies is ongoing and the on-site construction phase is in process with the support of different international consortiums. This position is assigned in the In-Cryostat, Cryostat Thermal Shield & Auxiliaries (ICCA) Section in charge of procurement and assembly of In Cryostat Instrumentation, Magnet Feeders, Cryostat.

Major Duties/Roles & Responsibilities

- Monitors, coordinates and provides guidance for the activities managed by the staff of the Cryostat & Auxiliaries (CA) group;
- Manages the Cryostat Procurement Arrangement (PA);
- Proposes resourcing plan for the activities of the group and contributes to performance management of staff;
- As transversal activity, supports the overall configuration management of the general ICCA scope, including the coordination of Engineering Work Packages (EWP) for the ICCA Section;
- Is responsible for the design, construction and assembly of the Cryostat & auxiliaries including all processes such as material, structural design, factory manufacturing, on-site installation and assembly, inspection and transportation;
- Coordinates and manages all interfaces with other ITER components and buildings, including penetrations and supports;
- Prepares and consolidates the EWPs which instruct assembly contractors for the Cryostat, Cryostat Thermal Shield, In-Cryostat piping and tools scope;
- Ensures surveillance and supervision of the Construction Work Packages (CWP) related to Cryostat Thermal Shield and auxiliaries like piping and tooling, including the effective management of non-conformities etc.;
- Ensures surveillance and supervision of the manufacturing, acceptance, assembly and integrated testing of the Cryostat components;
- Contributes to the risk identification and management, by identifying and implementing specific development tasks and/or feasibility studies which may be needed, including writing technical specifications, tendering and managing contracts;
- 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

- Effectively manages the Cryostat PA by striving to achieve cost, schedule and specification objectives;
- Effectively manages the assembly activities of the Cryostat and associated penetrations and ensures activities are carried out safely, in a timely manner and within defined costs;
- Effectively coordinates the CA Group's activities regarding performance, work plans, workloads, absences, missions, and/or any other daily activities, by ensuring regular reviews and providing proper guidance and tools;
- Provides effective leadership in safety and maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics;
- Maintains effective communication and excellent relations with interfacing teams within ITER and with external stakeholders;
- Complies with applicable codes (such as ASME) and propagates their use where necessary;
- Preemptively identifies and manages risks to minimize disruption to the schedule and implements suitable actions to anticipate and/or resolve potential issues.

Experience & Profile

- ***Professional Experience:***
  - At least 10 years' experience working in a responsible role for the procurement, design, assembly and installation of large pressure equipment.
- ***Education:***
  - Master's degree or equivalent in a 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:***
  - Project Management within an Engineering context, including Procurement and Contracts (planning, measuring progress of project work, managing risks/costs and reporting on progress):
    - Specifying and managing large, complex contracts including safety, quality, scope, schedule and cost is required;
    - Proven ability to provide effective technical leadership within a large complex project;
    - Multi-disciplinary project management and leadership experience is required, including preparation of resource-loaded schedules and managing budgets;
    - Coordinating and supervising of a team's activities, in addition to coaching and performance management of staff.
  - Specialized Domains of Work (Pressure Equipment) and application/understanding of:
    - Fabrication technology (forming, welding, and Non-Destructive Testing (NDT) of large vessel structures and experience with using the conventional pressure vessel codes such as ASME;
    - Structural design, manufacturing of mechanical components, codes & standards and quality assurance (QA);
    - Conditions required to establish and maintain ultra-high vacuum;
    - Nuclear safety audits;
    - QA and the associated Quality Control (QC) methods appropriate to the assembly and testing of superconducting magnets and/or vacuum or pressure vessels would be an advantage.
  - Problem Solving (assess problems, identify root causes and reach practical solutions in a consistent way to reach project objectives):
    - Developing innovative solutions to complex and technologically sophisticated engineering problems;
    - A good understanding of the main requirements for the assembly of a tokamak would be an advantage;
    - Supervising all aspects of manufacturing, acceptance, assembly and integrated testing for large pressure equipment or large mechanical components is required;
    - Interface Management (identify, resolve and maintain technical and functional interfaces).
- ***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.

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.