

Job Title: Cryogenic Systems Maintenance Engineer IO1106

Requisition ID **6381** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Machine Operations - 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: 24/07/2022

Domain: Science & Operation Domain

Department: Science, Controls & Operation Department

Division: Operations Division

Group: Maintenance

Job Family: Commissioning & Operations

Job Role: Operations Coordinator – 2

Job Grade: P3

Language requirements: Fluent in English (written & spoken)

Contract duration: Up to 5 years

Purpose

As a Cryogenic Systems Maintenance Engineer, you will ensure that the ITER Cryogenic System's components are correctly preserved and maintained (including spare management aspects) in order to enable the safe, efficient and reliable operation of these facilities.

You will also monitor Maintenance contracts deliverables and performance within the Site Operation.

Background information:

The Operations Division is responsible for developing plans and procedures for implementation of commissioning, operation and maintenance work processes of the ITER Tokamak and plant systems. The Cryogenic systems provide cooling fluids at very low temperature fluids to client systems across the ITER facility via several different circuits in order to generate expected Cryogenic conditions for Tokamak superconductive magnets.

Major Duties/Responsibilities

- Implements safe, reliable and efficient Maintenance Work Management process of the Cryogenic systems including the assistance for the commissioning of Cryogenic subsystems and of multiple interfaces as they are turned over to clients;

- Plans, authorizes and supervises maintenance activities, then reviews maintenance and inspection reports and implementing corrective actions when necessary;
- Manages technical aspects for Cryogenic systems maintenance contracts;
- Ensures necessary spares are planned and procured;
- Prepares and revises technical specifications and associated documents required for maintenance components, spare parts and technical services of Cryogenic systems;
- Monitors tendering processes, is involved in Contract Key Performance Indicators (KPI) definition and manages maintenance and technical support contracts;
- Assesses contractors' performance and sets up and analyses KPIs;
- Reviews system maintenance and inspection plans established according to project requirements and manufacturers recommendations;
- Acts as a computerized maintenance management system (SAP PM) key user in order to ensure the good deployment of associated practices and processes;
- Writes and updates internal procedures pertaining to the activities of the Division;
- Proposes upgrades or improvements in order to improve the overall system reliability and equipment performance
- Evaluates arising maintenance issues and provides reports to the Maintenance Group Leader;
- Maintains up to date, in close relation with Safety, Quality and Security Department, knowledge of specific French Regulations pertaining to the operation and maintenance of industrial and nuclear facilities;
- 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.

Measures of Effectiveness

- Ensures reliable and efficient implementation of Maintenance Work Management process of the cryogenic systems and subsystems in order to achieve required system reliability and availability of the service for the clients at optimized costs,
- Ensures compliance with all regulations in order to prevent health and safety risks;
- Completes procurement activities in a timely manner within defined costs and ensures that Key Performance Indicators of contractors show a positive trend.
- Contributes to a safe working environment by ensuring all activities are properly authorised and tracked and performing some internal inspections.

Qualifications and Experience

- **Professional Experience:**
 - At least 8 years' experience in managing the Maintenance of Cryogenic systems/fluids production, or Utilities plants in large-scale facilities or complex international environments or projects.
- **Level of study:**
 - Master degree or equivalent in Mechanical Engineering, Maintenance Engineering or any other relevant discipline;
 - The education degree requirement may be satisfied 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:**
 - Specialised Domains of Expertise (Cryogenic systems): The processes and technology of mechanical equipment for Cryogenic systems such as Liquid helium compressors and pumps, cold boxes and the associated control systems;

- Implementation of Maintenance work processes in order to drive efficiency and overall planning, scheduling and execution performance
 - Project and Contract Management: planning, measuring progress of work, managing risks and costs, executing within human and financial resources and reporting on progress (preferably using SAP PM);
 - Problem Solving: Analysing and determining root cause of problems, interacting with stakeholders to find and implement solutions based on technical expertise in Cryogenic systems.
 - **Social skills:**
 - 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 autonomously and proactively gather 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.
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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 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.