Job Title: Rotating Equipment Coordinator/Engineer IO1112

Requisition ID **5940** - 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: 08/05/2022
Domain: Science & Operation
Department: Science,Controls & Operation
Division: Operations
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 Rotating Equipment Coordinator/Engineer, you will be responsible for the reliability of critical rotating equipment of the various plant systems handed over to Operation Division (OPD) and will further act as an advisor within OPD regarding rotating equipment in general.
In particular, you will establish or validate the technical content of Systems Maintenance & Inspection (M&I) Plans for the sections relating to rotating equipment and will support the commissioning in the definition of test procedures and give support to validate components performance.

Background:
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 in staged approach.
ITER systems are composed by industrial equipment such as, screw and centrifugal compressors, Expansion turbines, large size vertical pumps, centrifugal chillers, … and sets of other industrial machines driven and monitored by a complex Instrumentation and control architecture system. Several plant systems which are currently in commissioning stage are just about to be transferred to Maintenance team, while the first systems located in the tokamak area will enter progressively in a testing phase during at least the coming 4 years. The positions is part of the Maintenance Group, that is composed of maintenance

engineers busy with the development and implementation of Maintenance processes, tools, contracts and procedures.

Key Duties, Scope, and Level of Accountability

- Supervises the consolidation of the rotating machines manufacturers files and development of the maintenance plan;
- Formalizes the hand-over of equipment from the various plant systems to OPD;
- Carries out, organizes, coordinates and leads the condition monitoring of critical rotating equipment using on-line and off-line data acquisition techniques and data analysis;
- Proposes measures to improve reliability and availability of critical rotating equipment and minimize their failure rate;
- Troubleshoots and examines equipment/systems performance in order to provide recommendations to enhance their maintainability and reliability for operation, on a long term basis, in a most possible safe and effective manner;
- Prepares works and executes supervision during overhaul of critical rotating equipment. This includes the definition of the technical specifications, the assessment of technical offers, the review of contractors' regular reports, the assessment of their performance and provision of advice as necessary;
- Advises on spare part replacement, modifications or refurbishment needs during major maintenance works to optimize equipment lifetime duration;
- Reviews requirements for spare parts including preservation aspects, determines stock levels and material descriptions;
- Provides support for commissioning and processing of technical claims when needed;
- Keeps an overview of maintenance-work-forecast on a multi-year basis and reports to Maintenance Group Leader in order to update accordingly OPD multi-year budget;
- Develops local procedures, operative processes and instructions within dedicated area of responsibility;
- Acts as technical discipline engineer in construction/upgrade project execution phase or design reviews (in particular to assess maintainability aspects) within dedicated area of responsibility;
- Interacts with vendors and contractors to ensure regulatory and technical surveillance ;
- Acts as internal trainer and coach in his area of expertise to operators and maintenance staff;
- Ensures that all the engineering and maintenance documentation required for the commissioning and operational testing of rotating machinery is available, properly maintained and recorded;
- 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

- Achieves the plant systems availability and rotating equipment reliability targets;
- Efficiently monitors execution activities and supervises specialized contracts and Original Equipment Manufacturers ensuring their adherence to processes, instructions and standards;
- Proposes and implements feasible solutions and communicates procedural updates to all relevant stakeholders in a timely manner;
- Demonstrates high level expertise for rotating equipment;
- Collaborates successfully with technical partners, suppliers, Domestic Agencies and other units within ITER organization.

Experience & Profile

- ***Professional Experience:***
- Minimum 8 years' experience in rotation machinery installation, commissioning and maintenance in the field of large industrial facilities *(*ex: nuclear or Oil and Gas installations, etc.) within complex international environments or projects.

- ***Education:***
  - Master's degree or equivalent in Mechanical engineering 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:***
- Specialised Domains of Expertise (Rotating Equipment/Machinery): Technical background in turbomachinery operation and maintenance (including instrumentation and DCS/PLC aspects), in addition to vibration monitoring technologies and capabilities in interpreting some spectrum in a predictive way;
- Cryogenic industry (Process, machinery type, …) experience would be advantageous;
- Interface management: identifying technical, operational, and contractual interfaces to proactively reach resolution of issues, communicates issues and solutions with stakeholders;
- Project management: planning, measuring progress of work, managing risks and costs, executing within human and financial resources and reporting on progress (preferably in SAP PM, P6 project management software, …);
- Analysis: Including root cause failure analysis process for rotating equipment, and a good understanding of Failure Modes, Effects and Criticality Analysis (FMECA) and Reliability Centred Maintenance (RCM) principles;
- Problem Solving: assesses problems related to assembly activities, identifies root causes and reaches practical solutions in a consistent way to reach project objectives.
- ***Behavioral Competencies:***
  - Action oriented: Taking on new opportunities and tough challenges with a sense of urgency, high energy and enthusiasm;
  - 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 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.

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.