Job Title: Magnets Feeder Engineer CST-159

Req ID **1144** - Posted **14/12/2019** - (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.

Application deadline: 31/01/2020
Domain: Construction
Department: Machine Construction
Division: Ex-Vessel Delivery & Assembly
Section: In-Cryostat, CTS & Auxiliaries
Job Family: Project Engineering
Job Role: Engineer - 2
Job Grade: P3
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As a Magnets Feeder Engineer, you will lead the feeder joint assembly, which includes the qualification of both special processes and operators in addition to executing the joint assembly on site;
You will also act as the sub-system Responsible Officer, where you will follow up the supply and assembly of the joint components of the Feeder Procurement Arrangement (PA).

Major Duties/Responsibilities

- Leads feeder joint Engineering Work Packages (EWP) from start to finish which involves: technical specifications, procedures, drawings, Construction Process Descriptions (CPD), inspection and test plans, and review of Installation Work Package (IWP) documentation;
- Prepares and improves on-site feeder joint assembly procedures by optimizing joint design and prototyping of tooling as needed;
- Supervises and coordinates training and delivers qualification of on-site assembly operators for feeder joint assembly;
- Supervises feeder on-site assembly preparation, including on-time supply of the Feeder PA parts and field-fit parts to construction site;
- Monitors the procurement of instrumentation feeders, proposing recovery plan when necessary;
- Supervises on-site feeder joint assembly and acceptance tests, defines acceptance criteria, participates in inspection and manages/proposes solutions to resolve Non Conformance Reports (NCRs) and hold points within the relevant cost and schedule;

- Follows up the supply of the joint components for the Feeder PA, including manufacturing and acceptance tests, review of quality documents, management of NCRs and control points within the relevant cost and schedule;
- Supports manufacturing of full size feeder joint and High Voltage insulation mockups, prepares the joint qualification tests and participates in insulation qualification tests;
- May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule.

Measures of Effectiveness

- Completes feeder joint EWPs to the required quality, cost and schedule;
- Develops complete, accurate and clear feeder joint assembly procedures on time, to ensure successful on-site feeder assembly to the required quality;
- Efficient training of feeder joint assembly crew completed and qualification delivered on the required schedule;
- Qualifies special process with feeder assembly mockups and tooling within the defined timeframe;
- Supervises on-time readiness of quality documents, materials and qualified special assembly operators for joint assembly IWP at construction site;
- Resolves NCR on a timely basis related to manufacturing and assembly;
- Works effectively with a team of engineers, technicians, welders to perform complex assembly, qualification, and quality control activities for the defined scope.

Qualifications and Experience

- *Professional Experience:*
  - At least 8 years' in engineering, managing the manufacturing and the assembly of complex systems for a large multidisciplinary project or institute.
- *Education:*
  - Master Degree or equivalent in Mechanical Engineering.
  - 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 in:*
  - Manufacturing, assembly and testing of large superconducting joints would be a definite advantage;
  - Writing, reviewing and following up quality supervision plans;
  - Configuration control, interface management, non-conformance and design change control;
  - Using safely electrical test equipment (Multi-meters, hi-pot tester, and power supply units);
  - Welding, vacuum / torch brazing, and related NDE procedures and test results;
  - Functional performance tests of cryogenics components and instrumentation;
  - Identifying lessons learned and proposing related improvement to procedures would be an advantage;
  - Super-conducting magnet feeder assembly processes, with extensive expertise in identifying and proposing special processes would be an advantage;
  - Familiarity with at least one of the following areas would be desirable: coil design and manufacture, and material properties at low temperatures;

- *Behavioral Competencies:*
  - 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, **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.