

Job Title: Magnet Assembly Technician IO0685

Requisition ID **6825** - Posted - (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.

ITER Organization (IO) is an Equal Opportunity/Inclusive organization committed to diversity in the workplace, with diversity and Inclusiveness being one of the ITER Values.

As IO attracts and retains people coming from a vast array of different backgrounds and cultures, bias and exclusion cannot be tolerated. IO believes it is our diverse perspectives and backgrounds that gives unique strength and value to the ITER mission, regardless of race, member nation, gender, religion, status, sexual orientation, or disability - all are welcome and respected at ITER.

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: 29/01/2023

Domain: Construction Domain

Department: Machine Construction Department

Division: Sector Modules Delivery & Ass. Division

Section: Toroidal Field Coil Section

Group: Toroidal Field

Job Family: Construction

Job Role: Coordinating Technician

Job Grade: G5

Language requirements: Fluent in English (written & spoken)

Contract duration: Up to 5 years

Purpose

As a Magnet Assembly Technician, you will contribute to and support the follow up of the Toroidal Field (TF) coil procurement and on-site assembly activities.

You will also support the qualification of key processes of TF coil and Thermal Shield (TS) on-site assembly, in addition to preparing and updating TF coil on-site assembly and quality control processes and documents.

Background

ITER TF coil is to generate magnetic field to confine plasma and to be framework of ITER. TF coils are assembled after installation of cooling pipes, Correction coil (CC) clamp and so on with Vacuum vessel

(VV) and VV TS. The role of VVTS is to minimize the radiation heat load from the VV to TF coil operating at 4.5 K. TF coil preparatory work, TF coil assembly with VVTS are on-going at the ITER site.

Key Duties, Scope, and Level of Accountability

- Follows up procurement and part arrivals/inventory for the TF coils, structures and supports from in-kind or in-cash procurement;
- Prepares Bill of Materials (BOM) and Assembly Kits in support of TF preparation works by the TAC-2 contractor, ensuring good traceability of parts and components, and readiness for use (availability of items in a timely manner, and inspections);
- Performs when required incoming inspection or preservation check of parts and components according to specific requirements
- Supports the preparation and qualification of on-site TF coil and TS assembly procedures including quick prototyping of tooling as requested by engineers, manufacture of full size mockups of keys and flanges, preparation and participation in the associated qualification tests;
- Drafts on-site TF preparation / assembly procedures / inspection plans based on the techniques, setup, and procedures used in the qualification tests;
- Assists the preparation of the Hand Over Packages for the assembly contractor within IO databases ;
- Assists in execution of assembly activities in TF preparation building, assembly hall and/or pit;
- May be required to work outside ITER Organization reference working hours, including nights, week-ends and public holidays.

Measure of Effectiveness

- Drafts high quality and clear to understand assembly/qualification procedures in a timely manner;
- Provides timely assembly-related documentation (BOMs, FCRs, etc.);
- Efficiently contributes to achieving desired quality assurance and quality control of assembly activities;
- Performs activities in line with expected safety standards and proactively alerts relevant colleagues to anticipated issues;
- Timely delivery of TF component inventory information, and parts/components to the TF assembly contractor;
- Maintains effective communication with the interfacing teams within ITER, Domestic Agencies and with external contractors.

Experience & Profile

- **Professional Experience:**
 - Minimum 7 years' experience as a mechanical engineer or Technician for the assembly and qualification large mechanical components within complex international environments or projects;
- **Education:**
 - Bachelor degree or equivalent in 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).
- **Other requirements:**
 - For staff expected to perform on-call, shift hours, or other work outside ITER Organization reference working hours, including nights, weekends, and public holidays, the possession of a driving license valid in France is required. No commuting vehicle will be provided by the ITER Organization.
- **Technical competencies and demonstrated experience in:**
 - Specialised Domains of Expertise (Mechanical Engineering): Design, manufacture, inspection, and testing of large mechanical components;

- Manufacturing and Construction Oversight: Experience in monitoring or supervising fabrication in industry highly desirable.
- Welding and weld inspection techniques;
- Operation of CAD software including Ansys background;
- Writing, reviewing and documenting clear and concise reports;
- Quality Control: Requirements and adherence to international quality codes, standards, methods, and practices;
- Procurement and contract management: knowledge and practice of procurement procedures and contractual requirements;
- Use of rigging equipment (e.g., cranes, fork-lifts and scissor lifts) or electrical test equipment (Multi-meters, breakdown testers and power supply units) is considered as an advantage.

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 (Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members) :
 - 1) Nuclear Safety, Environment, Radioprotection and Pressured Equipment
 - 2) Occupational Health, Safety & Security
 - 3) Quality Assurance Processes
- ITER Core Behavioral Competencies :
 - 1) **Collaborate**: Ability to facilitate dialogue with a wide variety of contributors and stakeholders
 - 2) **Communicate Effectively**: Ability to adjust communication content and style to deliver messages to work effectively in a multi-cultural environment
 - 3) **Drive Results**: Ability to persist in the face of challenges to meet deadlines with high standards
 - 4) **Manage Complexity**: Ability to analyze multiple and diverse sources of information to understand problems accurately before moving to proposals
 - 5) **Instill Trust**: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity
- 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.