

# Job Title: Feeder Assembly Technician IO0427

Requisition ID **6845** - 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:** 14/03/2023

**Domain:** Construction Domain

**Department:** Machine Construction Department

**Division:** Ex-Vessel Delivery & Assembly Division

**Section:** In-Cryostat, CTS & Auxiliaries Section

**Group:** Feeders

**Job Family:** Construction

**Job Role:** Technician – 3

**Job Grade:** G4

**Language requirements:** Fluent in English (written & spoken)

**Contract duration:** Up to 5 years

## Purpose

As an Assembly Technician, you will support magnet feeder engineers for all activities required to complete the Feeder assembly at ITER construction site, including but not limited to: installing ITER superconducting magnet feeder and integrating feeder sub-systems at construction site; supervising on-site assembly activities; witnessing acceptance test; supporting the preparation of IO feeder trial assembly procedure and supporting the qualification of construction contractor's special process operators, in addition to witnessing the commission of custom-built assembly tool.

## Background

The Magnet System is involved in the Plasma confinement and control, and is made of 48 superconducting coils and modules. The ITER Magnet Feeder consists of 31 Feeders distributed around the Tokamak. Each Feeder is composed of many sub-systems that are provided through a Procurement Arrangement with IO. Today we are receiving many of these sub-systems, inspecting them and installing with our assembly contractor on site. This Installation also includes their specific connection all together up to their main interfaces: Coils terminal region inside the Cryostat and the different systems in the Tokamak galleries.

### Key Duties, Scope, and Level of Accountability

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- Provides support for personnel qualification for Feeder special processes activities and on-site assembly;
- Performs on-site supervision of feeder on site assembly and construction activities and submits necessary reports;
- Contributes to the installation, testing, commissioning and maintenance of an integrated Feeder mock up station;
- Witnesses the commissioning of customs-built tool and verifies the procedure for tooling operation;
- Supports the preparation of various documentation, including assembly/construction reports, layout/assembly procedures, engineering dossiers (EWP), inventories etc. related to feeder activities;
- Supports the execution of receiving and inspection tests (RITs) including checking the integrity of external and internal components, vacuum leak tests, endoscope inspections of pipe and duct internal region, dimensional inspections at functional interfaces, resistance measurement of sensor, and high voltage test of busbar insulation;
- Supports the supervision of component repairs with outstanding nonconformities, including but not limited to repair of a silver plated joint surface, pipe cleaning up, etc.;
- Ensures the normal operation in feeder mock up facility is maintained as much as possible and controls the inventories of equipment, tools, parts, components, and consumables.
- May be required to work outside ITER Organization reference working hours, including nights, week-ends and public holidays.

### Measure of Effectiveness

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- Provides technical support and safety awareness to the operators for the qualification of the feeder joint assembly and insulation activities, within the planned time frame;
- Assists efficiently to establish, organize and maintain the feeder facility with planned functionality and meeting safety codes;
- Writes and maintains up-to-date and clear documents;
- Delivers high quality and timely work products;
- Finds practical, cost-effective, manageable and efficient solutions to issues;
- Collaborates effectively with a team of engineers, technicians, welders to perform complex assembly, qualification, and quality control activities associated with the feeder system.

### Experience & Profile

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- **Professional Experience:**
  - Minimum 5 years' experience of factory or in-field experience in large component assembly 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).
- **Technical competencies and demonstrated experience in:**
  - Assembly & Construction Oversight: Ensuring work is executed as per requirements;

- Drafting and reviewing documents in English such as assembly/construction reports, layout/assembly procedures, engineering dossiers, inventories;
- Reading and interpreting mechanical drawings with geometric dimensioning and tolerances, circuit schematics, and manufacturers' manuals (or similar documents);
- Familiarity with at least one of the following areas would be desirable: non-destructive examination methods, assembly of large bolted/welded structures, tooling for lifting / alignment of large component;
- Knowledge with at least one of the following areas would be an advantage: assembly of an electrical splice joint, insulation of a high voltage part by fiber-resin composite material, non-destructive examination methods, vacuum leak testing, safe use of electrical equipment, and safe handling of cryogen;
- Working experience with CATIA 3D modelling, ENOVIA database.
- **IO Core 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.

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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 (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
- 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.
- 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.