# Job Title: Electrical Installation Coordinator IO0126

Requisition ID **6567** - 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.

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:** 18/09/2022
**Domain:** Construction Domain
**Department:** Machine Construction Department
**Section**: Machine Assy. Integration Section
**Group**: Metrology, RE, Inspection & Test
**Job Family:** Construction
**Job Role:** Coordinating Engineer
**Job Grade:** P4
**Language requirements:** Fluent in English (written & spoken)
**Contract duration:** Up to 5 years

## Purpose

As an Electrical Installation & Test Coordinator, you will lead all associated tasks to establish, develop and coordinate implementation plans, procedures and requirements for electrical tests and inspections, ground systems, electrical feedthroughs, sensors and cables and Non-Destructive Examination (as required) for all electrical components contained in the Cryostat.

## Background

*Constructing a Superconducting (SC) tokamak requires strict, well controlled Quality Control (QC) based on suitably established plans and requirements, which should convey technical key success factors and be practical at the same time. To integrate the wide spectrum of the key technical elements is of utmost importance to ensure success of the tokamak assembly.*

## Key Duties, Scope, and Level of Accountability

- Establishes, develops and coordinates plans, procedures, instructions and acceptable criteria for the inspections & tests on electrical instrumentation and electrical components contained in cryostat for: 1) inter-structural Low Voltage (LV) insulations; 2) electrical continuation and function test for

sensors & cables; 3) plans and procedures for ground fault detection system for in-cryostat components during assembly; 4) Non-Destructive Examinations (NDEs) for all filed joints in-cryostat;
- Technically leads design finalization up to installation of grounding system design inside cryostat, then leads related work packages for implementation of the grounding system, and the technical specification for grounding system installation;
- Supervises the installation and connection of the grounding system by the assembly contractor inside Cryostat or interconnecting from cryostat to grounding system in the tokamak complex;
- Performs and/or coordinates all tasks to update, make obsolete and to prepare inspection & tests associated documents, reflecting field changes as necessary;
- Interacts with IO Quality Control for Construction (QCC) to embed the integrated requirements and criteria in the IO quality control system, and provides solutions when needed;
- Ensures that inspections and tests for electrical instrumentation in the tokamak construction are properly reflected and implemented in the Tokamak Assembly Contracts (TACs);
- Coordinates with the HV and LV responsible officers inside the cryostat, coordinates with the working group to respond Risk & Opportunity management including defining new risks, actions and reporting updated progress for all inspection & test related risks;
- Supports the Section Leader in matters related to electrical system tests and inspection in Machine Construction Department scope during tokamak constructions;
- 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.

Note: 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.

**Measure of Effectiveness**

- Develops suitable and feasible plans, procedures, instructions and relevant criteria for inspections & tests on electrical instrumentation and electrical components in line with the schedule, safety and quality standards;
- Defines effectively the inspection and testing organization, plans and requirements within the defined timeline;
- Successful planning and execution of grounding system installation with relevant coordination and management;
- Anticipates or resolves inspection and test issues promptly to minimize disruption to the schedule;
- Maintains effective communication and excellent relations with interfacing teams within ITER and with external contractors;
- Completes tasks according to the objectives defined by the Machine Assembly Integration Section Leader.

**Experience & Profile**

- ***Professional Experience:***
  - Minimum 10 years' experience in Electrical Engineering in the field of inspections & testing and/or assembly of electrical instruments within complex international environments or projects.
- ***Education:***
  - Master's degree or equivalent in Electrical Engineering, Construction, Project Management 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:***
  - Design, manufacture, assembly and integration of electrical components and/or nuclear devices;
  - Project Management (Planning, measuring progress of work, managing risks/costs and reporting on progress of procurement process);
  - Construction Oversight & Quality Control: Verifying the compliance of construction work and the procedures for the installation of mechanical components and piping systems with all applicable requirements;
  - High/low voltage tests, grounding tests and joint tests;
  - Problem solving; assess problems, identify root causes, and reach solutions in a way to reach project objectives within time and cost;
  - Superconducting magnet systems and cryogenic systems including vacuum, insulation, thermo-mechanical technologies is advantageous;
  - Assembly of large components operated at cryogenic temperature and affected by high hydraulic pressure and mechanical loads is advantageous;
  - Familiarity of non-destructive examination techniques such as visual inspection, dye penetrant inspection, helium leak detection, ultrasonic inspection, and radiographic examination of welds and brazes, and applicable codes and standards for the implementation and acceptance criteria.
- ***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 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.