# **Job Title: Non-Destructive Testing Technician IO0548**

Requisition ID **3800** - Posted **19/03/2021** - (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:** 02/05/2021

**Domain:** Construction

**Department:** Machine Construction

**Division:** Sector Modules Delivery & Assembly

Section: Vacuum Vessel

Job Family: Project Engineering

Job Role: Coordinating Technician Engineer - Early Career

Job Grade: G5

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

Contract duration: Up to 5 years

# Purpose

As Non-Destructive Testing Technician, you will develop Non Destructive Testing (NDT) techniques for the Vacuum Vessel (VV) manufacturing, and assembly, with focus on Phased Array Ultrasonic Testing (PAUT). Additionally, you will support procurement activities related to the VV components, and supervise the manufacturing and assembly of VV Sectors and Ports with an emphasis on compliance, and reporting on design and construction rules for mechanical components of nuclear installations. This also includes Non-Destructive Testing (NDT) and implementing other requirements related to the French Regulations for Pressure and Nuclear Pressure Equipment.

#### **Background**

This position is part of a collaborative team within the Vacuum Vessel Section. The VV Section is in charge of the design, integration, follow-up of manufacturing, assembly and commissioning of the Vacuum Vessel and associated components.

# Major Duties/Roles & Responsibilities

• Supports the Responsible Officers to monitor and follow up the Procurement Arrangements signed with the Domestic Agencies (DAs) for the fabrication and final delivery of the VV Sectors and Ports and

- other components, as required;
- Supports the Responsible Officers to monitor and follow up the assembly of the Vacuum Vessel in Pit and in the Assembly Hall;
- Provides technical support for NDT development and qualifications (Phased Array Ultrasonic Testing (PAUT)) and Remote Visual Examination (RVE), and other technical justifications or document review requested for the VV Sectors and Ports built and installed according to RCC-MR nuclear code;
- Performs detailed checking of NDT procedures and work instructions submitted by the DAs or by the assembly contractors, with emphasis on compliance with RCC-MR code, technical specifications, and/or Phased Array Ultrasonic Testing (PAUT);
- Monitors the NDT feasibility prior to start the manufacture and assembly of the VV Sectors and Ports in order to insure a full NDT examination;
- Monitors the NDT operations completed during the fabrication and assembly of components for the VV
  Sectors and Ports built according to RCC-MR and is also responsible for reviewing PAUT, RVE reports
  and checking Radiographic Testing (RT) films;
- Performs routing monitoring activities, such as day-by-day interactions with the DAs, suppliers, and other assembly contractor, organizes regular progress and dedicated meetings, performs routine and unscheduled inspections at the supplier's premises and witnesses intermediate and final acceptance tests;
- Implements all NDT requirements dictated by the Agreed Notified Body and related to the French Regulations for Pressure and Nuclear Pressure Equipment;
- Supports preparation for the assembly of the VV components and interfaces with assembly contractor and CMA;
- Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project.

#### **Measures of Effectiveness**

- Develops and qualifies NDT techniques within the defined cost and schedule;
- Provides efficient support to procurement and assembly activities of VV systems and/or components with necessary testing, qualification and procedures checking;;
- Ensures continuous compliance with applicable codes and standards;
- Generates and maintains comprehensive, and accurate documentation;
- Maintains effective communications with the ITER Organization Central Team and Domestic Agencies staff.

# **Experience & Profile**

# • Professional Experience:

• At least 7 years' experience working in component design, testing and/or manufacturing in the field of pressure equipment, if possible for nuclear facility.

#### • Education:

- Bachelor's degree or equivalent in an 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 experience and demonstrated competencies in:

- Testing techniques for manufacturing complex stainless steel structures (Phased Array Ultrasonic Testing and other NDT methods, and welding etc.)
- Quality control: verifying compliance of components with applicable requirements and qualification according ISO 9712 level II in UT, RT and PT;

- Applying RCC-MR/RCC-M and/or ASME codes to Pressure Equipment or Nuclear Pressure Equipment and implementing requirements related to the French Regulation for Pressure and Nuclear Pressure Equipment, including Conformity Assessment of Nuclear Pressure Equipment;
- Procurement, measuring progress of work, managing costs, risks, and reporting.

### • 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.

# 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.