# ITER 국제기구 공모 직위 직무기술서 (제149차)

## ○ 1개 직위

구분	분야	소속	직위	Job No.	등급
1)	토카막 엔지니어링 (TED)	Vessel Division Cryostat & VVPSS Section	Cryostat Engineer	TED-030	P4

## **IO1702 Cryostat Engineer - TED-030**

#### **General information**

Job category Standard

Status Published

Department TED / Tokamak Engineering Department

Division TED / Vessel Division

Section TED / VV / Cryostat & VVPSS Section

#### Job description

Main job Engineering - Cryogenics

Title of the position Cryostat Engineer - TED-030

Job family Coordinating Engineer

Grade P4

Direct employment Not required

To ensure the procurement of the cryostat and its sub-systems. To monitor the assembly & testing of these systems.

To complete the design and development of the technical specifications for Torus Cryo-Pump Housings (TCPH) and rectangular bellows and finalize the Procurement Arrangement (PA) documentation, to ensure coordination of all interfaces with other ITER components and building, including penetrations and supports.

**Purpose** 

Is responsible for completing the design of the Cryostat systems, such as TCPH and rectangular bellows, including instrumentation;

Is responsible for follow-up of the fabrication, assembly and commissioning of the Cryostat; Reviews the manufacturing documents with a focus to the high vacuum aspects of the Cryostat:

Reviews the manufacturing design, construction and assembly documentation of the cryostat, including materials, factory manufacturing, vacuum leak testing and final integrated leak testing of the Cryostat;

Develops and establishes the procurement arrangement and technical specifications for the place holder sub-systems of the signed Cryostat PA with the Indian Domestic Agency;

Provides support in the licensing activities for safety design and assessment of the safety related functions, including technical requirements such as codes and standards;

Is responsible for the consistency of the cryostat construction planning in relation to the ITER construction, commissioning and operation plan;

Works in close contact with the ITER groups/divisions in charge of the ITER components and buildings interfaced with the cryostat and design integration for on-site installation and assembly;

Provides support to the detailed design, manufacture and assembly of the Vacuum Vessel Pressure Suppression System (VVPSS), as required;

Performs other duties in support of the project schedule, as described in the Detailed Work Breakdown Structure Schedule or Strategic Management Plan;

Main duties / Responsibilities

May be requested to be part of any of the project team dealing with the above activities and perform other duties upon management request;

Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.

Reports to the Cryostat & VVPSS Section Leader;

Interfaces with all other departments within the ITER Organization as required;

Acts as an interface between all the ITER systems within the ITER organization, as well as interface with the relevant Domestic Agency (DA);

In response to requests from the Director-General (DG) and/or Tokamak Engineering Department (TED) Head, proactively informs the DG/ TED Head of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.

Successfully generates and maintains coherent, comprehensive, and understandable design documentation;

	Manages cryostat interfaces design with other Tokamak systems; Manages the oversight of Cryostat fabrication and coordination and communication with the DA;
Measures of effectiveness	Completes procurement activities of Cryostat in a timely manner and within defined costs; Initiative to understanding of the design and manufacturing at the ITER Organization (IO) and an effective coordination with the IO and DA staff; Successfully maintains effective communications within the ITER Organization.
	Project Construction Phase

## **Applicant criteria**

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Level of study	At least Master's Degree or equivalent				
Diploma	Mechanical Engineering field or other				
Level of experience	At least 10 years				
Technical experience/knowledge	Competent expertise, in particular, in the area of high vacuum aspects of manufacturing of mechanical components, codes & standards and quality assurance is highly desirable; At least 10 years relevant experience in design, construction and installation of large pressure vessels/vacuum vessels and or nuclear devices;  Experience in fabrication technology (forming, welding and Non Destructive Examination) of large vacuum vessel structures and familiarity with conventional pressure vessel codes such as ASME;  Basic experience on design and technical requirements of the ITER mechanical components and tokamak assembly would be an advantage.  Project experience:  High experience either in the project itself or be specialist in the technical field of the job description;  Basic Project Management experience such as planning, scheduling and progress reporting expertise is required.				
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit				
General skills	People Management experience: Providing the technical guidance and monitoring the work of the supporting staff and work in a team.				
Languages	English (Fluent)				