

ITER 국제기구 공모 직위 직무기술서 (제182차)

○ 1개 직위

구분	분야	소속	직위	Job No.	등급
①	토카막 엔지니어링 (TED)	Port Plugs & Diagnostics Integration Division Common Port Plug Engineering Section	Common Port Plug Engineer	TED-098	P2

IO1812 Common Port Plug Engineer - TED-098

General information

Job category	Standard
Status	Published
Department	TED / Tokamak Engineering Department
Division	TED / Port Plugs & Diagnostics Integration Division
Section	TED / PPD / Common Port Plug Engineering Section

Job description

Main job	Engineering - Mechanics
Title of the position	Common Port Plug Engineer - TED-098
Job family	Engineer - 1
Grade	P2
Direct employment	Not required
Purpose	<p>To perform the engineering justification through design and lead analysis of common diagnostic port-based structures and related interfaces with the main tokamak components. To ensure the integrity of diagnostic systems through structural assessment and using common engineering practices. To ensure the finalization of design of diagnostic systems for procuring, manufacturing and follow-up with industry.</p>
Main duties / Responsibilities	<ul style="list-style-type: none">-Develops the design of Diagnostic systems;-Leads analysis of mechanical and thermal stresses, stresses due to electro-magnetic forces, dynamic analysis and provision for mitigation of environmental factors of port-based diagnostic systems;-Develops the design of diagnostic port interfaces with main tokamak interfaces (vacuum vessel, cooling, buildings);-Proposes solutions for improvement of mechanical designs of common diagnostic port-based structures and related interfaces based on analysis results;-Prepares technical documents as required for procurement and manufacturing of diagnostic port-based and integrated systems;-Monitors the procurement for diagnostics port-based and integrated systems;-Prepares for the installation of the diagnostic port-based systems on ITER;-Updates and takes through review all relevant supporting engineering documents;-Supports or leads the Design Review processes, as appropriate;-Develops, controls and maintains relevant ITER databases in compliance with the Management Quality Program;-Collaborates on Diagnostic systems in charge with technical stakeholders in Domestic Agencies and other Departments/Offices at IO;-Reports variances on all technical, cost and schedule aspects immediately to the Section Leader/Division Head;-Supports effective risk identification and management;-Manages the change control process for his/her scope of work and communicates changes to the line management;-Maintains related documentation at all times on the ITER Document System and ensure it is updated and in the correct formats;-Ensures the Division is well represented from an engineering perspective;-May be required to work outside normal working hours, including nights, weekends and public holidays;-Performs other duties in support of the project schedule;-May be requested to be part of any of the project/construction teams and to perform other duties;-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.-Reports to the Common Port Plug engineering Section Leader;-Interfaces with other ITER Technical Directorates, as required; Ensures integration with other technical interfaces;

Measures of effectiveness	<ul style="list-style-type: none"> -Maintains communication with other organizations within the ITER collaboration and the fusion community; -In response to requests from the Director-General and/or Tokamak Engineering Department Head, or proactively, informs the DG/ Tokamak Engineering Department 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.
	<ul style="list-style-type: none"> -Work packages completed to agreed deadlines; -Developed and approved interface documentation, schematics plans and databases; -Developed and approved technical documentation for procurement and made a proper follow-up within the defined cost and schedule; -Developed and approved installation plans within the defined time frame; -Successful collaboration with technical stakeholders in Domestic Agencies and other Departments/Offices at IO; -Efficient work at all times with other Diagnostics team members. <p>Project Construction Phase</p>

Applicant criteria

Technical experience/knowledge	Level of study	Master or equivalent degree
	Diploma	Mechanical Engineering
	Level of experience	At least 5 years
		-Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates in relevant domains may be considered a reasonable substitute for the required educational degree.
		At least 5 years' experience in mechanical engineering;
		Good experience in mechanical engineering design for integrated tokamak systems;
		Experience in application of recognized engineering codes and standards and with analysis codes (Ansys etc);
		Experience in analysis (mechanical, thermal-hydraulic, modal, electromagnetic) of complex mechanical systems;
		Experience with the technical follow-up of CAD activity;
		Experience with welding techniques and procedures;
		Organization and design defence lead in technical design reviews is an advantage;
		Experience in specifications for procurement and manufacturing follow-ups.
	Social skills	Ability to communicate effectively, Ability to effectively multi-task
	General skills	-Proven presentation writing skills.
	Languages	English (Fluent)
	Specific skills	Computer Aided Design
	Others	-Familiarity with CAD oversight & with P&I Diagrams.