

IO1454 Vacuum System Engineer PSE-165

General information

Job category	Standard
Status	Published
Department	DIP/Department for ITER Project
Division	PSE/Fuel Cycle Engineering Division
Section	PSE/ FCED/ Vacuum Section

Job description

Main job	Engineering - Electronics
Title of the position	Vacuum System Engineer PSE-165
Job family	Engineer - 1
Grade	P2
Direct employment	Not required
Purpose	<p>To develop controls and interlocks of the ITER Vacuum Systems from Functional Analysis through to engineering solutions;</p> <p>To ensure that the functional interfaces between components, sub-systems and systems are reflected in the definition of the controls and interlocks for operation of ITER Vacuum Systems;</p> <p>To ensure that the Vacuum Systems controls and interlocks are designed in relation to total and partial machine operations;</p> <p>To identify and document the operational interactions between systems;</p> <p>To ensure the relevant soft and hardwired protections in preparation for commissioning and operations.</p>
Main duties / Responsibilities	<p>Supports Functional Analysis of the Vacuum Systems in view of the development of the operational controls and interlocks;</p> <p>Ensures the development of operational interfaces within the control scheme between the Vacuum Systems and other systems, ensuring the effective management of the interactions between systems;</p> <p>Develops interlocks and other solutions for minimizing impact of off-normal events in interfacing systems;</p> <p>Responsible for compiling, updating and maintaining interfaces for control systems and interlocks through documentation and databases;</p> <p>Develops software and hardware based protection schemes for investment protection and safety;</p> <p>Analyzes configurations and provides control strategies for vacuum sub-systems commissioning;</p> <p>Contributes to the planning of assembly and commissioning of the vacuum instrumentation and control system;</p> <p>May be required to work shifts during the ITER assembly and commissioning phases;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>Under close functional supervision from the Plant Systems Chief Engineer, reports to the Vacuum Section Leader;</p> <p>Acts as an interfaces between the ITER Sections and Divisions and with Domestic Agencies;</p> <p>In response to requests from the Director-General and/or Director of Plant System Engineering (PSE), or proactively, informs the DG/Director of PSE Directorate 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.to the Vacuum Section Leader.</p> <p>Clarity and thoroughness of engineering documents;</p> <p>Quality and efficiency on interfacing with the ITER divisions and Domestic Agencies, and maintaining good communication and relations;</p> <p>Works effectively in teams and contribute to the overall success of the ITER project;</p>

Measures of effectiveness	Successfully and efficiently completes the tasks assigned under Responsibilities above within the defined time frame; Performs work safely and with regard for safety in design.	Main Duties /
	Project Construction Phase	

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Process or Electronic Engineering field or other
Level of experience	At least 5 years
Technical experience	At least 5 years' system engineering experience including working in defining controls and interlocks in a complex high technology engineering environment; Experience in the commissioning and operation of vacuum systems or equivalent industrial plants; Experience in the development of software for PLC controls; Experience in the implementation of interlocks for the protection of high value plants or in safety critical or nuclear environments; Experience of working to international standards for protection systems would be an advantage.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	Knowledge of vacuum/cryogenic measurement techniques and industrial control systems.
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	Experience with Siemens Step 7 would be of advantage; Desirable knowledge on software for project management, CAD, document control and process modeling.