

IO1953 Vacuum Process/Instrumentation Engineer PED-155

General information

Job category	Standard
Status	Published
Department	PED / Plant Engineering Department
Division	PED / Fuel Cycle Engineering Division
Section	PED / FCED / Vacuum Section

Job description

Main job	Engineering - Electronics
Title of the position	Vacuum Process/Instrumentation Engineer PED-155
Job family	Engineer - 1
Grade	P2
Direct employment	Not required
Purpose	<p>To develop the control and instrumentation systems for the ITER Vacuum System (VS). To ensure the production of process diagrams for the complete VS. To define interlocks and control sequences for operation. To develop control sequences for the different phases of the VS commissioning and operation.</p>
Main duties / Responsibilities	<ul style="list-style-type: none">-Participates in the design and integration of ITER VSs (vacuum vessel, cryostat, neutral beam and auxiliary vacuum systems) having responsibilities for design, manufacturing and commissioning of vacuum I&C systems;-Contributes and manages the production of Process Flow Diagrams (PFD), Piping and Instrumentation Diagrams (PID) and electrical schematics to international standards for the complete vacuum system;-Defines process control systems and sequence diagrams for the operation of the various ITER vacuum systems, ensuring functional interfaces between components and sub-systems;-Develops interlocks and software based protection schemes for operational efficiency, investment protection and safety;-Provides support for the validation of vacuum instrumentation being standardized for operation in magnetic fields and radiation environments;-Drafts, reviews and complements installation and commissioning procedures for the vacuum system;-May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays;-May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule;-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	<ul style="list-style-type: none">-Reports to Vacuum Section Leader;-Acts as an interface between Vacuum and other technical Sections in the ITER Organization (IO) and with Domestic Agencies (DAs) and contractors;-In response to requests from the Director-General and/or Plant Engineering Department (PED) Head , or proactively informs the DG/Director or Head of PED 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. <p>-Completion of tasks associated with Main Duties/Responsibilities on time, within budget and with necessary quality;</p> <p>-Perform work safely and securely;</p> <p>-Work effectively and harmoniously with ITER staff, DAs and contractors;</p> <p>-Responsible for adherence to technical standards.</p>
	Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Electronic, Process Engineering or other
Level of experience	At least 5 years
Technical experience/knowledge	<ul style="list-style-type: none"> -At least 5 years' engineering experience including process engineering in a complex high technology engineering environment; -Knowledge of vacuum/cryogenic measurement techniques and industrial control systems; -Experience in the commissioning and operation of vacuum or industrial process plant; -Experience of working with international standards for process definition and protection systems; -Experience in the development of software for PLC controls would be an advantage; -Experience in coordinating industrial commissioning activities with high standards of performance; -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.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	<ul style="list-style-type: none"> -Ability to facilitate dialogue with a wide variety of contributors and stakeholders; -Ability to adjust communication content and style to deliver messages; -Ability to persist in the face of challenges to meet deadlines with high standards; -Ability to comply with high standards of team mindset, trust, excellence, loyalty and integrity.
Languages	English (Fluent)
Specific skills	Computer Aided Design, MS Office professional (Access, Project, Publisher, Visio), MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> -Microsoft Word, Excel, Access, Visio and PowerPoint; -Knowledge on software for project management, CAD, document control and process modeling is desirable