

IO1545 Magnet Instrumentation Engineer TED-005

General information

Job category	Standard
Status	Published
Department	TED / Tokamak Engineering Department
Division	TED / Magnet Division
Section	TED / MAG / Superconductor Systems & Auxiliaries Section

Job description

Main job	Engineering - Electrotechnics
Title of the position	Magnet Instrumentation Engineer TED-005
Job family	Engineer - EC
Grade	P1
Direct employment	Not required
Purpose	<p>To perform the High Voltage (HV) qualification and Quality Control tests of the magnet and instrumentation components.</p> <p>To interface with the HV component procurement Responsible Officers (ROs) for component specifications and to interface the magnet system designers in that area.</p> <p>To contribute to the magnet system quench detection life-cycle from the functional specifications to the system commissioning.</p> <p>To contribute to the magnet Instrumentation & Control quality.</p>
Main duties / Responsibilities	<p>Specifies and follows-up the manufacture of the test facility required for qualifying the HV measurement chains and the quench detection system in scope of the magnet workshop;</p> <p>Defines & executes the qualification tests for HV insulation and HV instrumentation;</p> <p>Drafts the technical specifications of the quench detection system;</p> <p>Proposes the definition of the installation commissioning scenarios of the quench detection system;</p> <p>Contributes to the quench detection system commissioning;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan & upon management request;</p> <p>May be requested to belong to any project team dealing with above activities and perform other duties upon management request;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Measures of effectiveness	<p>Under the supervision of the Magnet instrumentation Responsible Officer, reports to Superconductor Systems & Auxiliaries Section Leader;</p> <p>Acts as an interface between other Departments as required by the magnet design, in particular with the Electrical Engineering Division and the CODAC Section;</p> <p>In response to requests from the Director-General and/or Head of Tokamak Engineering Department (TED), or proactively, informs the DG/ Head of TED 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> <p>Completes the set-up the test facility required for qualifying and for the quality control of the HV insulated components.</p> <p>Contributes efficiently to the quench detection system specifications;</p> <p>Contributes to the manufacture and the qualification of the quench detection prototype;</p> <p>Contributes to the life-cycle of the quench detection system series production, installation and commissioning.</p> <p>Project Construction Phase</p>

Applicant criteria

Level of study	Master or equivalent degree
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Diploma	Electrical Engineering or other related discipline
Level of experience	2 to 3 years
Technical experience/knowledge	<p>Knowledge of HV measurement techniques; Knowledge of ITER magnet HV instrumentation.</p> <p>At least 2/3 years' postgraduate experience in magnet instrumentation design; Basic Project Management experience is required.</p>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	<p>Ability to both work in a team and coordinate a group of professionals; Ability to communicate clearly and write technical reports and specifications in English.</p>
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<p>Familiarity with CAD tools for electrical drawings; Good command of the Microsoft Office package; Good command of the simulation tools commonly used for electromagnetic analysis.</p>