

JOB DETAIL

Ref. IO1696 - 4/14/2016

Instrumentation Technician TED-058

Main job	Electronics
Department	TED / Tokamak Engineering Department
Division	TED / Magnet Division
Section	TED / MAG / Superconductor Systems & Auxiliaries Section
Job Family	Coordinating Technician
Application Deadline (MM/DD/YYYY)	05/15/2016
Grade	G5
Direct employment	Required
Purpose	<p>To contribute to the instrumentation design, definition and procurement for the ITER coils and auxiliary systems. To contribute integrating the instrumentation into the coils and feeders. To contribute to definition of instrumentation assembly and commissioning procedures. To participate as supervisor to the instrumentation assembly and the coil commissioning activities.</p> <ul style="list-style-type: none">• Contributes to the ITER magnet instrumentation and control procurement and take responsibility for some procurement contracts;• Contributes to the design of the instrumentation measurement chains for Low Voltage (LV) and High Voltage (HV) signals up to the control interfaces;• Assists in integrating the coil instrumentation systems with the coils to fulfill the monitoring requirements reliably without compromising the coil operation;
Main duties / Responsibilities	<ul style="list-style-type: none">• Contributes to the instrumentation measurement chain qualification;• Contributes to the Quench Detection System qualification;• Prepares reliability assessments for the instrumentation and defines adequate back up capability;• Contributes to the definition of the instrumentation interfaces to CODAC, Central Interlock and Safety Systems;• Assists in the definition of procurement specifications for the instrumentation systems, carrying out a call for tender and placing procurement contracts;• Follows the instrumentation procurement and ensures timely delivery to the Domestic Agencies (DAs) and ITER site during coil fabrication and installation on ITER site;• Contributes to the definition of the instrumentation system installation and test procedures;• Monitors quality control tests on the instrumentation during manufacture and after installation;• Assists in providing the control logic to allow the control software to be developed;• Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;• May be requested to be part of any project team and performs other duties upon management request;• Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics. <ul style="list-style-type: none">• Under the supervision of the Magnet instrumentation Responsible Officer, reports to Superconductor Systems & Auxiliaries Section Leader;• Acts as an interface between other Departments as required by the magnet design, in particular with the Electrical Engineering Division and the Control System Division;• 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.
Measures of effectiveness	<ul style="list-style-type: none">– Contributes efficiently to the instrumentation system specifications;– Contributes to the manufacture and the qualification of the instrumentation solutions within the defined schedule;– Contributes to the life-cycle of the instrumentation series production, installation and commissioning.
	Project Construction Phase
Level of study	At least Bachelor's degree or equivalent
Diploma	Electrical Engineering or other related discipline
Level of experience	At least 7 years
Technical experience/knowledge	<ul style="list-style-type: none">– Knowledge of High Voltage measurement techniques.– Knowledge of cryogenic instrumentation;– At least 7 years' postgraduate experience in magnet instrumentation design;– Familiarity with Magnet and Cryogenic controls including quench detection.– Basic Project Management experience is required.
Project experience	2 to 4 years
Social skills	Ability to work effectively in a multi-cultural environment Ability to work in a team and to promote team spirit
Specific skills	Computer Aided Design MS Office standard (Word, Excel, PowerPoint, Outlook)
General skills	<ul style="list-style-type: none">– Ability to both work in a team and coordinate a group of technicians;– Ability to communicate clearly and write technical reports and specifications in English;
Languages	English (Fluent)

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