## the way to new energy



## **JOB DETAIL**

Ref 101689 - 4/14/2016

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## Vacuum Electrical Engineer TED-064 Main job Vacuum technologies Department TED / Tokamak Engineering Department Division TED / Port Plugs & Diagnostics Integration Division Section TED / PPD / In-Vessel Diagnostics Section Job Family Engineer - 2 **Application Deadline** 05/15/2016 (MM/DD/YYYY) Grade P3 Direct employment Not required assembly and commissioning activities.

Purpose To manage the procurement of Electrical Services for diagnostics. To update and maintain all relevant documentation. To supervise the design, R&D and direct procurement of ITER Organization (IO)-supplied vacuumcompatible and safety-rated electrical feedthroughs. To drive common engineering and maintenance solutions for the electrical systems and structures. To plan all related

> · Monitors the procurement of Electrical Services for vessel and cryostat diagnostics;

 Leads the supply of the systems (looms, support structures, feedthroughs, connectors);

- Ensures all technical requirements are recorded;

Organizes and executes any supporting R&D;

- Manages the commissioning preparation activities;

- Plans and specifies assembly and integration activities on site; - Updates and maintains all relevant interfaces including

all vacuum vessel client systems; - Develops the design of interfaces of the sensors with

the main tokamak components

- Monitors compliance of supply with all technical requirements;

- Ensures Domestic Agencies (DAs) and ITER Organization (IO) schedules are compatible at all times.

· Develops the detailed design of the port feedthroughs;

- Proposes and maintains all technical specifications

- Develops and executes the safety-important qualification plan

- Drives and contributes to relevant integration activities; Updates and maintains all relevant interfaces including all vacuum vessel client systems;

Specifies and oversees the creation and updates of

Main duties / Responsibilities

electrical diagrams; Updates and takes through review all relevant

supporting engineering documents;

- Leads the design review processes;

- Prepares technical specifications for procurement with industry;

- Checks and ensures maintenance of relevant ITER databases.

- · Monitors service contracts including visits and
- deliverables;

· Communicates with other organizations within the ITER collaboration and the fusion community;

· Reports variances on all technical, cost and schedule

aspects immediately to the Section Leader;
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 ensures it is updated and in the correct formats.

· 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;

· Performs other duties in support of the project schedule

	as described in the Detailed Work Schedule and			
	<ul> <li>as described in the Detailed Work Schedule and the Strategic Management Plan;</li> <li>May be requested to be part of any of the project team dealing with the above activities and performs other duties upon management request;</li> <li>Maintains a strong commitment to the implementation and perpetuation of the ITER safety program, values and ethics.</li> </ul>			
	<ul> <li>Reports directly to the In-Vessel Section Leader;</li> <li>Interfaces with ITER Technical Department, as required;</li> <li>In response to requests from the Director-General and/or Head of Tokamak Engineering Department (TED), or proactively, informs the DG/ TED 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.</li> </ul>			
Measures of effectiveness	<ul> <li>Work packages completed to agreed deadlines;</li> <li>Developed and approved interface documentation, schematics plans and databases;</li> <li>Developed and approved technical documentation for</li> </ul>			
	<ul> <li>procurement;</li> <li>Developed and approved installation plans;</li> <li>Successful collaboration with technical partners in Domestic Agencies and other Directorates at ITER Organization (IO);</li> <li>Efficient work at all times with other Diagnostics team members.</li> </ul>			
	Project Construction Phase			
Level of study	At least Master's Degree or equivalent			
Diploma	Engineering or equivalent			
Level of experience	At least 8 years			
Technical experience/knowledge	<ul> <li>At least 8 years' experience in nuclear / mechanical / electrical engineering;</li> </ul>			
	<ul> <li>At least 3 years' experience in a fusion-related field;</li> <li>Documented experience with design of Ultra High Vacuum (UHV) systems</li> <li>Documented experience with design of mineral-insulated cable systems;</li> <li>Documented experience with requirements gathering and verification;</li> <li>Documented experience in coordination of teams' activities;</li> <li>Documented experience with safety-relevant design reviews and qualifications;</li> <li>Experience with the technical follow-up of CAD activity;</li> <li>Ability to project costs and resources for technical projects;</li> <li>Familiarity with nuclear effects on materials;</li> <li>Familiarity with electrical diagrams;</li> </ul>			
Social skills	<ul> <li>Documented experience with design of Ultra High Vacuum (UHV) systems</li> <li>Documented experience with design of mineral-insulated cable systems;</li> <li>Documented experience with requirements gathering and verification;</li> <li>Documented experience in coordination of teams' activities;</li> <li>Documented experience with safety-relevant design reviews and qualifications;</li> <li>Experience with the technical follow-up of CAD activity;</li> <li>Ability to project costs and resources for technical projects;</li> <li>Familiarity with nuclear effects on materials;</li> <li>Familiarity with electrical diagrams;</li> </ul>			
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Specific skills	<ul> <li>Documented experience with design of Ultra High Vacuum (UHV) systems</li> <li>Documented experience with design of mineral-insulated cable systems;</li> <li>Documented experience with requirements gathering and verification;</li> <li>Documented experience in coordination of teams' activities;</li> <li>Documented experience with safety-relevant design reviews and qualifications;</li> <li>Experience with the technical follow-up of CAD activity;</li> <li>Ability to project costs and resources for technical projects;</li> <li>Familiarity with nuclear effects on materials;</li> <li>Familiarity with electrical diagrams;</li> <li>Ability to work effectively in a multi-cultural environment Ability to work in a team and to promote team spirit</li> <li>CATIA MS Office standard (Word, Excel, PowerPoint, Outlook)</li> <li>Proven presentation writing skills;</li> </ul>			

For more information about ITER, visit our web site : <u>http://www.iter.org</u>