



the way to new energy

china eu india japan korea russia usa

JOB DETAIL

Ref. IO1571 - 8/24/2015

Cryogenic Process Engineer PED-009

Main job	Cryogenics
Department	PED / Plant Engineering Department
Division	PED / Cooling Systems Engineering Division
Section	PED / CSED / Cryogenic System Section
Job Family	Coordinating Engineer
Application Deadline (MM/DD/YYYY)	09/20/2015
Grade	P4
Direct employment	Not required
Purpose	<p>To ensure the integration, design, layout, construction and operation of the ITER Cryogenic System; To identify and detail the dedicated hardwired interlocks for the ITER cryogenic system's safe operation; To monitor the schedule to build the Cryogenic System and the programs for testing and commissioning the cryogenic equipment.</p> <ul style="list-style-type: none"><li>• Develops and reviews the Process and Instrumentation diagram in order to assess the process controls and required instrumentation;</li><li>• Ensures that requirements of the technical specifications are implemented by contractors and well justified;</li><li>• Ensures that performance of the cryogenic system is achieved during testing and commissioning phases;</li><li>• Develops and reviews the preparation of technical specifications for the cryoplant, cryolines and cryodistribution systems;</li></ul>
Main duties / Responsibilities	<ul style="list-style-type: none"><li>• Develops and reviews the process and design interfaces of the cryogenic components and subsystems;</li><li>• Designs the dedicated hardwired interlocks necessary for ITER cryogenic system's safe operation and shutdown sequences, in respect with Quality Assurance and other IO requirements;</li><li>• Develops and implements the required testing and commissioning program for the instrumentation and process control system;</li><li>• Develops and maintains the operation and maintenance procedures as well as spare requirements;</li><li>• Performs the training of the operators of the cryogenic system;</li><li>• Writes and reviews the technical specifications and baseline documentation for the ITER cryogenic system;</li><li>• Performs the required analysis to validate and improve the cryogenic system flexibility and reliability to operate over a full range of plasma scenarios;</li><li>• Prepares, revises and maintains the schedule to build the cryogenic system as well as the testing and commissioning program;</li><li>• Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan &amp; upon management request;</li><li>• May be requested to belong to any project team dealing with above activities and perform 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 style="list-style-type: none"><li>• Reports to the Cryogenic System Section Leader;</li><li>• Acts as an interface between designers of the magnets, the Tokamak 80K thermal shields, the cryo-vacuum pumps</li></ul>

My space

RSS

See jobs

My job alert

	<p>and the buildings to support integration;</p> <ul style="list-style-type: none"><li>• In response to requests from the Director-General and/or Head of Plant Engineering Department (PED), or proactively, informs the DG/ 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.</li></ul>
Measures of effectiveness	<ul style="list-style-type: none"><li>• Manages effectively interfaces between the cryogenic system and cryogenic users;</li><li>• Manages effectively plans for procurement, preparing installation, tests and commissioning within the defined schedule;</li><li>• Maintains effective communication with all parties delivering subsystems.</li></ul> <p>ID SAP: 50000214</p> <p>Project Construction Phase</p>
Level of study	Master or equivalent degree
Diploma	Cryogenics or Process Engineering field
Level of experience	At least 10 years
Technical experience/knowledge	<ul style="list-style-type: none"><li>– Excellent knowledge of industrially proven cryogenic equipment in world market and associated R&amp;D for specific applications;</li><li>– A PhD in the related fields will be considered as an advantage;</li><li>– Good knowledge of factory acceptance tests and commissioning of complex equipment.</li></ul> <ul style="list-style-type: none"><li>– Experience in the development, design, procurement and commissioning of large cryoplant and cryodistribution systems for fusion or accelerator applications;</li><li>– Experience in process engineering and analysis of operating modes for large cryogenic systems;</li></ul>
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"><li>– Experience in thermohydraulic analysis and numerical codes;</li><li>– Experience working with the design code and standards.</li></ul>
Languages	English (Fluent)

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