

ITER 국제기구 공모 직위 직무기술서 (제215차)

○ 3개 직위

구분	분야	소속	직위	Job No.	등급
①	플랜트 엔지니어링 (PED)	Cooling Systems Engineering Division Cryogenic System Section	Instrumentation & Control Engineer	PED-136	P2
②		Cooling Systems Engineering Division Cooling Water System Section	Cooling Water Operator	PED-140	G5
③				PED-142	G5

IO1898 Instrumentation & Control Engineer - PED-136

General information

Job category	Standard
Status	Published
Department	PED / Plant Engineering Department
Division	PED / Cooling Systems Engineering Division
Section	PED / CSED / Cryogenic System Section

Job description

Main job	Engineering - Cryogenics
Title of the position	Instrumentation & Control Engineer - PED-136
Job family	Engineer - 1
Grade	P2
Direct employment	Not required
Purpose	<p>To participate to the functional analysis, process control and software implementation of cryoplant and cryogenic distribution system.</p> <p>To lead and coordinate the Instrumentation & Control (I&C) system functional test prior and during the commissioning activities of the cryogenic system, in close cooperation with the Central Control team and industrial suppliers.</p> <p>To lead the instrumentation loop tests and acceptance during the commissioning and pre-operation phase.</p>
Main duties / Responsibilities	<ul style="list-style-type: none">-Prepares and reviews the instrument and process control design interfaces of the cryogenic components and subsystems;-Perfoms and/or reviews the functional analysis and process control for the liquid helium, liquid nitrogen and cryogenic distribution systems;-Defines the instrumentation and controls for the liquid helium, liquid nitrogen and cryogenics distribution system;-Develops and performs the required testing, commissioning and operation plan for the cryogenic system instrumentation and process control;-Communicates and collaborates with the ITER Safety Department to facilitate the licensing process, providing technical support for the definition and update of safety interfaces;-Manages Section's documentation in compliance with the ITER Management Quality Program and participates in preparing or updating its baseline documentation;-Performs other duties linked to the above purpose upon management request, as necessary;-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;-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 the Cryogenic System Section Leader;-Interacts with members within ITER and outside collaborators as required;-In response to requests from the Director-General (DG) and/or Director for Central Engineering and Plant (CEP) Directorate, or proactively, informs the DG/ Director for CEP Directorate 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.-Successfully and timely manages the instrument and process control design interfaces of the cryogenic components and subsystems;-Performs high quality and accurate functional analysis and process control within the defined schedule;-Completes and documents efficiently the definition of the instrumentation and controls for the liquid helium, liquid nitrogen and cryogenics distribution system;-Maintains excellent communication with interfaces in the Organization to develop the Instrumentation and Control of the Cryogenic System.

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Process, Instrumentation & Control
Level of experience	At least 5 years
Technical experience/knowledge	<ul style="list-style-type: none"> -At least 5 years' work experience in the development, design, procurement and commissioning of cryogenics installations or equivalent process plant; -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; -Proven Success in complicated chemical processing system control; -Hands on experience of industrial control and instrumentation equipment including Siemens PLC, HMI and SCADA system.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Languages	English (Fluent)
Specific skills	CATIA, Computer Aided Design, MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> -Proficiency in using MS Windows Server 2003, 2008; -Programming Languages: C , C++ , VBA, VBS and VB.NET; SQL: PgSQL, MySQL, MS SQL ; HTML, XHTML, CSS; JavaScript, DHTML, PHP; -Basic knowledge of CAD System (CATIA and AVEVA PDMS) will be a plus.

IO1899 Cooling Water Operator - PED-140&142

General information

Job category	Standard
Status	Published
Department	PED / Plant Engineering Department
Division	PED / Cooling Systems Engineering Division
Section	PED / CSED / Cooling Water System Section

Job description

Main job	Engineering - Hydraulics
Title of the position	Cooling Water Operator - PED-140&142
Job family	Coordinating Technician
Grade	G5
Direct employment	Not required Two openings
Purpose	<p>To perform the functional analysis of the CWS bottom up coupling the system with its Clients and Suppliers checking consistency with Functional and safety performances as per the System technical Specifications;</p> <p>To review the commissioning technical specifications and associated commissioning procedures for the Cooling water System;</p> <p>To contribute the testing, commissioning and pre-operation of the Cooling Water System in support to the Cooling Water System Technical Responsible Officer (CWS TRO);</p> <p>To be one of the main contact points and advisor for the process control for the ITER CWS.</p> <p>-Reviews the documents prepared by the Indian Domestic Agency (IN DA) for the Factory Acceptance Tests (FAT) of the CWS main components (e.g. cooling towers, pumps, heat exchangers, chillers etc.);</p> <p>-Participates to the testing and final acceptances of CWS components and sub-systems organized by Domestic Agencies (DAs) and relevant manufacturers;</p> <p>-Drafts and proofreads documents for testing, commissioning and pre-operation of the Cooling Water System;</p> <p>-Prepares the on-site testing, commissioning and pre-operation of the CWS;</p> <p>-Prepares and reviews commissioning, testing, operation and maintenance procedures;</p> <p>-Develops knowledge for the process control for the CWS namely for the management of the relevant Instrumentation & Control (I&C);</p> <p>-Monitors the schedule for the testing, and commissioning and pre-operation of the CWS;</p> <p>-Provides support driving the installation activities to the final Assembly on site of the CWS;</p> <p>-Provides support issuing technical specifications and procedures for the operation and maintenance of the CWS during the pre-operational phase</p> <p>-Ensures availability of auxiliary systems (electrical power, instrument air etc.) for performing testing and pre-commissioning;</p> <p>-Contributes to ensure quality assurance for the defined scope of work and to manages interface issues;</p> <p>-May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays;</p> <p>-Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;</p> <p>-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>-Reports to the Cooling Water System Section Leader;</p> <p>-Interfaces with other ITER Technical Departments as required; Maintains communication with other organizations within the ITER collaboration and the fusion community;</p> <p>-In response to requests from the Director-General and/or Head of the 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</p>
Main duties / Responsibilities	

Measures of effectiveness	of the Project's objectives.
	<ul style="list-style-type: none"> -To assure commissioning of the systems according to commissioning procedures and acceptance according to the required safety and functional performances; -To assure integration between functional analysis conclusions and commissioning performances checking and validating the system performances in normal and accidental scenarios; -Co-ordinates efficiently with the ITER Construction and Operation Divisions engineers and operators in order to move the Cooling Water System from Construction stage into Commissioning stage and, at commissioning completion , into operation stage.
	Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Industrial, Mechanical, Nuclear, Chemical/Process
Level of experience	At least 5 years
Technical experience/knowledge	<ul style="list-style-type: none"> -At least 5 years' experience in the testing, commissioning and/or operation of large and complex installations, preferably in the nuclear field related to cooling water system; -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; -Good experience in the process engineering for large installations, preferably in the nuclear would be highly desirable with knowledge of pre-commissioning and startups; -Experience in writing and reviewed technical documents; -Experience in operations of chillers, large pumps, heat exchangers etc is considered as an advantage.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Languages	English (Fluent)
Specific skills	CATIA, ENOVIA, MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	-Knowledge of CATIA (ENNOVIA) and SMART PLANT is preferable