

ITER 국제기구 공모 직위 직무기술서 [제89차]

○ 8개 직위

구분	분야	소속	직위	Job No.	등급
①	중앙통합엔지니어링 (CIE)	Directorate for Project Control & Assembly	Coil Instrumentation Electronics Engineer	CIE-317	P4
②	프로젝트 관리·조립 (PCA)	Assembly & Operations Division	Testing and Commissioning Engineer	CIE-257	P4
③	ITER 프로젝트부 (DIP)	Directorate for Central Engineering & Plant	Project Manager	TCWS-002	P4
④	ITER 프로젝트부 (DIP)	Directorate for Central Engineering & Plant	Project Engineer	TCWS-003	P3
⑤	중앙엔지니어링 (CEP)	Plant Engineering Division	System Engineer	TCWS-001	P3
⑥	일반행정 (GEA)	Procurement Arrangement and Contracts Division	Procurement Officer	ADM-114	P3
⑦	중앙엔지니어링 (CEP)	Plant Engineering Division	Cryogenic Process & Interfaces Engineer	CEP-137	P2
⑧	ITER 프로젝트부 (DIP)	Directorate for Central Engineering & Plant	Magnets Feeder Technician	CEP-149	G4

IO1369 Coil Instrumentation Electronics Engineer CIE-317

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Project Control & Assembly

Job description

Main job	Engineering - Electronics
Title of the position	Coil Instrumentation Electronics Engineer CIE-317
Job family	Coordinating Engineer
Grade	P4
Direct employment	Required
Purpose	<p>To be responsible for the design of electronic circuits for control and instrumentation, launching the corresponding procurement contracts and conducting their follow-up in the field of superconducting magnets quench detection, high voltage instrumentation and control systems;</p> <p>To integrate, install and commission the electronic systems related to all types of magnet instrumentation, including the instrumentation for the superconductive magnet feeders.</p> <p>Designs and develops quench detection electronics to be compliant with specific environmental conditions including large static (10 T) and variable magnetic fields (10 T/s), and nuclear radiation;</p> <p>In close interaction with the magnet systems designers, designs and develops high voltage instrumentation components compatible with a cryogenic (-270 °C) and high vacuum environment (10-6 mbar);</p> <p>Writes procurement specifications for the instrumentation electronic equipment, places the contracts thereto related and performs the follow-up with strong involvement in the quality assurance and control aspects;</p> <p>Responsible for the integration of electronics equipment in the Tokamak Complex environment, following up in detail all issues with respect to installation of the corresponding local control and instrumentation cubicles (space, power supply, heat dissipation, connection to the ITER central control and interlock systems and networks, electro-magnetic compatibility, etc), including the specific requirements to be taken into account for the nuclear safety important components;</p> <p>Ensures a proactive behavior to solve problems at suppliers, test laboratories and during the development manufacturing and testing of the instrumentation at the magnet coil and feeder suppliers;</p> <p>Supports the Section Leader in building a strong instrumentation team for on-site assembly and commissioning of magnet instrumentation and feeders.</p> <p>Maintains progress data and prepares reports related to quality assurance and controls; makes sure that all reports are available within the ITER Data Management system;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Main duties / Responsibilities	<p>Reports to the Director for Project Control and Assembly Directorate;</p> <p>Interfaces with other Divisions inside the IO, in particular the ones responsible for Tokamak Machine, Data Acquisition and Controls, Interlocks and Machine Protection, Vacuum System, etc.</p> <p>In response to requests from the Director-General a, or proactively, informs the DG 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>
Measures of effectiveness	<p>Writes the relevant documentation and makes it available at defined steps of the development/manufacturing/installation process;</p> <p>Completes the procurement activities in a timely manner and within the defined costs; electronic equipment must be available at the milestones fixed by the project;</p> <p>Conducts and completes the follow-up of contracts in a timely manner, ensuring electronics and control equipment are delivered at the milestones fixed by the project;</p>

Communicates critical information to his/her superiors in a timely manner in order not to jeopardise the progress of activities.

Project Construction Phase

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Analog/digital electronics, controls systems
Level of experience	At least 10 years
Technical experience	<p>At least 10 years' experience:</p> <ul style="list-style-type: none">- in the design of analog/digital electronics, in particular control and instrumentation for high voltage systems (some-tens of kilovolts);- of work related to high-voltage applications under vacuum; good understanding of related physics phenomena would be an advantage;- in writing technical specifications for supply contracts and follow-up and related quality assurance aspects(manufacturing and inspection plan, quality assurance programme, factory acceptance tests, etc); <p>Experience in Electro-Magnetic Compatibility for instrumentation with very low power measurement signals operating in harsh environments;</p> <p>Experience with nuclear safety, radiation-hard and tolerant electronic components will be an advantage;</p> <p>Experience of at least 3 years work in a large experimental/ scientific facility in an international environment;</p> <p>Good understanding of the related to quench detection and protection in superconducting magnets systems will be an advantage.</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	Technical Project Management experience is required; Good understanding of an engineering document plan.
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	A PhD in subjects related to Electronics and Controls would be an advantage; Knowledge of a Computer Aided Electronics package.

IO1370 Testing and Commissioning Engineer CIE-257

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Project Control & Assembly
Division	PCA / Assembly & Operations Division
Section	PCA / AOP /Commissioning & Operations Section

Job description

Main job	Engineering - Mechanics
Title of the position	Testing and Commissioning Engineer CIE-257
Job family	Coordinating Engineer
Grade	P4
Direct employment	Not required
Purpose	To support the Commissioning & Operations Section Leader in all activities for the testing and commissioning of the ITER machine and plant systems.
Main duties / Responsibilities	<p>Develops policy, strategy and general procedures for ITER on-site testing and commissioning; Defines overall plan for system acceptance testing and integrated commissioning, in collaboration with responsible officers for each system; Prepares detailed working plans (test procedures, schedule, on-site test facilities availability) for testing and commissioning activities for all ITER systems; Develops and reviews test procedures, test reports, handover documents; Coordinates the execution of testing and commissioning activities during construction, assembly; Inspects and witnesses tests and participates in acceptance and handover of ITER systems; Contributes to the ITER safety program and technical risk control and enforces them through individual behavior and through his/her organization; Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan; Performs other duties linked to the above purpose upon management request, as necessary; Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Measures of effectiveness	<p>Reports to the Commissioning and Operations Section Leader. Acts as an interface between the Assembly and Operations Division and all other directorates and technical teams, as well as the Domestic Agency staff on testing and commissioning related matters. In response to requests from the Director-General and/or the Director for Project Control and Assembly, or proactively, informs the DG/Director for Project Control and Assembly 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>Develops the ITER Testing and Commissioning Strategy; Ensures detailed planning of the above strategy for all ITER systems; Supports the Section Leader in managing the testing and commissioning of ITER systems and in ensuring the ITER machine enters into Operation successfully.</p> <p>ID SAP 50001009 Project Construction Phase</p>

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Engineering or technical domain
Level of experience	At least 10 years

Technical experience	At least 10 years' professional experience, having reached a high level of expertise in defining and coordinating the testing and commissioning of a large experimental or nuclear facility; Experience of testing, handover and commissioning of large scale plant and mechanical systems, such as cryogenics, cooling water, high voltage electrical, vacuum and control systems; Experience in defining and coordinating the testing, commissioning of a nuclear facility would be an advantage; Knowledge of magnetic fusion, superconducting magnets, Tokamaks and ITER would be an advantage.
Project experience	At least 5 years
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	Ability to organize and supervise technical shift teams and manage support contractors.
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook), Primavera
Others	Willingness to learn French would be an advantage when dealing with technical contractors; Experience in planning systems such as Primavera or Microsoft Project would be an advantage.

IO1372 Project Manager TCWS-002

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Engineering & Plant

Job description

Main job	Project Management - Generalist
Title of the position	Project Manager TCWS-002
Job family	Coordinating Engineer
Grade	P4
Direct employment	Not required
	[Job offer for 3-year contract]
Purpose	<p>To manage and coordinate the Organization Centralized Procurement and Preassembly of Piping Systems for ITER. The major ITER piping systems is the Cooling Water System (CWS) but other systems are also considered.</p> <p>The ITER Tokamak Cooling Water System (TCWS) has 3 separate primary heat transport systems supported by three additional systems, with a requirement to remove approximately 1,000 MWT of heat. The systems perform a safety function for confinement of radioactive material, confinement of high energy liquid, and decay heat removal which is generally lower in magnitude (less radioactive material, pressure, and decay heat) but of similar function to commercial fission reactors. The systems have 33 km of nuclear-grade piping, which is a comparable size to a commercial fission reactor water system. The TCWS system is complex due to specialized features such as draining and baking functions that use heaters and pressurized gas.</p>
Main duties / Responsibilities	<p>Leads and manages the TCWS Centralized Procurement and Preassembly of Piping Systems for ITER;</p> <p>Is responsible for the preparation of the technical specifications and contractual documentation for the call for tender of the Centralized Piping for the ITER machine;</p> <p>Performs the required analysis and contractual negotiation for the adjudication of the procurement;</p> <p>Develops project and risk plans according to recognized best practice;</p> <p>Maintains project plans, milestones, change control and risk plans;</p> <p>Carries out regular project reviews;</p> <p>Ensures flow-down of requirements, implementation of nuclear safety guidelines and quality assurance standards in all the activities performed;</p> <p>Is responsible for configuration management for the piping system;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Measures of effectiveness	<p>Reports to the Director of the Central Engineering and Plant Directorate;</p> <p>Acts as an interface with internal and external resources to coordinate the procurement and installation of the ITER piping systems under his responsibility.</p> <p>In response to requests from the Director-General, or proactively, informs the DG 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>Manages the procurement of the centralized piping system;</p> <p>Coordinates the design activities of the centralized piping system;</p> <p>Implement project management techniques for the monitoring of the centralized piping system;</p> <p>Maintains project plans, milestones, change control and risk plans.</p>
	Project Construction Phase

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Engineering or equivalent
Level of experience	At least 10 years
Technical experience	At least 10 year's experience in the Project Management of complex piping systems in the nuclear field; Project Management experience in managing global schedule, cost and risk of a project is required; At least 5 years' experience in negotiating and managing large procurement contracts; Successful experience in coordinating activities performed by technical staff.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	Project Management Certification will be considered as a distinct advantage; Technical ability to procure and manufacture nuclear plant piping systems and components; Knowledge of design codes and standards; Proficiency in industrial cooling water components and processes.
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)

IO1373 Project Engineer TCWS-003

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Engineering & Plant

Job description

Main job	Project Management - Generalist
Title of the position	Project Engineer TCWS-003
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
	[Job offer for 3-year contract]
Purpose	<p>To manage and coordinate the Tokamak Cooling Water System Final Design. The ITER Tokamak Cooling Water System (TCWS) has 3 separate primary heat transport systems supported by three additional systems, with a requirement to remove approximately 1,000 MWT of heat. The systems perform a safety function for confinement of radioactive material, confinement of high energy liquid, and decay heat removal which is generally lower in magnitude (less radioactive material, pressure, and decay heat) but of similar function to commercial fission reactors. The systems have 33 km of nuclear-grade piping, which is a comparable size to a commercial fission reactor water system. The TCWS system is complex due to specialized features such as draining and baking functions that use heaters and pressurized gas.</p>
Main duties / Responsibilities	<p>Leads and manages the TCWS final design project inclusive of the preparation of technical specifications for procurement and assembly;</p> <p>Is responsible for the design and integration of the ITER tokamak cooling water systems (TCWS) coordinating the activities and ensuring the work is performed collaboratively with the Organization internal and external interfaces and the concerned Domestic Agencies (DAs);</p> <p>Delivers the required design documentation for TCWS systems according to schedule;</p> <p>Develops project and risk plans according to recognized best practice;</p> <p>Maintains project plans, milestones, change control and risk plans;</p> <p>Carries out regular project reviews;</p> <p>Ensures flow-down of requirements, implementation of nuclear safety guidelines and quality assurance standards in all the activities performed;</p> <p>Is responsible for configuration management for the TCWS system;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Measures of effectiveness	<p>Reports to the Director of the Central Engineering and Plant Directorate;</p> <p>Acts as an interface with internal and external resources to coordinate the design of the Tokamak Cooling Water System;</p> <p>In response to requests from the Director-General, or proactively, informs the DG 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>Manages the design of the TCWS;</p> <p>Coordinates the design activities of the TCWS;</p> <p>Implement project management techniques for the monitoring of the design of the TCWS;</p> <p>Manages the interfaces of the TCWS;</p> <p>Maintains project plans, milestones, change control and risk plans.</p>
	Project Construction Phase

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Engineering or equivalent
Level of experience	At least 8 years
Technical experience	<p>At least 8 year's experience in Project Engineering of the design of complex industrial installation in the nuclear field;</p> <p>At least 5 years' experience in managing design contracts and technical objectives, cost, schedule and risk of a project;</p> <p>Technical ability to design nuclear plant cooling systems and components;</p> <p>Knowledge of design codes and standards;</p> <p>Proficiency in industrial cooling water components and processes;</p> <p>Experience in supervising and coordinating technical activities.</p>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	Project Management Certification will be considered as an advantage.

IO1371 System Engineer TCWS-001

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Engineering & Plant
Division	CEP / Plant Engineering Division
Section	CEP / PED / Cooling Water System Section

Job description

Main job	Engineering - Nuclear Power
Title of the position	System Engineer TCWS-001
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	<p>To be responsible for the integration of Nuclear Cooling Water systems and processes.</p> <p>To manage the layout, integration, Quality Control (QC) of Nuclear Cooling Water systems.</p> <p>The ITER Tokamak Cooling Water System (TCWS) has 3 separate primary heat transport systems supported by three additional systems, with a requirement to remove approximately 1,000 MWT of heat. The systems perform a safety function for confinement of radioactive material, confinement of high energy liquid, and decay heat removal which is generally lower in magnitude (less radioactive material, pressure, and decay heat) but of similar function to commercial fission reactors. The systems have 33 km of nuclear-grade piping, which is a comparable size to a commercial fission reactor water system. The TCWS system is complex due to specialized features such as draining and baking functions that use heaters and pressurized gas.</p>
Main duties / Responsibilities	<p>Is responsible for the Tokamak Cooling Water System layout and design integration in close collaboration with the users, buildings and services;</p> <p>Supports the Tokamak Cooling Water System design, construction and operation in close collaboration with the users, the Building and Site Infrastructure Directorate and the Safety, Quality & Security Department by managing the layout and integration of the systems and reviewing the systems requirements and interfaces;</p> <p>Manages the Tokamak Cooling Water System integration activities;</p> <p>Supports the licensing and safety requirements for the Tokamak Cooling Water System by managing and reviewing the safety analysis and the compliance with the RPrS (Rapport Preliminaire de Sûreté) and DAC (Demande d'Autorisation de Creation d'INB);</p> <p>Manages the integration, system engineering and construction activities with the involved Domestic Agencies;</p> <p>Prepares and maintains the required documentation for the licensing, commissioning and operation;</p> <p>Ensures flow-down of requirements, implementation of nuclear safety guidelines and quality assurance standards in all the activities performed;</p> <p>Supports the maintenance of the configuration management for the TCWS system;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Measures of effectiveness	<p>Reports to the Section leader of the Cooling Water System;</p> <p>Acts as an interface with internal and external resources to coordinate the design and construction of the Tokamak Cooling Water System;</p> <p>In response to requests from the Director-General and/or CEP directorate Director, or proactively, informs the DG/ CEP directorate Director 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>Manages the layout of the TCWS;</p> <p>Manages and coordinates the interfaces of the TCWS;</p>

Implement techniques for the monitoring systems interfaces and requirements;
Support the implementation of project plans, milestones, change control and risk plans.

Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Nuclear Engineering
Level of experience	At least 8 years
Technical experience	At least 8 years' experience in the System Engineering of complex nuclear projects; Experience in coordinating and supervising technical activities; Basic Project Management experience.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	Technical ability to design and construct a nuclear plant cooling systems and components; Knowledge of design codes and standards; Proficiency in industrial cooling water components and processes.
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)

IO1367 Procurement Officer ADM-114

General information

Job category	Standard
Status	Published
Department	ADM/Directorate for General Administration
Division	GEA / Procurement Arrangement and Contracts Division
Section	ADM/ PCD/ Core Tokamak, Controls & Site Section

Job description

Main job	Business Administration - Procurement
Title of the position	Procurement Officer ADM-114
Job family	Functional Officer - 2
Grade	P3
Direct employment	Not required
Purpose	<p>To manage tender processes for in-cash contracts and/or joint tenders with the DAs; To implement and improve IO Procurement In-cash and In Kind policies, procedures, processes and working instructions; To coordinate and manage all activities within the assigned Directorate(s), related to contractual, legal and administrative aspects of Procurement Arrangements (PAs) signed between IO and the Domestic Agencies (DAs) for the procurement In-kind.</p>
Main duties / Responsibilities	<p>Manages tender processes for in cash contracts, including joint tenders with DAs which include the development of procurement strategies, drafting of Memoranda of Understanding for joint tender processes, drafting tender packages & negotiating with suppliers whenever necessary; Provides support to technical directorates for technical specifications associated with procurement requirements; Provides advice to line management for the annual & multi-year procurement plan for the assigned area, in compliance with the Strategic Management Plan (SMP) & the Detailed Work Schedules (DWS); Trains Technical Responsible Officers working for the IO & the DAs on In-kind & In-cash procurement procedures; Ensures continuous improvement in the procurement procedures & processes in order to save costs & implement cost containment objectives; Evaluates, prepares, and presents standard and ad-hoc status and progress reports for IO management;</p> <p>Proposes a sound procurement strategy for each PA and coordinates the development of PAs for the assigned Directorates in compliance with SMP Milestones; Reviews the technical specifications (Annex B) drafted by the technical team in focusing on the schedule and contractual type of requirements and the overall consistency between the different parts of the PA; Drafts special and general conditions, participates in the negotiation of the final PA documentation, up to the signature by the Director General and the DAs, etc.; Provides support to the IO Responsible Officers in the management and follow-up of PAs once signed, for PAs requiring IO concurrence for the placement of DAs' contracts; Performs other duties in support of the project schedule as described in the Detailed Work Breakdown Structure Schedule or Strategic Management Plan; Performs other duties linked to the above purpose upon management request, as necessary; Maintains a strong commitment to the implementation and perpetuation of ITER Safety program, values and ethics.</p> <p>Reports to the Procurement Core Tokamak, Controls & Site Section Leader; Interfaces with IO Technical Responsible Officers, IO line management and with DAs representatives; In response to requests from the Director-General and/or Director for General Administration Directorate, or proactively, informs the Director-General/ Director for General Administration 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.</p>

Measures of effectiveness	<p>Successfully contributes to the execution of the duties and responsibilities of the Procurement and Contracts Division in his/her scope;</p> <p>Timely delivers tenders and contracts in accordance with the relevant directorate procurement plans;</p> <p>Develops and executes the Procurement Plans according the ITER Project Schedule;</p> <p>Rigorously implements IO Procurement Procedures for contract awards.</p> <p>Timely delivers PAs Main and Annex A (General Conditions), and ensures the consistency with the Annexes B (Technical Specifications);</p> <p>Successfully handles the negotiations with the Domestic Agencies and coordinate the signature of PAs.</p> <p>Sap Id: 50000110</p> <p>Project Construction Phase</p>
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Applicant criteria

Level of study	Master or higher degree
Diploma	Business admin, Law or other & tech. background
Level of experience	At least 8 years
Technical experience	<p>At least 8 years of proven experience in procurement domain in technical areas;</p> <p>Basic experience in public procurement is required;</p> <p>Proven experience in technical and scientific environment;</p> <p>Autonomy in the management of portfolios.</p> <p>Basic Project Managemnt experience requiered.</p>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit, Ability to communicate effectively, Good planning and organisational skills, Good negotiation skills
Languages	<p>English (Working)</p> <p>Engineering Master's degree is considered as an advantage.</p>
Others	<p>Computer and IT skills:</p> <p>Good command of the MS Office Package;</p> <p>ERP proficiency (SAP or other), MS project.</p>

IO1366 Cryogenic Process & Interfaces Engineer CEP-137

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Engineering & Plant
Division	CEP / Plant Engineering Division
Section	CEP / PED / Cryogenic System Section

Job description

Main job	Engineering - Cryogenics
Title of the position	Cryogenic Process & Interfaces Engineer CEP-137
Job family	Engineer - 1
Grade	P2
Direct employment	Required
Purpose	<p>To participate and support the engineering for the ITER Cryogenic System.</p> <p>To contribute to the definition and control of the requirements and interfaces of the Cryogenic System.</p>
Main duties / Responsibilities	<p>Develops, implements, reviews and updates internal and external interfaces management documents;</p> <p>Proposes to the responsible officers definition, review and update of Process and Flow Diagrams (PFDs), Process and Instrumentation Diagrams (P&IDs) and required wiring diagrams;</p> <p>Implements the system configuration management and product assurance plan for the cryogenic system;</p> <p>Drafts the assembly, installation and testing plans of the cryogenic system;</p> <p>Establishes and executes the operation and maintenance procedures for the cryogenic system and defines the required operational spare parts and maintenance plan;</p> <p>Develops and maintains the communication and information plan, the document management plan for the cryogenic system and the implementation in the data base;</p> <p>Organizes and coordinates the reviews of the cryogenics system;</p> <p>Provides the Section's technical document management and participates in preparing or updating its baseline documentation;</p> <p>Performs other duties in support of the project schedule as described in the Detail Work Schedule (DWS) and the Strategic Management Plan (SMP);</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Measures of effectiveness	<p>Reports to the Cryogenic System Engineering Section Leader;</p> <p>Interacts with members within ITER and outside collaborators as required;</p> <p>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.</p> <p>Implement the cryogenic system configuration management and quality assurance plan;</p> <p>Establish and review PFDs and P&IDs as well as wiring diagrams;</p> <p>Successfully and timely review and update the interface control documents;</p> <p>Interface as required with members of the Organization to review and update procedures and interface documents.</p>
	Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Process, Nuclear, Cryogenics Engineering

Level of experience	At least 5 years
Technical experience	At least 5 years' experience in the development, design, and commissioning of complex systems or facilities preferably in the nuclear field; Excellent knowledge of process engineering; Good knowledge of project tools for system engineering; Good knowledge of design code and standards; Good practical knowledge of factory acceptance tests and commissioning of complex equipments.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)

IO1368 Magnets Feeder Technician CEP-149

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Engineering & Plant

Job description

Main job	Engineering - Mechanics
Title of the position	Magnets Feeder Technician CEP-149
Job family	Technician - 3
Grade	G4
Direct employment	Required
Purpose	<p>To contribute to the follow up of the feeder procurement and assembly activities.</p> <p>To assist engineers to qualify key processes of feeder on-site assembly;</p> <p>To assist engineers to prepare / update feeder in-factory and on-site assembly and quality control processes and documents;</p> <p>To assist engineers to train feeder on-site assembly crew members.</p>
Main duties / Responsibilities	<p>Follows up procurement for the feeders, in the technical areas of High Voltage insulation, vacuum / cryogenic technology, superconductivity;</p> <p>Maintains normal operation of facilities and machinery in the feeder workshop, and controls the inventories of equipment, tooling, parts, components, and consumables;</p> <p>Assists engineers to prepare and qualify on-site feeder assembly procedures including quick prototyping of tooling as requested by engineers, manufacture of full size mockups of feeder joint and HV insulation, preparation and participation in the joint and insulation qualification tests. Examples of these are</p> <ul style="list-style-type: none">- joint resistance at room and cryogenic temperatures,- hipot testing of superconducting busbars and joint to 30kV- helium vacuum leak checking <p>Drafts final on-site feeder assembly procedures and manufacturing / inspection plans based on the techniques, setup, and procedures used in the qualification tests;</p> <p>Assists engineers to train and qualify fellow technicians for on-site feeder assembly including personnel safety requirements;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Measures of effectiveness	<p>Reports to the Director of Central Engineering & Plant Directorate;</p> <p>Interfaces with members in feeder team and other sections in the Magnet Division, with other departments as required by the feeder design and with the Domestic Agency and its industries regarding fabrication;</p> <p>In response to requests from the Director-General, or proactively, informs the DG 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>Performs procurement follow up during fabrication;</p> <p>Assists engineers to establish / organize / and maintain the feeder workshop with planned functionality and meeting safety codes;</p> <p>Assists engineers to train and lead the feeder assembly crew with the required skill and safety awareness within the planned time frame.</p> <p>Assists engineers to manufacture / assemble on-site assembly mockups and performs qualification tests.</p> <p>Drafts and submits official assembly procedures and manufacturing / inspection plan for on-site feeder assembly.</p> <p>Works effectively with a team of engineers, technicians, welders to perform complex assembly, qualification, and quality control activities associated with the feeder system.</p>

Applicant criteria

Level of study	At least Bachelor's degree or equivalent
Diploma	Mechanical Engineering or other related discipline
Level of experience	At least 5 years
Technical experience	<p>At least 5 years' experience as a project technician / engineer or project engineer in a large multidisciplinary project or institute;</p> <p>Practical experience in cryogenics and vacuum technologies; Quality control of mechanical components manufacturing;</p> <p>Experience in review and follow up of quality plan;</p> <p>Experience in pressure and leak testing performs Process & Instrumentation Diagram check and functional test;</p> <p>Experience in assisting product manager (QC) : configuration control, interface management, control of performances matrix, doc;</p> <p>Experience with safe usage of electrical test equipment (Multimeters, breakdown testers and power supply units);</p> <p>Experience with large area soldering, and preparation / installation / curing of fiber glass / resin composite insulation.</p> <p>Experience in the use of rigging equipment (e.g., cranes, fork-lifts and scissor lifts).</p>
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit</p> <p>Ability to read and interpret mechanical drawings, circuit schematics, and manufacturers' manuals (or similar documents), and to fabricate parts or sub-assemblies from sketches or verbal instructions;</p>
General skills	<p>Knowledge of welding, vacuum / torch brazing, and visual inspection procedures;</p> <p>Knowledge in functional performances tests of cryogenics components and instrumentation;</p> <p>Familiarity with at least one of the following areas would be desirable: superconducting components, coil design and manufacture, and material properties at low temperatures.</p>
Languages	English (Working)
Others	<p>Demonstrated ability to write good quality technical reports;</p> <p>Good command of the Microsoft Office package.</p>