

IO1547 Feeders Mechanical Engineer TED-008

General information

Job category	Standard
Status	Published
Department	TED / Tokamak Engineering Department
Division	TED / Magnet Division
Section	TED / MAG / Superconductor Systems & Auxiliaries Section

Job description

Main job	Engineering - Mechanics
Title of the position	Feeders Mechanical Engineer TED-008
Job family	Coordinating Engineer
Grade	P4
Direct employment	Not required
Purpose	<p>To manage the Magnet Feeders assembly, including assembly interfaces, coordination of assembly tasks, preparation of assembly documentation, management of resources, and development/implementation of quality assurance and quality control.</p> <p>Manages the interface design in the 3D CAD model and interface drawings;</p> <p>Assesses assembly tolerance and tolerance mitigation, of manufacturability, and of impact to feeder functionality;</p> <p>Assesses the structural, thermo-mechanical, and thermo-hydraulic analyses to verify the integration of Feeders assembly;</p> <p>Manages the interface control documents for the Feeder component interfaces, and coordination of responsibilities for on-site assembly between Magnet Feeders assembly team and ITER plant construction team;</p> <p>Is responsible for planning and management of on-site assembly activities, writing Feeders assembly and inspection plans including detailed procedures with technical acceptance criteria, Develops assembly resource management plan and quality control plan, and contributes to development/implementation of Manufacturing Database modules for feeder assembly;</p> <p>Supervises the on-site assembly teams to execute assembly and inspection plans;</p> <p>Gives technical support for assembly issues and manufacturing quality control to the Feeder assembly task at ITER work site and component manufacturing work at Domestic Agency (DA) contractor's site;</p> <p>Provides engineering assessment on components interaction with Feeders DA's assembly tooling and shipping tooling and contribution to design optimization and risk mitigation as needed;</p> <p>Monitors Feeders DA's assembly tooling qualification and contributes to the manufacturing readiness assessment;</p>
Main duties / Responsibilities	<p>Coordinates assembly technicians' activity to install Feeder components, supports and instrumentation, and diagnostic wires / cables;</p> <p>Reviews Feeder-relevant, on-site assembly and inspection plans and procedures supplied by ITER assembly group and other component supplying teams;</p> <p>Assesses the interaction of Feeders component with on-site assembly tooling supplied by ITER assembly team and contributes to design improvement and risk mitigation as needed;</p> <p>Assists the Feeder Technical Responsible Officer in the execution and follow-up of on-site and DAs procurement acceptances;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan & upon management request;</p> <p>May be requested to belong to any project team dealing with above activities and perform other duties upon management request;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>Reports to the Superconductor Systems & Auxiliaries Section Leader;</p> <p>Acts as an interface between sections in the Magnet Division and other Divisions in the Department;</p> <p>Interfaces with other Departments as required by the Feeders design, in particular with the CAD</p>

Measures of effectiveness	<p>office, integration and assembly teams; Interfaces with the Domestic Agencies' officers and their industries regarding fabrication as requested.</p> <p>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.</p>
	<p>Timely generation of Feeders assembly and inspection plan and procedures, review of Feeders manufacture dossiers, and tooling design within the defined cost; Coordinate efficiently Feeders assembly team; Generates and maintains accurate, coherent, comprehensive and understandable documentation; Maintains effective communication within the ITER Organization.</p> <p>Project Construction Phase</p>

Applicant criteria

Technical experience/knowledge	Level of study	Master or equivalent degree
	Diploma	Mechanical Engineering or relevant discipline
	Level of experience	At least 10 years
		Knowledge in structural, thermo-mechanical and thermo-hydraulic design, analysis and engineering assessment.
		At least 10 years' experience in design, manufacture, assembly and integration of large bolted / welded mechanical components and/or nuclear devices; Practical experience in assembly work and heavy duty handling of large structures with tight tolerances;
		Familiarity of non-destructive examination techniques such as visual inspection, dye penetrant inspection, helium leak detection, ultrasonic inspection, and radiographic examination of welds and brazes, and applicable codes and standards for the implementation and acceptance criteria; Experience with international codes and standards such as ISO, EN, RCC-MR, ASTM and ASME for construction of pressure equipment and/or nuclear equipment; Experience / knowledge in assembly of large components operated at cryogenic temperature and affected by high hydraulic pressure and mechanical loads.
	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 both work in a team and coordinate a group of professionals; Ability to communicate clearly and write technical reports and specifications in English.
	Languages	English (Fluent)
	Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others		Knowledge / experience in high voltage insulation using glass fiber reinforced composite material for cryogenic application and high voltage test of insulation is a plus.
		Good command of the Microsoft Office package.