

IO1170 Structural Engineering Responsible Officer TKM-109

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Tokamak
Division	TKM / Magnet Division
Section	TKM / MAG / TF Coil Section

Job description

Main job	Engineering - Mechanics
Title of the position	Structural Engineering Responsible Officer TKM-109
Job family	Project engineering
Grade	P4
Direct employment	Not required
Purpose	<p>To contribution to the management of procurement arrangements related to Magnet Supports and Toroidal Field (TF) Coil Case structures. This also includes the engineering support to the TF Section activities and related design consolidation.</p>
Main duties / Responsibilities	<p>Is responsible for the monitoring of the fabrication of some TF related structures at Domestic Agency (DA) premises, maintaining the schedule and implementing the quality control programme;</p> <p>Assists the technical Responsible Officer in the execution and follow-up of the structure procurement arrangements;</p> <p>Contributes to design activities and the follow up of the procurement packages related to Magnet Supports and TF Coils Structures for the TF coil manufacturing;</p> <p>Ensures interfaces are defined with the supplying Domestic Agencies and are consistent with the TF system requirements;</p> <p>If required, performs some thermal and structural assessment analysis checks so as to define and verify the design or manufacture;</p> <p>Takes active part in the reviews and monitoring of qualification and production readiness phase activities;</p> <p>Assures implementation of quality control requirements on the procurements, in agreement of all Parties responsible for procurement;</p> <p>Optimises the design to minimize fabrication costs while satisfying performance requirements;</p> <p>Participates in the monitoring of the coil case delivery to the winding companies and the insertion of the winding packs into the case;</p> <p>Takes part in integration and assembly TF reviews, including tolerance definition and internal magnet interfaces to the TF winding pack and external supports;</p> <p>Oversees updates of TF ITER Organisation Computer Aided Design (CAD) models in line with the suppliers' model updates and review of the related manufacture drawings;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Breakdown Structure Schedule or 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 TF Coil Section Leader</p> <p>In response to requests from the Director-General and/or the Director for Tokamak, or proactively, informs the DG/Director for Tokamak 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>Acceptance of structural procurement package by industries;</p> <p>Timely construction of TF coil structures and Magnet supports within agreed cost;</p> <p>Completes procurement activities in a timely manner within defined costs;</p> <p>Successfully generates and maintains coherent, comprehensive and understandable documentation;</p> <p>Successfully maintains effective communication within the ITER Organisation.</p>

Applicant criteria

Level of study	Master or higher degree
Diploma	Mechanical Engineering
Level of experience	At least 10 years
Technical experience	<p>At least 10 years' experience in the design and manufacture of large mechanical stainless steel components (forming and welding) and/or nuclear devices;</p> <p>Experience applying the RCC-MR and ASME compliance conventional codes;</p> <p>Good knowledge of metal forming techniques such as forging, casting, rolling and welding;</p> <p>Good knowledge and experience of non-destructive testing (NDT) techniques and applicable codes such as ultrasonic, radiographical inspection methods;</p> <p>Good knowledge of structural design procedures (analysis techniques, structural assessment, design packages);</p> <p>Familiarity with magnetic field coil design and superconductivity.</p>
Project experience	2 to 4 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	<p>Ability to both work in a team and supervise a group of professionals;</p> <p>Ability to communicate clearly and write technical reports and specifications in English;</p>
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Free criteria	Interfaces with other Sections in the Magnet Division, in particular those responsible for structural performance assessment; interfaces with other Departments as required by the magnet design, in particular with the CAD office; interfaces with the Domestic Agencies' technical responsible officers and their industries regarding fabrication.