

IO1195 Engineering & Structural Analyst TKM-122

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Tokamak
Division	TKM / Vessel Division
Section	TKM/ VD/ VV / Ports Section

Job description

Main job	Engineering - Mechanics
Title of the position	Engineering & Structural Analyst TKM-122
Job family	Experienced Technician - 1
Grade	G4
Direct employment	Required
Purpose	<p>To perform engineering activities including checking of manufacturing design/processes and thermal/structural analyses for the Vacuum Vessel (including In-vessel coils) and Ports.</p> <p>To prepare checking reports on manufacturing drawings, Computer Aided Design (CAD) models and other documents related to manufacturing processes.</p> <p>To perform thermal/structural analyses including impact study for design changes, deviation requests and Non-Conformance Reports (NCRs).</p>
Main duties / Responsibilities	<p>Checks and reviews designs for the Vacuum Vessel and Ports, including CAD models and 2D drawings, and assessment of consistency of tolerances;</p> <p>Checks and reviews CAD models and 2D drawings delivered by the Domestic Agencies (DAs) and industries;</p> <p>Collaborates with CAD designers to ensure design checking and model preparation (including design improvements);</p> <p>Issues checking reports of CAD models and 2D drawings;</p> <p>Prepares technical reports and documents based on other engineering activities related to manufacturing processes including forming, cutting, welding and Non-Destructive Examination;</p> <p>Prepares Finite Element (FE) models for thermal and structural analyses including thermal and mechanical load, boundary conditions and material data;</p> <p>Performs FE analyses and compares to analytical calculation results for design changes, deviation requests and NCRs.;</p> <p>Assesses and reviews analysis results based on design and construction Codes (such as RCC-MR or ASME Sec III and VIII) and prepares related analysis reports and Memos;</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 Vacuum Vessel and Ports Section Leader, under the coordination of professional engineers and analysts in the Vessel Division;</p> <p>Interacts on a daily basis with members of the Vessel Division and ITER Tokamak Directorate as well as DAs staff and contractors;</p> <p>In response to requests from the Director-General and/or Tokamak Director, or proactively, informs the DG / Tokamak 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>Complete requested activities for the design and analysis of the VV in accordance with the assigned schedule;</p> <p>Create accurate reports and documents in respect with Quality Assurance rules;</p> <p>Ensures that CAD models/2D drawings and detailed design documents are reviewed and commented properly;</p> <p>Provide high-quality service to the Section and Division members;</p> <p>Establish a good collaboration attitude with all members of the Vessel Division and Tokamak Directorate.</p>

Applicant criteria

Level of study	At least Bachelor's degree or equivalent
Diploma	Mechanical Field or a related discipline
Level of experience	5 to 10 years Experience in a similar position in a large multidisciplinary project.
Technical experience	Experience in research area and/ or engineering project; Co-ordination skills will the ability to set priorities and meet deadlines.
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, Ability to hold and respect deadlines
General skills	Excellent communication skills and capability to work towards directorate goal with a high level of autonomy; High level of reliability and dependability.
Languages	English (Working)
Specific skills	Computer Aided Design
Free criteria	Working knowledge of finite element codes