IO1193 Mechanical Engineer TKM-112

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Tokamak
Division	TKM / Vessel Division
Section	TKM / VV / Cryostat and VVPS Section

Job description

Main job	Engineering - Mechanics
Title of the position	Mechanical Engineer TKM-112
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	To carry out design and engineering activities for the Cryostat and Vacuum Vessel Pressure Suppression System (VVPSS), with an emphasis on the design by analysis and construction code compliance. To support the design, finite element analysis using ANSYS and Engineering work for Torus Cryopump Housing (TCPH) and Rectangular bellows. To prepare and monitor the procurement, the manufacturing and the installation for the systems.
Main duties / Responsibilities	Performs design and engineering activities for the Cryostat, especially for TCPH; Coordinates the preparation of the design drawings and Computer Aided Design models for the Cryostat and VVPSS; Issues specifications, follows up and monitor procurement, manufacturing and installation activities for the Cryostat including TCPH; Contributes to the Design and Construction Code compliance for the Cryostat (including TCPH) and VVPSS (such as ASME or RCC-MR); Manages interfaces of TCPH with the Vacuum Pumping System and Assembly/Remote Handling; Prepares Procurement Arrangement (PA) amendments for TCPH; Contributes to the design and carries out engineering activities for the VVPSS; Ensures compliance with French regulatory requirements relating to Basic Nuclear Installations and in particular the application of the ITER Quality Assurance (QA) requirements for the Cryostat and VVPSS; Contributes to define the load conditions and other requirements; Supervises preparation of the design drawings and Computer Aided Design (CAD) models for the Cryostat and VVPSS; Reviews and evaluates thermal and structural analysis; 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.
Measures of effectiveness	Reports to the Cryostat and VVPSS Section Leader; Interacts on a daily basis with members of the Vessel Division and ITER Tokamak Directorate as well as Domestic Agencies. In response to requests from the Director-General and/or Director of Tokamak (TKM) Directorate, or proactively, informs the DG/ Director of TKM 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 Complete requested activities for the Cryostat and VVPSS in time. Create high-quality reports and documents as requested in DWS and SMP. Ensure that CAD models/2D drawings and detailed design documents are generated as scheduled; Establish a good collaboration attitude with all members of the Vessel Division and Tokamak

	Directorate. Project Construction Phase

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Mechanical Engineering or related fields
Level of experience	At least 10 years
Technical experience	Experience of Design, structural analysis using ANSYS- finite element analysis software and engineering in a similar position in a large multidisciplinary project. Experience of Design and Construction Codes such as ASME or RCC-MR Experience in research area and/or large engineering project.
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, Ability to organize and monitor activities, Ability to communicate effectively, Ability to hold and respect deadlines
General skills	High level of reliability and dependability; Co-ordination skills will the ability to set priorities and meet deadlines.
Languages	English (Working)
Specific skills	Computer Aided Design, MS Office standard (Word, Excel, PowerPoint, Outlook)
Free criteria	Knowledge of FEM analysis