

ITER 국제기구 공모 직위 직무기술서(제55차)

○ 2개(P급) 직위(제55차)

구분	분야/소속	직 위	Job No.	등급
제55차	토카막(TKM) /Tokamak	Structural Engineering Responsible	TKM-109	P4
		Divertor Engineering Officer	TKM-078	P3

IO1154 Structural Engineering Responsible Officer TKM-109

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	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.
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 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>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	Social skills: Ability to both work in a team and supervise a group of professionals; Ability to communicate clearly and write technical reports and specifications in English;
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.

IO1158 Divertor Engineering Officer TKM-078

Job description

Main job	Engineering - Generalist
Title of the position	Divertor Engineering Officer TKM-078
Job family	Project engineering
Grade	P3
Direct employment	Not required
Purpose	To monitor the design & manufacture of Divertor components and related materials; To follow up with the integration of associated systems, diagnostics and instrumentation; To monitor related research and development (R&D) and qualification in the relevant Domestic Agencies.
Main duties / Responsibilities	Supervises the work carried out by the concerned Domestic Agencies in preparation for the design & manufacture of the Divertor components; Assists in the preparation of the procurement specifications of the Divertor components, including materials; Assists in preparation of Neutronic analysis of the Full-W Divertor; Supervises the production of the concerned drawings; Monitors the R&D and qualification tests by the concerned Domestic Agencies; Monitors the design & manufacture of the Divertor components and related materials during the ITER construction in close relation with the Procurement & Contract Division; Monitors the interfaces and Quality Assurance (QA) procedures of the Divertor components in close relation with the Quality Assurance Division; 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	Successfully completes the design and manufacture of divertor components with the prescribed quality, in a timely manner and within defined costs; Successfully generates and maintains coherent, comprehensive and understandable design documentation; Successfully maintains effective communication within the ITER Organization.

Applicant criteria

Level of study	Master or equivalent degree
Level of experience	At least 8 years
Technical experience	At least 8 years' experience in the follow up of procurement of high heat flux components for an Ultra High Vacuum (UHV) and/or nuclear devices. Experience in the fusion technologies for plasma-facing components would be highly advantageous. Previous experience in welding technologies, non-destructive inspections and in the practical application of QA procedures would be an advantage.
Project experience	1 to 2 years
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)
Free criteria	Direct Supervisor and Interfaces: Reports to the Internal Components Division Head, under the supervision of the Tungsten Divertor Section Leader; Interfaces with all other Sections in the ITER Organization, as required.