

Structural Engineering Responsible Officer TKM-109

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| Main job | Mechanics |
| Department | DIP/Directorate for Tokamak |
| Division | TKM / Magnet Division |
| Section | TKM / MAG / TF Coil Section |
| Job Family | Project engineering |
| Application Deadline | 31/Jan/2012 |
| 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 | <ul style="list-style-type: none">• 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;• Assists the technical Responsible Officer in the execution and follow-up of the structure procurement arrangements;• 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;• Ensures interfaces are defined with the supplying Domestic Agencies and are consistent with the TF system requirements;• If required, performs some thermal and structural assessment analysis checks so as to define and verify the design or manufacture;• Takes active part in the reviews and monitoring of qualification and production readiness phase activities;• Assures implementation of quality control requirements on the procurements, in agreement of all Parties responsible for procurement;• Optimises the design to minimize fabrication costs while satisfying performance requirements;• Participates in the monitoring of the coil case delivery to the winding companies and the insertion of the winding packs into the case;• Takes part in integration and assembly TF reviews, including tolerance definition and internal magnet interfaces to the TF winding pack and external supports;• 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;

- 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.

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| Measures of effectiveness | <ul style="list-style-type: none">• Acceptance of structural procurement package by industries;• Timely construction of TF coil structures and Magnet supports within agreed cost;• Completes procurement activities in a timely manner within defined costs;• Successfully generates and maintains coherent, comprehensive and understandable documentation;• Successfully maintains effective communication within the ITER Organisation. |
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| Level of study | Master or higher degree |
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| Diploma | Mechanical Engineering |
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| Level of experience | At least 10 years |
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| Technical experience | <ul style="list-style-type: none">– At least 10 years' experience in the design and manufacture of large mechanical stainless steel components (forming and welding) and/or nuclear devices;– Experience applying the RCC-MR and ASME compliance conventional codes;– Good knowledge of metal forming techniques such as forging, casting, rolling and welding;– Good knowledge and experience of non-destructive testing (NDT) techniques and applicable codes such as ultrasonic, radiographical inspection methods;– Good knowledge of structural design procedures (analysis techniques, structural assessment, design packages);– Familiarity with magnetic field coil design and superconductivity. |
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| Project experience | 2 to 4 years |
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| Social skills | Ability to work effectively in a multi-cultural environment Ability to work in a team and to promote team spirit |
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| Specific skills | MS Office standard (Word, Excel, PowerPoint, Outlook) |
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| General skills | Social skills: – Ability to both work in a team and supervise a group of professionals; |
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– Ability to communicate clearly and write technical reports and specifications in English;

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.

Languages English (Working)