

# IO1192 Magnets- Toroidal Field Coils Engineer TKM-114

## 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	Magnets- Toroidal Field Coils Engineer TKM-114
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	To contribute to the management of procurement arrangements related to Toroidal Field (TF) Coils within magnet division. This also includes engineering support to the TF Section interface management activities and related design consolidation.
Main duties / Responsibilities	<p>Is responsible for the design, R&amp;D and qualification testing of the TF windings including interface/integration activities;</p> <p>Contributes to the design changes and analysis of the TF winding packs and TF coil cases;</p> <p>Maintains the design and analysis documentation on the TF coils;</p> <p>Maintains the Computer Aided Design (CAD) models and drawings for the TF coils and interfacing structures, ensuring that manufacturing changes are implemented;</p> <p>Gives expertise and provides follow up in winding, impregnation, components fabrication.</p> <p>Follows and ensures the manufacture and delivery of TF coils within the defined schedule;</p> <p>Monitors TF winding pack fabrication and ensures proper implementation of quality control standards;</p> <p>Contributes to maintain and document the internal and external interfaces;</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> <p>Reports to the Toroidal Field Coil Section Leader;</p> <p>Interfaces with other Sections in the Magnet Division and other Divisions in the Directorate, with other Departments as required by the magnet design, in particular with the CAD &amp; Design Coordination and Assembly &amp; Operations Divisions, with the DAs' technical responsible officers and their industries regarding fabrication;</p> <p>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.</p>
Measures of effectiveness	<p>Ensures manufacture of TF coils within agreed cost and schedule;</p> <p>Completes procurement activities in a timely manner within defined costs;</p> <p>Ability to work within a team and set achievable work objectives;</p> <p>Develops and maintains coherent, comprehensive and understandable documentation;</p> <p>Maintains effective communication within the ITER Organization and other stakeholders.</p> <p>Project Construction Phase</p>

## Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Mechanical, Electrical Engineering, other relevant

Level of experience	At least 10 years
Technical experience	<p>Experience in a large scientific or construction project;</p> <p>At least 5 years' experience in design, fabrication and operation of superconducting coils;</p> <p>Familiarity with magnetic field coil design and superconductivity;</p> <p>Knowledge of insulation systems and cryogenics appreciated;</p> <p>Familiarity with electromagnetic effects on structural design;</p> <p>Knowledge of metal forming techniques such as forging, casting, rolling and welding;</p> <p>Familiarity with mechanical design codes and standards such as ASME.</p>
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
General skills	Experience of procurement management in large scientific project is required.
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)