IO1265 Mechanical Engineer TKM-007

General information

Job category Standard

Status Draft

Department DIP/Directorate for Tokamak

Division TKM / Magnet Division

Section TKM / MAG / Superconductor Systems and Auxiliaries Section

Job description

Main job Engineering - Mechanics

Title of the position Mechanical Engineer TKM-007

Job family System Engineer - 1

Grade P3

Direct employment Not required

Purpose

To be responsible in the mechanical design and manufacturing of the ITER Magnet Feeders, specializing on manufacturing process engineering and mechanical analysis.

Supports the Technical Responsible Officer (TRO) in the mechanical design & manufacturing of the ITER Magnet Feeder, in the following areas:

Contributes to the mechanical design & analysis of the Magnetic Feeder;

Participates in the planning, manufacturing, & assembly of the feeders at the Domestic Agencies (DA) suppliers;

Monitors the fabrication & assembly of the magnet feeders, in regards to the defined schedule & requirements;

Assesses the tolerances & alignments in feeder components and assembly;

Performs engineering assessment & analysis to support the manufacturing design of feeders; Performs quality control for the execution of the feeder Procurement Arrangement. Travel to DA supplier's premises is required;

Contributes to the review & maintenance of the feeder Procurement Arrangement manufacturing documents, Computer Aided Design (CAD) model, and 2D drawings;

Interacts with Domestic Agents and other IO teams on feeder related issues.

Main duties / Responsibilities Performs other duties in support of the project schedule as described in the Detailed Work Schedule & 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.

Reports to Superconducting Systems and Auxiliaries Section Leader;

Interfaces with other sections in the Magnet Division, in particular with those responsible for structural performance assessment, with other Directorates as required by the feeder design, in particular to the Computer Aided Design office, and with the Field Teams and their industries regarding fabrication.

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.

Completes manufacturing documents, CAD design and 2D drawings for feeder procurement arrangement;

Maintains good working relationship with Suppliers and DAs:

Establishes and maintains manufacturing quality assurance and process control database; Completes interface documents with other ITER teams;

Measures of effectiveness

Responds to design changes raised by Domestic Agent and other ITER teams in a timely manner; Follows up on procurement activities at Domestic Agent suppliers' premises.

SAP Id: 50000143 **Project Construction Phase**

Applicant criteria

Level of study At least Master's Degree or equivalent Diploma Mechanical / Electrical Engineering Level of experience At least 5 years Knowledge of the techniques of manufacturing process planning and quality control; Knowledge of the methods of definitions of dimension, tolerance, and symbols in 2D engineering and manufacturing drawings; Knowledge of high voltage electrical design issues and solid composite insulation systems; Knowledge of electromagnetic effects on structural design. Technical experience Experience in industrial manufacturing process planning and quality control for the fabrication of large welded / bolted components; Knowledge of the design and fabrication of large scale cryogenic / vacuum components; Knowledge of the material properties at cryogenic temperatures: Knowledge of mechanical design codes and standards such as ASME, EN, and ISO. Ability to work effectively in a multi-cultural environment, Ability to work in a team and to promote Social skills team spirit General skills Basic Project Management experience is required. Languages English (Fluent) Others Familiarity with Microsoft Office and CAD viewer.