TITLE: Mechanical Engineer – VV Design		TKM-018
REPORTS TO LINE MANAGER: Vacuum Vessel/Ports &Thermal Shield Section Leader; Tokamak Department		
DIRECT EMPLOYMENT: NOT REQUIRED	GRADE RANGE: P-3 TO P-4	
DATE WRITTEN: October, 2006	DATE REVISED: FEBRUARY 23, 2007	DATE REVISED:

Purpose:

Design and specification of Vacuum Vessel systems, with an emphasis on the supporting system, and in-wall shielding. This also includes the preparation and monitoring of procurement, manufacturing and installation.

Major Duties/Responsibilities:

- Complete the design and prepare the procurement specification for Vacuum Vessel systems. Emphasis will be on activities related to the supporting system (both vertical and toroidal) and in-wall systems.
- Assure interfaces are defined and are consistent with requirements
- Establish the load conditions and other requirements
- Define the assembly and maintenance schemes and methods
- Perform material selection and assessment for all components
- Supervise the preparation of the design drawings
- Assure that design requirements for the supports are met
- Perform thermal and structural analysis as required to define and verify the design
- Plan and oversee R&D activities

Qualifications and Experience:

- University degree in engineering
- 15 years experience in the design and manufacture of components for UHV and/or nuclear devices.
- Experience in fabrication (forming and welding) of large stainless steel structures
- Experience working with nuclear and conventional vessel codes.
- Ability to both work in a team and lead a group of professionals.
- Ability to communicate with written and spoken English.

Work Direction and Interfaces:

Report to the Vacuum Vessel/Ports &Thermal Shield Section Leader. Interfaces with all other departments within the ITER Organization as required.

Authority/Approval Levels:
Has authority and approval levels generally defined by the DDG for his/her scope of work.

Measures of Effectiveness:
Complete procurement activities of VV systems in a timely manner and within defined costs.
Successfully generates and maintains coherent, comprehensive, and understandable design documentation.
Successfully maintains effective communications within the ITER Organisation.