

TITLE: Mechanical Engineer – VV and Port Design		TKM-054
REPORTS TO LINE MANAGER: Vacuum Vessel/Ports & Thermal Shield Section Leader; Tokamak Department		
DIRECT EMPLOYMENT: NOT REQUIRED		GRADE RANGE: P3 - P4
DATE WRITTEN: October, 2006	DATE REVISED: FEBRUARY 23, 2007	DATE REVISED:

Purpose:

Design and specification of Vacuum Vessel and Port systems, with an emphasis on the RCC-MR code (and/or ASME code) compliance and reporting. This also includes implementing requirements related to the French Regulation for Pressure and Nuclear Pressure Equipment. The preparation and monitoring of procurement, manufacturing and installation activities is also included.

Major Duties/Responsibilities:

- Complete the design and prepare the procurement specification for Vacuum Vessel and Port systems. Emphasis will be on activities related RCC-MR code (and/or ASME code) compliance and reporting.
- All aspects of RCC-MR (and/or ASME code) code compliance and reporting will be included (design, analyses, materials, welding, inspection, required reporting, etc)
- Implementing all requirements related to the French Regulation for Pressure and Nuclear Pressure Equipment
- Establish the load conditions and other requirements
- Perform material selection and assessment for all components
- Supervise the preparation of the design drawings
- Perform thermal and structural analysis as required to define and verify the design

Qualifications and Experience:

- University degree in engineering
- 15 years experience in the design and manufacture of components for UHV and/or nuclear devices.
- Experience applying the RCC-MR and ASME codes to large UHV and/or nuclear devices
- Experience implementing all requirements related to the French Regulation for Pressure and Nuclear Pressure Equipment
- 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.