TITLE: Mechanical Engineer				TKM-038
REPORTS TO LINE MANAGER: CS and Correction Coils Section Leader				
DIRECT EMPLOYMENT: NOT REQUIRED		GRADE RANGE: P3-P4		
DATE WRITTEN:	DATE REVISED:		DATE REVISED:	
October, 2006	FEBRUARY 28, 2007			

Purpose:

Contribution to the mechanical design of the ITER CS and Correction coils, in the areas of the precompression structure and supports (for the CS) and the case and supports (for the CCs)

Major Duties/Responsibilities:

- Contribute to the mechanical design of the CS precompression structure
- Contribute to the design of the cases for the correction coils
- Prepares documentation to support the design, concentrating on mechanical assessments
- Responsible for defining qualification and quality control tests for the CS precompression structure and CC cases
- Prepare CAD drawings for the design of the CS precompression structures and correction coil cases
- Participate in the monitoring of the fabrication of the CS precompression structure and the Correction Coil cases

Qualifications and Experience:

- University degree (DipIng or Bachelors) in engineering (mechanical or electrical)
- At least 10 years post graduate experience in structural design of metallic components
- Familiarity with magnetic field coil design and superconductivity
- Good knowledge of electromagnetic effects on structural design
- Familiarity with basic metallic joining techniques such as welding, brazing
- Familiarity with mechanical design codes and standards such as ASME
- Ability to communicate clearly and write technical reports and specifications in English.

Work Direction and Interfaces:

Report to the CS and correction coil group head. Interface with other groups in the magnet division. Interfaces with other departments as required by the magnet design, in particular to the CAD office. Interface with the Field Teams and their industries regarding fabrication.

Authority/Approval Levels:

Has authority and approval levels generally defined by the magnet division head for his/her scope of work.

Measures of Effectiveness:

Complete design of CS structures and CC coil cases. Acceptance of coil design by industries. Successful qualification and quality control testing of CS structures during fabrication. Successful assembly and commissioning of CS solenoid assembly.