TITLE: In-Cryostat Assembly Engineer		TKM-081
REPORTS TO LINE MANAGER: Leader of the Machine Assembly & Tooling Section, Assembly and Maintenance Division, Department for Tokamak		
DIRECT EMPLOYMENT: NOT REQUIRED		GRADE RANGE: P3-P4
DATE WRITTEN: June, 2008	DATE REVISED: July 2008	DATE REVISED:

Purpose:

- To support the Leader of the Machine Assembly and Tooling Section in matters related to the development of the Assembly Plan for the in-cryostat components (machine sectors, in- and ex-vessel components);
- To coordinate the development of strategies and procedures required to assemble and control all components and systems within the cryostat;
- To initiate development tasks and participate in the development of the enabling technologies;
- To contribute to the development of the overall assembly plan for the Project;
- To ensure compliance with the ITER Quality Assurance program, safety requirements and procurement procedures.

Main Duties/Responsibilities:

- Supports the leader of the Machine Assembly and Tooling Section in all matters related to the assembly of the in-cryostat components;
- Reviews / develops assembly concepts and systems, ensuring consistency of approach and conformance to schedule for the in-cryostat component sets;
- Ensures that assembly interfaces are clearly defined between components within the cryostat and between in-cryostat components and other systems such as buildings;
- Participates in the evaluation of the engineering designs and provides expert guidance on design and assembly aspects. In particular, represents assembly activities at design reviews;
- Coordinates the preparation of schedules, resource requirements and cost estimates;
- Participates in the preparation of the specifications for the main assembly contract;
- Participates in the development of technical specifications for the engineering design of the assembly tooling;
- Identifies and implements specific development tasks and / or feasibility studies which may be needed, including writing technical specifications, tendering and managing contracts where appropriate;
- Interfaces directly with all departments of the ITER Organization;
- Participates in the monitoring of the manufacturing and acceptance of components, including preparation of test and acceptance criteria where appropriate;
- Maintains a strong commitment to the implementation and perpetuation of the ITER safety program, values and ethics.

Qualifications Required:

- Education:
 - Professional Mechanical Engineer, with a University degree in Mechanical Engineering or a related discipline.
- Experience:
 - Minimum of 15 years' experience in the assembly of large, complex engineering projects, preferably in the field of fusion research;
 - Minimum of 5 years in a supervisory role;
- Demonstrated ability to develop innovative solutions to complex engineering problems;
- Substantial expertise in the field of welding technologies, weld design, qualification and QA;
- Extensive knowledge of QA systems and their practical application;
- A working knowledge of 3D metrology techniques;
- Substantial experience in project and contract management;
- Extensive experience of international procurement and tendering;
- Proactive, with drive and initiative;
- Ability to work as a member of a multicultural team, but also to work independently when required;
- Ability to interface with team members at all levels.
- Language requirements:
 - High level of both written and spoken English;
 - Ability to write clear and concise reports.

Work Direction and Interfaces:

- Reports to the leader of the Machine Assembly and Tooling Section;
- Directly interfaces with project team at all levels.

Authority/Approval Levels:

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

Measures of Effectiveness:

- Successfully elaborates, maintains and implements the Assembly Plan for the machine sectors and related ex-vessel components;
- Successfully generates and maintains coherent, comprehensive and understandable documentation;
- Successfully maintains effective communications within the ITER Organization and with partner organizations;
- Successfully communicates with the designers of the ITER machine components to formulate and validate the Assembly Plan and Procedures;
- Successfully completes the objectives set in agreement with the leader of the Machine Assembly and Tooling Section.