

TITLE: Cryogenic Technical Engineer		CEP-068
REPORTS TO LINE MANAGER: Leader of Cryogenic Section; Department of Central Engineering and Plant Support		
GRADE: G4-G5		
Date Written: July 2007	Date Revised:	Date Revised:

Purpose:

To support activities on design and procurement of equipment related to the responsibility of the ITER Cryogenic Section. To assist in development of design interfaces for cryogenic process units, local cryo-distribution boxes and cryogenic transfer lines for all ITER cryogenic users. To support in preparation of specifications on equipment including cryogenic sensors, control system and instrumentation diagrams for cryogenic related procurement packages.

Major Duties/Responsibilities:

During the initial period of assignment, the successful candidate shall have the necessary expertise and skills to take several responsibilities among those listed below.

When new staff will be compiled assigned duties and responsibility will be reviewed: provide practical input to activities within the ITER Cryogenic Section, particularly related to delivery, assembly, pre and post-assembly testing, and commissioning of components for the liquid helium and liquid nitrogen plants, including their compressor stations, the cryo-distribution boxes and cryogenic lines for cooling of all superconducting magnets, tokamak 80K thermal shields and cryo-sorption vacuum pumps, and compile input data from all requisite sub-systems and components in concert to be in line with the ITER Integrated Project Schedule.

Qualifications/ Experience Required:

- At least 10 years practical engineering experience in working with cryogenic equipment for complex electrical magnetic and physical facilities.
- High educational studies or equivalent.
- At least 5 years dealing with construction of industrial modern cryogenic components and their cryogenic sensors.
- Good practical knowledge related to factory and on site testing of cryogenic equipment.
- Experience of working with demanding QA standard for materials and welding including standards covering pressure equipment directives.
- Good knowledge of fabrication, welding and leak testing techniques.
- Good communication skills in written and spoken English.
- Proven ability to work effectively in a team and a multi-cultural environment.

Work Direction and Interfaces:

Report to the leader of cryogenic section. Close co-operation with and good understanding of the requirements and design of the ITER Plant.

Authority/Approval Levels:

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

Measures of Effectiveness:

- Successfully support ITER Cryogenic Section in design, procurement, delivery, assembly and commissioning of cryogenic equipment.
- Assist in development of requirements related to instrumentation diagrams and cryogenic sensors for the cryopant and cryo-distribution system.
- Assist in definition of detailed design interfaces with all ITER cryogenic users, including the magnet system and the cryogenic vacuum pumps.
- Support in pre and post-assembly testing of the cryopant process units, compressor gas stations, cryo-distribution boxes and cryogenic lines.
- Compile input data for all requisite systems and components to check consistent with the ITER Integrated Project Schedule.
- Assist Participant Teams in successfully meeting the ITER requirements for component tests at suppliers sites.