

TITLE: Cryoplant Layout Engineer		CEP-062
REPORTS TO LINE MANAGER: Leader of Cryoplant Section; Department of Central Engineering and Plant Support		
DIRECT EMPLOYMENT: NOT REQUIRED		GRADE: P3-P4
Date Written: July 2007	Date Revised:	Date Revised:

Overall Purpose:

The layout, procurement, installation and testing of one component group of the ITER cryogenic system named the “Cryoplant “ that includes the complex of the cryogenic process boxes and compressor stations of a liquid helium plant and a liquid nitrogen plant linked with a 80 K helium loop for cooling of the tokamak thermal shields.

Major Duties/Responsibilities:

- Detailed layout of equipment inside the cryoplant cold box and compressor buildings.
- Revision and improvement of process /design interfaces of the cryoplant process boxes with the cryogenic and warm transfer lines located inside the cryoplant cold box and compressor buildings.
- Preparation of technical specifications to procure the cryoplant and revision of the Project Integration documents related to the cryoplant.
- Preparation of programs and schedules to build, test and commissioning of the cryoplant.

Qualifications Required:

- Experience in the development of large cryogenic system for fusion or accelerator applications.
- Knowledge of the industrially proven cryogenic equipment in world market, including liquid helium and nitrogen plants, purification/dryer systems, gas storages and compressors.
- Knowledge of the design code and standards of experimental cryogenic equipment.
- Knowledge of thermal-hydraulic analysis of the cryogenic process boxes.
- Good communication skill, ability to develop and maintain effective international contacts to perform tasks in multicultural environment, covering the international project.

Work Direction and Interfaces

Interfaces with designers of the cryoplant equipment, including compressors and their buildings in order to support excellent integration.

Authority/Approval Levels:

Has authority and approval defined by the group leader for his/her work

Measures of Effectiveness

- Successfully defines and implements the concept of the cryoplant.
- Successfully manages interfaces between the cryoplant process boxes, compressors, cryogenic/warm transfer lines and gas storages.
- Successfully manages plans for installation, tests and commissioning.
- Successfully maintains effective communications with all parties delivering subsystem.