

# IO1328 Diagnostic Engineer CHD-095

## General information

Job category	Standard
Status	Confirmed
Department	DIP/Directorate for CODAC, Heating & Diagnostics
Division	CHD / Diagnostics Division
Section	CHD/ DD/ In-Vessel Diagnostics Section

## Job description

Main job	Engineering - Diagnostics
Title of the position	Diagnostic Engineer CHD-095
Job family	Engineer - 1
Grade	G6
Direct employment	Required
Purpose	<p>To develop the design and interfaces of in-vessel diagnostic systems with the main tokamak components, working alongside the Diagnostics Team.</p> <p>To support procurement of diagnostics components.</p> <ul style="list-style-type: none"><li>- Develops the design of interfaces of diagnostics with the main tokamak components;</li><li>- Specifies and drives on-going integration activities;</li><li>- Helps developing engineering designs for key in-vessel diagnostic components in-vessel and cryostat. Potential topics to be addressed include heat loads, cooling requirements and options, e-m forces, electrical connections, assembly processes, vacuum performance, remote-handling, calibration, alignment, testing, and maintenance schemes; electrical, fluid and other diagram oversight;</li><li>- Supports or leads the Design Review processes, as appropriate;</li><li>- Prepares technical specifications in support of procurement actions with ITER Domestic Agencies (DAs) or industry;</li><li>- Checks and maintains relevant ITER databases;</li><li>- Maintains communication with other organizations within the ITER collaboration and the fusion community;</li></ul>
Main duties / Responsibilities	<ul style="list-style-type: none"><li>- Prepares for the installation of the diagnostic systems on ITER;</li><li>- Reports variances on all technical, cost and schedule aspects immediately to the line management;</li><li>- Supports effective risk identification and management;</li><li>- Manages the change control process for his/her scope of work and communicates changes to the line management;</li><li>- Maintains related documentation at all times on the ITER Document System and ensure it is updated and in the correct formats.</li><li>- Ensures the Division is well represented from an engineering perspective;</li><li>- Performs other duties in support of the project schedule as described in the Detailed Work Schedule or Strategic Management Plan;</li><li>- Performs other duties linked to the above purpose upon management request, as necessary;</li><li>- Maintains a strong commitment to the implementation and perpetuation of the ITER safety program, values and ethics.</li></ul> <p>Reports to the In-Vessel Diagnostics Section Leader;</p> <p>Interfaces with other ITER Technical Directorates, as required; Ensures integration with other technical interfaces;</p> <p>Interacts with DAs and industrials;</p> <p>In response to requests from the Director-General and/or CODAC, Heating &amp; Diagnostics Director, or proactively, informs the DG/ CODAC, Heating &amp; Diagnostics Director of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.</p>
Measures of effectiveness	<p>Work packages completed to agreed deadlines;</p> <p>Efficient support provided for interface documentation, schematics plans and databases development and approval;</p>

	<p>Efficient support provided for procurement technical documentation development and approval;</p> <p>Effective preparation for installation plans;</p> <p>Successful collaboration with technical partners in Domestic Agencies and other Directorates at IO;</p> <p>Efficient work at all times with other Diagnostics team members;</p> <p>Project construction phase</p>
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Applicant criteria

Level of study	Master or equivalent degree
Diploma	Engineering, physics, fusion or relevant
Level of experience	At least 5 years
Technical experience	<p>- Experience preferably in a high technology field such as plasma physics, high energy particle physics, fission reactors or Ultra High Vacuum (UHV) systems;</p> <p>- Familiarity with some aspects of mechanical and/or electrical engineering design for tokamak diagnostic systems, such as magnetics, instrumentation, optical engineering, vacuum systems, microwave and cabled electrical transmission, water cooling systems and mechanical handling schemes, would be an advantage;</p> <p>- Familiarity with recognized engineering codes and standards, experience in manufacturing or database manipulation would be an advantage;</p> <p>- Experience with the technical follow-up of Computer Aided Design (CAD) activity and/or direct participation in CAD activities would be an advantage.</p>
Project experience	At least 3 years
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	Ability to use analysis codes (ANSYS etc) and CAD tools (CATIA etc)