

# IO1378 Cooling Water Chemistry Engineer CEP-010

## General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Plant System Engineering
Division	PSE/Plant Engineering Division
Section	PSE/ PED/ Cooling Water System Section

## Job description

Main job	Engineering - Chemical engineering
Title of the position	Cooling Water Chemistry Engineer CEP-010
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	<p>To be responsible for design, layout, installation and operation of the Cooling Water Systems water chemical control and treatment plant and systems, specifically for safety and environmental compliance.</p> <p>To ensure that the appropriate water chemistry requirements are fulfilled and controlled to prevent excessive formation of activated corrosion productions and to prevent stress corrosion cracking.</p> <p>To support the Cooling Water System Section in the procurement, assembly and installation of the Components Cooling Water, Chilled Water and Heat Rejection Systems.</p>
Main duties / Responsibilities	<p>Prepares and reviews components functional and technical specification;</p> <p>Prepares and reviews requirements specifications of various users related to water chemistry and treatments (filtration, ion-exchange, degasification, de-oxidifier, chemical additives/dosages, feed rate, regeneration, waste water, aerator, pumping station) and evaluate the respective documents;</p> <p>Identifies requirements and process optimization of the water treatment plant process &amp; distribution, its control and operation to ensure the economical functioning of remote water distribution or plant facilities, coordinating operational strategies with a Water Facilities or Operation and Maintenance personnel and users;</p> <p>Assesses and manages operational details in support of the procurement of the water cooling systems and provides expertise in the implementation of monitoring and control instrumentation;</p> <p>Establishes the required documentation to certify that all Cooling Water System activities are in compliance with environmental regulations and communicates with regulatory agencies, consultants, and legal counsel as needed;</p> <p>Provides support in the licensing activities for safety design and assessment of the safety related function in compliance with safety and environmental French regulations;</p> <p>Performs calculations to predict the quantity of activated corrosion products (ACPs) in ITER primary circuits;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>Reports to the Cooling Water System Section Leader;</p> <p>Interfaces with other ITER Project Group/Section/ Department as required;</p> <p>Maintains communication with other Organizations within the ITER collaboration and the nuclear community;</p> <p>In response to requests from the Director-General and/or Plant System Engineering (PSE) Directorate Director, or proactively, informs the DG/ PSE Directorate 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> <p>Establishes design requirements to achieve the required water chemistry;</p>

Measures of effectiveness	<p>Develops and implements plans for continuous improvement of water chemistry parameters during initial stages of operations;</p> <p>Contributes efficiently to identify and resolve critical path issues, and meeting schedule milestones;</p> <p>Successfully communicates with other Participant Teams/ Organizations within the ITER collaboration and the fusion community;</p> <p>Provides expertise for design, layout, installation and operation of the water treatment plant &amp; systems.</p>
	<p>ID SAP: 50000804</p> <p>Project Construction Phase</p>

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Nuclear or Chemical Engineering
Level of experience	At least 8 years
Technical experience	<p>Plant system engineer with at least 8 years' experience in a large size chemical or nuclear power plant;</p> <p>Good knowledge in systems design and functional analysis, systems integration and management of interfaces, installation and operation of various water treatment / process plant systems;</p> <p>Knowledge of maintenance and chemicals inventory management will be an added advantage.</p>
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit</p> <p>Basic Project Management experience is required.</p>
General skills	Computer and IT skills: Knowledge of specific software for predicting activated corrosion products (ACPs) in Pressurized Water Reactor (PWR) and ITER primary circuits (e.g. PACTOLE, PACTITER, OSCAR etc.) will considered be an advantage.
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)