

# IO1368 Magnets Feeder Technician CEP-149

## General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Engineering & Plant

## Job description

Main job	Engineering - Mechanics
Title of the position	Magnets Feeder Technician CEP-149
Job family	Technician - 3
Grade	G4
Direct employment	Required
Purpose	<p>To contribute to the follow up of the feeder procurement and assembly activities.</p> <p>To assist engineers to qualify key processes of feeder on-site assembly;</p> <p>To assist engineers to prepare / update feeder in-factory and on-site assembly and quality control processes and documents;</p> <p>To assist engineers to train feeder on-site assembly crew members.</p>
Main duties / Responsibilities	<p>Follows up procurement for the feeders, in the technical areas of High Voltage insulation, vacuum / cryogenic technology, superconductivity;</p> <p>Maintains normal operation of facilities and machinery in the feeder workshop, and controls the inventories of equipment, tooling, parts, components, and consumables;</p> <p>Assists engineers to prepare and qualify on-site feeder assembly procedures including quick prototyping of tooling as requested by engineers, manufacture of full size mockups of feeder joint and HV insulation, preparation and participation in the joint and insulation qualification tests. Examples of these are</p> <ul style="list-style-type: none"><li>- joint resistance at room and cryogenic temperatures,</li><li>- hipot testing of superconducting busbars and joint to 30kV</li><li>- helium vacuum leak checking</li></ul> <p>Drafts final on-site feeder assembly procedures and manufacturing / inspection plans based on the techniques, setup, and procedures used in the qualification tests;</p> <p>Assists engineers to train and qualify fellow technicians for on-site feeder assembly including personnel safety requirements;</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>
Measures of effectiveness	<p>Reports to the Director of Central Engineering &amp; Plant Directorate;</p> <p>Interfaces with members in feeder team and other sections in the Magnet Division, with other departments as required by the feeder design and with the Domestic Agency and its industries regarding fabrication;</p> <p>In response to requests from the Director-General, or proactively, informs the DG 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>Performs procurement follow up during fabrication;</p> <p>Assists engineers to establish / organize / and maintain the feeder workshop with planned functionality and meeting safety codes;</p> <p>Assists engineers to train and lead the feeder assembly crew with the required skill and safety awareness within the planned time frame.</p> <p>Assists engineers to manufacture / assemble on-site assembly mockups and performs qualification tests.</p> <p>Drafts and submits official assembly procedures and manufacturing / inspection plan for on-site feeder assembly.</p> <p>Works effectively with a team of engineers, technicians, welders to perform complex assembly, qualification, and quality control activities associated with the feeder system.</p>

## Applicant criteria

Level of study	At least Bachelor's degree or equivalent
Diploma	Mechanical Engineering or other related discipline
Level of experience	At least 5 years
Technical experience	<p>At least 5 years' experience as a project technician / engineer or project engineer in a large multidisciplinary project or institute;</p> <p>Practical experience in cryogenics and vacuum technologies; Quality control of mechanical components manufacturing;</p> <p>Experience in review and follow up of quality plan;</p> <p>Experience in pressure and leak testing performs Process &amp; Instrumentation Diagram check and functional test;</p> <p>Experience in assisting product manager (QC) : configuration control, interface management, control of performances matrix, doc;</p> <p>Experience with safe usage of electrical test equipment (Multimeters, breakdown testers and power supply units);</p> <p>Experience with large area soldering, and preparation / installation / curing of fiber glass / resin composite insulation.</p> <p>Experience in the use of rigging equipment (e.g., cranes, fork-lifts and scissor lifts).</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>Ability to read and interpret mechanical drawings, circuit schematics, and manufacturers' manuals (or similar documents), and to fabricate parts or sub-assemblies from sketches or verbal instructions;</p>
General skills	<p>Knowledge of welding, vacuum / torch brazing, and visual inspection procedures;</p> <p>Knowledge in functional performances tests of cryogenics components and instrumentation;</p> <p>Familiarity with at least one of the following areas would be desirable: superconducting components, coil design and manufacture, and material properties at low temperatures.</p>
Languages	English (Working)
Others	<p>Demonstrated ability to write good quality technical reports;</p> <p>Good command of the Microsoft Office package.</p>