

# IO1966 Neutral Beam Mechanical Engineer TED-156

## General information

Job category	Standard
Status	Published
Department	TED / Tokamak Engineering Department
Division	TED / Heating & Current Drive Division
Section	TED / HCD / Neutral Beam Section

## Job description

Main job	Engineering - Mechanics
Title of the position	Neutral Beam Mechanical Engineer TED-156
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	<p>To prepare the Procurement Arrangement (PA) documentation and follow up the design and manufacturing of the components under this PA which includes the piping in the NB cell and the assembly tooling.</p> <p>To prepare the assembly procedures of the Heating Neutral Beam (HNB) and Diagnostic Neutral Beam (DNB) components in the tokamak building and support the Technical Responsible Officers (TROs) for the assembly of the power supply equipment.</p> <p>To ensure the interfacing of the NB components with the NB assembly tools, the consistency and adequacy of the assembly sequence and the integration of NB systems.</p> <p>To ensure proper design of Neutral Beam piping equipment and its integration in the tokamak building.</p>
Main duties / Responsibilities	<ul style="list-style-type: none"><li>-Completes the conceptual design of the HNB assembly tools and equipment and determines the assembly sequence of the HNB and DNB and ensures integration of NB systems with the other systems in the NB cell and PS areas;</li><li>-Prepares the Procurement documentation for the assembly tools, assembly and piping and prepares and agrees the sharing of the assembly tooling with the relevant DAs;</li><li>-Manages the design, manufacturing and testing activities with Domestic Agencies (EU-DA &amp; IN-DA) during the procurement period of the assembly tools and piping equipment;</li><li>-Ensures technical and quality compliance during manufacturing activities, factory acceptance tests, site acceptance tests, raising and managing the deviations and non-conformities during the manufacture, integration and commissioning phases;</li><li>-Liaises with the DNB and HNB Technical Responsible Officers (TROs) to assure transfer of information on the design solutions to minimize cost of procurement and ease the procurement;</li><li>-Controls relevant interfaces and assures the integration of the components into the tokamak building and the compatibility with the interfaces;</li><li>-Reports variances on all technical, cost and schedule aspects immediately to the section leader and supports effective risk management;</li><li>-Contributes to the preparations for the installation of the NB systems on ITER;</li><li>-Supports effective risk identification and management;</li><li>-May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays;</li><li>-Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;</li><li>-May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule;</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 Neutral Beam Section Leader;</p> <p>-Interfaces with other ITER Technical Departments, as required;</p> <p>-Ensures integration with other technical interfaces;</p> <p>-In response to requests from the Director-General and/or Tokamak Engineering Department Head, or proactively, informs the DG/ Tokamak Engineering Department Head of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize</p>

Measures of effectiveness	the achievement of the Project's objectives.
	<ul style="list-style-type: none"> <li>-Work packages completed to agreed deadlines;</li> <li>-Prepare procurement Package documentation within the defined schedule;</li> <li>-Monitors efficiently the design finalisation and the manufacturing of the assembly tools and equipment and their integration in the ITER environment;</li> <li>-Contributes effectively to the NB specifications of allocated procurement packages providing answers to questions on due time;</li> <li>-Issues regular reports of good quality and monitors efficiently and effectively deviations and non-conformities follow-up;</li> <li>-Manages procurement of systems / components through procurement packages within the defined cost and schedule;</li> <li>-Controls accurately the technical aspects of the assembly tools and piping installation on ITER.</li> </ul>
Project Construction Phase	

## Applicant criteria

Level of study	Master or equivalent degree
Diploma	Mechanical engineering
Level of experience	At least 8 years
Technical experience/knowledge	<ul style="list-style-type: none"> <li>-At least 8 years' experience in mechanical engineering and manufacturing working with large complex system, thus enabling the candidate to have a good understanding of the associated manufacture, assembly, installation and integration issues;</li> <li>-Good experience in planning functions in scientific / technical projects;</li> <li>-Experience in application of recognized engineering codes and standards, experience in manufacturing;</li> <li>-Experience with the technical follow-up of CAD activity, and familiarity with mechanical and piping analysis, and Piping &amp; Instrumentation Diagrams;</li> <li>-Experience in writing reports;</li> <li>-Knowledge of neutral beam technology would be advantageous.</li> </ul>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	<ul style="list-style-type: none"> <li>-Ability to facilitate dialogue with a wide variety of contributors and stakeholders;</li> <li>-Ability to adjust communication content and style to deliver messages;</li> <li>-Ability to persist in the face of challenges to meet deadlines with high standards;</li> <li>-Ability to comply with high standards of team mindset, trust, excellence, loyalty and integrity.</li> </ul>
Languages	English (Fluent)
Specific skills	Ansys, CATIA, Computer Aided Design, MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> <li>-Familiarity with CATIA and CAD oversight, incl. manufacturing drawings</li> <li>-Familiarity with ANSYS and Caesar software for analysis</li> </ul>