



## Job Description

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**Title:** Mechanical Engineer

**Reports to:** Managing Director,  
Development Projects

**Department:** Advanced Technology

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### Summary - Job Responsibilities – Activities:

American Superconductor is seeking an experienced mechanical engineer for focused project work. The successful candidate will work directly with an engineering-based team to develop advanced Stirling cycle coolers, engines, and their support systems. The successful candidate will have a strong background in mechanical design, thermal analysis, structural analysis, and designing high precision, tight-tolerance components. The engineer is expected to take responsibility for managing government sponsored research and development projects, including managing the production of prototype hardware and reporting activities. Familiarity with Finite Element Analysis (FEA) software is a definite plus.

### Functions:

- The candidate will be responsible for the design of pressure vessels, heat exchangers, and support hardware for use in Stirling cycle hardware
  - The position calls for excellent communication skills, specifically the ability to write technical reports and presentations, as well as the ability to work within a team
  - The engineer will be responsible for various mechanically intricate subassemblies
  - Responsibility will continue through parts manufacture as well as system assembly and test
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### Education - Experience:

- 5 years of demonstrated machine design experience
  - 5 years of experience using a solid modeler
  - The individual should work effectively in a multidisciplinary team consisting of scientists, engineers, and support personnel (machinist-technicians)
  - Strong knowledge of machine shop practices with the design of machined parts and welded fabrications
  - Design experience integrating most of the following: electromechanical components, seals, weldments, castings, and coatings
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### Required Skills, Competencies, Authorities and Training Needs:

- Proficiency in SolidWorks CAD system
  - Open minded engineer with broad multidisciplinary knowledge and interests
  - Experience in cryogenic and vacuum system design, including use of materials, welding and brazing preparations, and understanding of insulation and heat transfer principles is a plus
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AMSC is an EEO M/F/D/V

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