

MECHANICAL DESIGN ENGINEER

L-3 Communications (a Fortune 500 company) is a leading provider of Intelligence, Surveillance and Reconnaissance (ISR) systems and products, secure communication systems, aircraft modernization, training and government services, and is a merchant supplier of a broad array of high technology products.

ESSCO, a division of L-3, is currently seeking a talented **Mechanical Design Engineer** for our radome and reflector manufacturing product lines at our Ayer, MA facility. ESSCO is the world's premier designer and manufacturer of ground-based radomes, including composite and metal space frame radomes, shipboard and airborne radomes, as well as precision reflectors and antenna products. In addition, as a custom vehicle builder and systems integrator, ESSCO also specializes in turnkey mobile solutions and cutting edge communications platforms for commercial broadcasters, as well as various federal, state and local government agencies.

Responsibilities

This position is responsible for the design, development, and manufacturing support of ground-based and metal space frame radomes, precision reflectors and antenna products, and custom turnkey mobile solutions. The preferred candidate will:

- Create complete mechanical design packages including Inventor™ 3-D models, AutoCAD™ 2-D drawings, Task Lists and bills of material (BOM) for customer's radome, reflector, antenna and vehicle projects.
- Design from concept to detail drawings, assembly drawings and BOM, to prototyping to production, including the ability to generate multiple design concepts based on a given set of requirements, and identify trade-offs, and provide weekly reports on project status.
- Support customers, manufacturing and customer service personnel in resolving questions and problems.
- Manage engineering projects from inception to completion serving as technical liaison with the customer. Review customer requirements and specifications in support of proposal efforts, and provide cost estimating and technical documentation.
- Complete assigned projects on time and within budget and for adherence to engineering standards including Item Master, bills of materials (BOM), modeling architecture, software libraries, task lists and related procedures.
- Work closely with other internal company disciplines to identify, troubleshoot and monitor all aspects of a program(s) to ensure that contract specifications and delivery schedule are met on time and within budget. Track and report on projects status weekly.
- Prepare formal documentation and presentation materials such as analysis reports, technical manuals, installation instructions, etc. Participate and present information for Preliminary Design Reviews (PDR), Critical Design Reviews (CDR), Technical Interchange Meetings (TIM) and prepare Customer Acceptance Test Procedures (ATP).
- Assist in maintaining and improving engineering standards, procedures, reference libraries, Inventor™ 3-D models, AutoCAD™ 2-D drawings, reference BOMs and Task Lists.
- Other duties as assigned.

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Education & Experience

- Bachelor's degree in Mechanical Engineering, Mechanical Design or related field from an accredited institution required. Master's degree is highly desirable. Professional Engineering (PE) license preferred, but not required.
- Minimum of five years of mechanical design experience required.
- Experience with the following elements is highly desirable:
 - designing and analyzing ground-based composite, metal space frame, shipboard and airborne radomes, and precision reflectors,
 - composite materials, resins and determining cure cycles,
 - designing, inspecting and profiling composite molds,
 - structural analysis and Finite Element Analysis (FEA), and
 - conducting Computational Fluid Dynamics (CFD) analysis,
- Experience with Solidworks™ or Inventor™ and AutoCAD™, and Autodesk Vault™ or PDMWorks™, and experience with large and complex CAD models is required. Preference given to Inventor™ modeling experience.
- Excellent computer skills, particularly understanding of Windows™ interface, navigating a network, file organization, making back-ups, email literacy, Excel™ and spreadsheet literacy.
- Understanding of Materials Requirement Planning (MRP) systems is required, and an understanding of Visual™ operating system is highly desirable.
- Must have sound engineering judgment; be capable of making independent technical decisions; have exceptional attention to detail; possess outstanding time management skills; and firm understanding of document and revision control.
- Excellent written and verbal communication skills are essential.

L-3 ESSCO is an Equal Opportunity/Affirmative Action Employer and offers a competitive salary, benefits program, and a friendly business casual work environment. Modest relocation assistance may be available.

Interested candidates should forward a resume and salary requirements to:

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