



**Location :** Clyde NY US 14433  
**Job Type :** Full Time  
**Position:** Design Engineer I  
**Career Level :** Experienced (Non-Manager)  
**Education :** Bachelors Degree in Engineering  
**Category:** Engineering

**Position Summary:**

Analyzes, researches, and designs components or a system of components new products or to improve existing products while reducing cost, enhancing performance, or facilitating manufacturing operations. Designs products or systems of moderate scope and complexity for assigned programs using a variety of engineering principles from mechanical, materials science, or other engineering disciplines

**Responsibilities:**

- Following established procedures; responsibilities may include some or all of the following:
  - Creates designs by analyzing product specifications, performance requirements, and existing manufacturing capabilities. Performs moderately complex design, fabrication, modification, and evaluation of components, subsystems, and systems by applying engineering principals and established analytical tools. May develop detailed designs by using sketches and descriptive transfer functions provided by others.
  - Investigates pertinent design factors such as ease of manufacture, availability of materials and equipment, interchangeability, replace ability, strength-weight efficiency, contractual specification requirements, cost defining recommendations, and change proposals.
  - Prepares or directs preparation of product layouts, detailed drawings, and assembly drawings by coordinating with designers or drafters, interpreting customer and functional requirements, and by using computer-aided design tools and following industry and drawing standards. Develops data and makes preliminary sketches, notes, and documentation in response to customer proposal requests.
  - Reviews drawings and assembly models to ensure clarity, completeness, form, fit, function, and conformity to standards, procedures, and specifications. Identifies design errors, omissions, and other deficiencies, and recommends revisions and improvements to engineers or other designers.
  - Conducts analyses and/or tests pertaining to the development of new designs, methods, materials or processes and completes required documentation by applying engineering principles and company standards, and generating reports, procedures, or change proposals.
  - May frequently work and communicate with suppliers to resolve technical issues.
  - Communicates with customers on AA Tech product capabilities and to clarify customers' technical requirements. Supports writing technical proposals for customers by reviewing and interpreting specifications and requirements. Prepares various reports by analyzing and summarizing data.
  - Recommends changes to refine and enhance products and processes by applying continuous improvement principles and techniques.
  - Evaluates and suggests improvements to safety and ergonomic issues encountered in assembly processes.
  - Recommends changes to refine and enhance products and processes by applying continuous improvement and key lean manufacturing/production principles and techniques to areas of production.



- Maintains professional and technical knowledge by attending educational workshops, reviewing professional publications, establishing industry networks, benchmarking state-of-the-art practices, and/or participating in professional associations.
- Complies with federal, state, and local legal requirements (e.g. environmental, safety, etc.) by studying existing and new legislation, ensuring adherence to requirements, and advising management on needed actions.
- Shares specialized knowledge with others. Represents the Company on specific projects. Mentors new employees.
- Contributes to team effort by accomplishing related results as needed. Work assignments may include cross-functional or project team responsibilities (e.g. continuous improvement, quality, design or test engineering).
- May need to periodically travel to customers and suppliers to resolve technical issues.
- All other duties assigned by management.

**Minimum Qualifications:**

- Education and Experience:
  - Bachelors degree (BS) in Manufacturing Engineering or related engineering field. Professional entry level position. May have limited prior industry experience or worked with direction in student internship programs. Society of Manufacturing Engineering (SME) or Mechanical Engineering (ASME) certification desired.
- Knowledge, Skills, and Abilities
  - Demonstrates strong mechanical aptitude.
  - Practical knowledge of mechanical engineering principles, theories, concepts, and techniques.
  - Knowledge of drawing practices, tolerancing and use of computer-aided design and basic engineering analysis tools.
  - May require fundamental understanding of fluid mechanics principles, kinematics, and stress analysis; materials selection and manufacturing methods and familiarity with commercial specifications and standards applicable to product line.
  - Ability to effectively apply continuous improvement principles and techniques to design and manufacturing areas.
  - Ability to apply standard practices and techniques in specific situations, adjust and correlate data, recognize discrepancies in results, and follow operations through a series of related detailed steps or processes.
  - Fundamental knowledge of manufacturing engineering principles and concepts and general business operations.
  - Fundamental knowledge of lean manufacturing/production principles and techniques.
  - General knowledge of aerospace industry or similar industry products and legal and regulatory requirements related to manufacturing environments.
  - Ability to use standard business applications software and/or specialized data analysis tools. May be required to develop skills in drafting and programming.
  - Ability to read, analyze, and interpret engineering drawings, technical manuals and policies and recommend changes to procedures.
  - Possesses interpersonal skills adequate for frequent interface with all levels of the organization.
  - Ability to effectively communicate and present information to team members, team leaders, and top management.
  - Ability to research and analyze data and develop recommendations or resolve problems.
  - Ability to work on a variety of problems of moderate scope and complexity where analysis of the situation or data requires a review of identifiable factors and analysis of impact, and problem resolution requires thorough evaluation of alternatives that may require originality or ingenuity.
  - Ability to work with only general work direction and instructions regarding the scope of assignments, determine priority and order of assignments.



- Ability to respond to inquiries and/or address issues from team members, team leaders, customers, and regulatory agencies.
- Ability to define problems, collect data, establish facts, and draw valid conclusions.
- Ability to effectively demonstrate team member competencies and participate in goal-setting, performance feedback, and self-development activities.

**Typical Mental and Physical Demands:**

While performing the duties of this job, the employee is required to sit. The employee frequently is required to use hands to operate a computer. The employee is occasionally required to stand and walk. Specific vision abilities required by this job include close vision. Also expected of the employee is regular attendance, the ability to work cooperatively and professionally with others and members of the public, and the ability to manage multiple tasks at once. The employee may be required to travel to vendors or customers including overnight trips.

(The essential functions have been provided as examples of types of work performed by employees assigned to this job classification. The Company reserves the right to modify the work assignments and/or to make reasonable accommodations so that qualified employees can perform the essential functions of the job. The physical and mental demands described above are representative of those required to successfully perform the essential functions of this job.)

Due to the Company's military contractor status, the applicant must be a U.S. citizen or a permanent resident of the United States, and must provide evidence of citizenship or immigration status upon applying for the position. Advanced Atomization Technologies, LLC is an equal opportunity employer and gives consideration for employment to qualified applicants without regard to race, color, religion, sex, sexual orientation, age, national origin, disability, protected veteran status, or any other consideration made unlawful by federal, state or local laws. ("Minority/Female/Disability/Veteran/VEVRAA Federal Contractor).

\_\_\_\_\_  
Employee Name

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Manager Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Human Resources Signature

\_\_\_\_\_  
Date