# Quality Assurance Engineer: Sr. Principal Quality Assurance Engineer

Develops, modifies, applies and maintains quality evaluation and control systems and protocols for processing materials into partially finished or finished materials product. Collaborates with engineering and manufacturing functions to ensure quality standards are in place. Devises and implements methods and procedures for inspecting, testing and evaluating the precision and accuracy of products and production equipment. Designs and analyzes inspection and testing processes, mechanisms and equipment; conducts quality assurance tests; and performs statistical analysis to assess the cost of and determine the responsibility for, products or materials that do not meet required standards and specifications. Audits quality systems for deficiency identification and correction. Ensures that corrective measures meet acceptable reliability standards and that documentation is compliant with requirements. May specialize in the areas of design, incoming material, production control, product evaluation and reliability, inventory control and/or research and development as they apply to product or process quality. May be certified in lean and six-sigma quality engineering methodologies.

#### Discretion/Latitude

Works under consultative direction toward predetermined long-range goals and objectives. Assignments are often self-initiated. Determines and pursues courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior.

## Knowledge, Skills and Abilities

Applies advanced technical principles, theories, and concepts. Contributes to the development of new principles and concepts. Widely recognized for achievements, technical expertise and meritorious standing within professional field. Identifies, analyzes and develop new business opportunities. Establish customer contacts, conducts researches and analysis into their future plans and needs, assists with the development of their specifications, develops proposals, and delivers marketing presentations.

#### **Problem Solving**

Works on unusually complex technical problems and provides solutions that are highly innovative and ingenious.

## **Impact**

Develops advanced technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical organizational objectives and effect the image of the organization's technological capability. Functions in a program leadership role. Plays a key role in implementing programs/projects and makes significant contributions to department goals and overall functional strategic planning efforts.

#### Liaison

Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications. Often instrumental in attracting and obtaining major new company business.

### **Minimum Education and Experience**

15+ years with BS in designated Engineering or related field. Employees usually have advanced degree in field of specialization.