

Quality Control & Testing Engineer

Analyzes chemical, biological or microbiological products, raw materials, in-process materials, release test samples or stability samples in support of the company's quality program. Interprets and evaluates the analyses in terms of accuracy and precision compared against established specifications and recommends and implements corrective action where necessary. Develops, validates and implements controlled environment methods. Applies existing techniques and procedures with recommendations and implementation of modification for improved efficiency, or devises and develops new analytical methods and techniques. Performs qualitative tests or quantitative assays on samples using techniques that vary from use of standard analytical equipment to highly modern and automated instrumentation. May also be involved in establishing requirements for the transfer of methodology from R&D.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Quality Control & Testing Engineer I	Quality Control & Testing Engineer II	Quality Control & Testing Engineer III	Quality Control & Testing Engineer IV	Associate Principal, Quality Control & Testing Engineer	Principal Quality Control & Testing Engineer
Knowledge	Limited use and/or application of technical principles, theories and concepts.	Frequent use and application of technical standards, principles, theories, concepts and techniques.	Complete understanding and wide application of technical principle, theories and concepts in the field. General knowledge of other related disciplines.	Applies extensive technical expertise and has full knowledge of other related disciplines.	Applies advanced technical principles, theories and concepts. Contributes to the development of new principles and concepts.	Exhibits an exceptional degree of ingenuity, creativity and resourcefulness. Applies and/or develops highly advanced technologies, scientific principles, theories and concepts. Viewed as an expert within the field.
Problem Solving	Develops solutions to routine technical problems of limited scope.	Provides solutions to a variety of technical problems of moderate scope and complexity.	Provides technical solutions to a wide range of difficult problems. Solutions are imaginative, thorough, practicable and consistent with organization objectives.	Develops technical solutions to complex problems which require the regular use of ingenuity and creativity.	Works on unusually complex technical problems and provide solutions which are highly innovative and ingenious.	Develops information which extends knowledge in a given field. Information may form the basis of newly developed concepts, theories and products.
Discretion/Latitude	Work is closely supervised. Follows specific detailed instructions.	Works under general supervision. Follows established procedures. Work is reviewed for soundness of technical judgment overall, adequacy and accuracy.	Works under only general direction. Independently determines and develops approach to solutions. Work is reviewed upon completion for adequacy in meeting objectives.	Work is performed without appreciable direction. Exercises considerable latitude in determining technical objectives of assignment. Completed work is reviewed from a relatively long-term perspective, for desired results.	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.	Often acts independently to uncover and resolve issues associated with the development and implementation of operational programs. Plans R&D programs and recommends technological application programs to accomplish long-range objectives. Work is checked only to the effectiveness of results obtained, typically requiring a long-term perspective. Virtually self-supervisory.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Quality Control & Testing Engineer I	Quality Control & Testing Engineer II	Quality Control & Testing Engineer III	Quality Control & Testing Engineer IV	Associate Principal, Quality Control & Testing Engineer	Principal Quality Control & Testing Engineer
Impact	Contributes to the completion of routine technical tasks. Failure to achieve results can normally be overcome without serious effect on schedules and programs.	Contributes to the completion of milestones associated with specific projects. Failure to achieve results or erroneous decisions or recommendations may cause delays in program schedules and may result in the allocation of additional resources.	Contributes to the completion of specific programs and projects. Failure to obtain results or erroneous decisions or recommendations would typically result in serious program delays and considerable expenditure of resources.	Guides the successful completion of major programs and may function in a project leadership role. Erroneous decisions or recommendations would typically result in failure to achieve major organizational objectives.	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.	Designs research and develops highly advanced new applications resulting in new product/business opportunities for the company. Erroneous decisions or recommendations would have a long-term negative effect on organization's reputation and business posture.
Liaison	Contacts are primarily with immediate supervisor, project leaders and other professionals in the section or group.	Primarily internal company contacts. Infrequent inter-organizational and outside customer contacts on routine matters.	Frequent inter-organizational and outside customer contacts. Represents the organization in providing solutions to difficult technical issues associated with specific projects.	Represents the organization as the prime technical contact on contracts and projects. Interacts with senior external personnel on significant technical matters often requiring coordination between organizations.	Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.	Serves as consultant to top management in long-range company planning concerning new or projected areas of technological research and advancements. Prime spokesperson on company's technical capabilities and future directions. Often instrumental in attracting and obtaining major new company business.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Quality Control & Testing Engineer I	Quality Control & Testing Engineer II	Quality Control & Testing Engineer III	Quality Control & Testing Engineer IV	Associate Principal, Quality Control & Testing Engineer	Principal Quality Control & Testing Engineer
Work Products (Examples may include but are not limited to)	Evaluates performance and/or characteristics of samples as determined by tests. Measures result against specifications established for the component or assembly and accepts or rejects the sample with recommendations for remedial action. Conducts special studies or investigations when necessary to determine the cause of excessive scrap, parts rejections, test failures or other quality control problems by retracing manufacturing operations, or by studying tabulated data, until cause of variation is isolated or controlled.	Performs Failure Analysis, Construction Analysis, Chemical Analysis and conducts re-certification investigations. Conducts special studies or investigations when necessary to determine the cause of excessive scrap, parts rejections, test failures or other quality control problems by retracing manufacturing operations, or by studying tabulated data, until cause of variation is isolated or controlled.	Performs Failure Analysis (FA), Construction Analysis (CA), Chemical Analysis and conducts re-verification investigations utilizing the necessary electrical tests and measurements, plus many of the advanced analytical techniques of physics, metallurgy and chemistry. Prepares reports including causes of defects and makes recommendations to appropriate sections for corrective or preventative action to secure improvement in product quality and reliability.	Performs Failure Analysis (FA), Construction Analysis (CA), Chemical Analysis and conducts re-verification investigations utilizing the necessary electrical tests and measurements, plus many of the advanced analytical techniques of physics, metallurgy, and chemistry. Prepares reports including causes of defects and makes recommendations to appropriate sections for corrective or preventative action to secure improvement in product quality and reliability. May be required to perform special assignments and/or supervise and lend technical direction to subordinate quality/reliability personnel. may perform other assignments which are related to the work of the Product Assurance function.	Performs Failure Analysis (FA), Construction Analysis (CA), Chemical Analysis and conducts re-verification investigations utilizing the necessary electrical tests and measurements, plus many of the advanced analytical techniques of physics, metallurgy and chemistry. May be required to perform special assignments and/or supervise and lend technical direction to subordinate quality/reliability personnel. May perform other assignments which are related to the work of the Product Assurance function. Determines and establishes product assurance requirements and costs for assigned project. Develops methods and procedures to meet the project quality requirements and develops quality data using standard techniques. Assures proper preparation of Product Assurance instructions to advise all concerned parties of these requirements.	Performs Failure Analysis (FA), Construction Analysis (CA), Chemical Analysis and conducts re-verification investigations utilizing the necessary electrical tests and measurements, plus many of the advanced analytical techniques of physics, metallurgy and chemistry. May be required to perform special assignments and/or supervise and lend technical direction to subordinate quality/reliability personnel. May perform other assignments which are related to the work of the Product Assurance function. Determines and establishes product assurance requirements and costs for assigned project. Develops methods and procedures to meet the project quality requirements and develops quality data using standard techniques. Assures proper preparation of Product Assurance instructions to advise all concerned parties of these requirements.
Minimum Education and Experience	0 - 1 year with BS.	2 - 4 years with BS; 0 - 2 years with MS	5 - 8 years with BS; 3 - 6 years with MS; 0 - 3 years with PhD; 0 - 3 years with JD	9 - 13 years with BS; 7 - 11 years with MS; 4 - 8 years with PhD; 4 - 8 years with JD; 0 - 3 years with MD; 0 - 3 years with DVM	14 - 19 years with BS; 12 - 17 years with MS; 9 - 14 years with PhD; 9 - 14 years with JD; 4 - 8 years with MD; 4 - 8 years with DVM	20+ years with BS; 18+ years with MS; 15+ years with PhD; 15+ years with JD; 9+ years with MD; 9+ years with DVM