

Jr. Quality Engineer

Quality Engineer Job Responsibilities

- Determines quality improvement parameters by identifying statistical methods relevant to manufacturing processes.
- Establishes statistical confidence by identifying sample size and acceptable error, and determining levels of confidence.
- Develops experiments by applying full and fractional factorial techniques.
- Develops sampling plans by applying attribute, variable, and sequential sampling methods.
- Maintains statistical process controls by applying demerit/unit, zone charting, \bar{x} charts for distributions and individual-medial/range for multistream processes.
- Analyzes data by completing hypothesis, normal distribution, and process capability analysis tests.
- Prepares reports by collecting, analyzing, and summarizing data; and making recommendations.
- Maintains professional and technical knowledge by attending educational workshops, reviewing professional publications, establishing personal networks, benchmarking state-of-the-art practices, participating in professional societies, and maintaining ASQ-certified quality engineer qualification.
- Contributes to team effort by accomplishing related results as needed.
- Ensures products adhere to company and industry quality standards.
- Brainstorms ideas to create solutions for identified problems.

Quality Engineer Skills and Qualifications:

Quality engineers assist in the planning, development, implementation, communication and maintenance of a company's quality management systems, policies, documentation, data, and customer-specific requirements. In most cases, they report to the quality manager, manufacturing director, or other leadership, depending on the size of the company. Use this section of the job description to list both tangible skills and soft skills like good written and verbal communication, leadership, analytic, and problem-solving skills. A list of standard qualifications and skills for the role may include the following:

- Development of inspection and work instructions
- Part inspection, including: layout, in process, final, and receiving using all types of mechanical inspection

- Preparation of inspection reports
- Coordination and performance of internal process/product audits
- Performance process capability studies
- Good oral and written communication skills
- Ability to communicate effectively with all levels of staff and management, both internal and external
- Capacity to work independently from general supervision (must be self-motivated once given direction/guidance)
- Excellent organization skills with the ability to perform multiple tasks and obtain results working within strict time frames
- Strong attention to detail
- Proficient in MS Office software including Word, Excel, Outlook, and PowerPoint
- Ability to read and interpret assembly and component drawings and engineering specifications
- CAD Data Analysis (measurement & manipulation)
- Basic knowledge of operating measurement equipment (CMM preferred)
- Good knowledge of manufacturing processes

Education & Experience Requirements

- Bachelor's degree in engineering or equivalent discipline or equivalent work experience
- 2-5 years in a manufacturing environment preferred (work or school)
- Root cause analysis experience preferred
- Above average math skills (sound knowledge in both statistics and calculus)
- Experience with programming and operation of Coordinate Measuring Machines (CMM), inspection of machine components, and performance of gage R&R studies preferred