



Job Title: Product Assurance Engineer
Reports To: Product Assurance Manager
Secondary Interfaces: Project Teams

EDUCATIONAL REQUIREMENTS: Bachelor's degree (B.A.) from four-year college or university; and a minimum of three years related experience and/or training; or equivalent combination of education and experience.

DESIRED ATTRIBUTES:

- Excellent communicator (oral and written)
- Self-starter
- Self-disciplined
- Good organizer and planner

SUMMARY: Develops, implements, and coordinates product assurance program to eliminate safety, quality, reliability, and maintainability defects in new or existing products by performing the following duties personally and through subordinates.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

- Develop initial and subsequent modifications of product assurance program in accordance with industry standards (currently SAE AS9100C) to delineate areas of responsibility, personnel requirements, and operational procedures within program.
- Understand and apply ISO-9001 and AS9100C requirements across the organization.
- Perform system audits, as necessary, in accordance with ISO-9001 and AS9100C.
- Train Techshot staff and new employees on all Product Assurance procedures as necessary.
- Meet and confer with representatives of material and component vendors to obtain information related to supplier quality, capacity of vendor to meet orders, and vendor quality standards.
- Develop a thorough understanding of all associated regulatory documents necessary to meet the minimum requirements of each contract.
- Apply basic QA/QC methods of design improvement early in the design and development phase of all projects.
- At beginning of each project, work with Project Manager to initiate a project product assurance program tailored to that project, including decisions on responsibilities, inspections hold points, approval levels, etc.
- Interpret and understand all design input requirements, the impact of these requirements, and provide guidance in meeting these requirements.
- Assist with Design History Files (DHF), 510(k) submissions, Underwriters Laboratory, CE technical files, and other regulatory submissions.
- Maintain configuration management (in conformance with MIL-STD-973 when applicable) with regard to drawing reviews, system designs, change requests and change order processes.
- Interpret, review, edit, and approve the release of designs via the drawings and specs.
- Understand and interpret drawings in accordance with MIL-STD-100 with dimensioning and tolerancing as defined in ANSI Y14.5M.
- Maintain all QA system documentation, including policies, procedures, and instructions, approvals, revisions, etc. in on-line software system (currently QT9).
- Provide quality oversight in regards to 1st article assembly and operation, as warranted.
- Provide quality oversight for flight hardware builds.
- Facilitate and assist with Travelers/Followers for flight projects.
- Develop/oversee calibration program to insure all shop and laboratory test equipment affords accurate performance and/or measurements.
- Apply basic gage and caliper skills in regard to receiving, in-process, and final inspection requirements.
- Coordinate the development, implementation, monitoring and maintenance of the safety program for all Techshot products.
- Ensure Techshot commercial products conform to consumer safety requirements.
- Assist in the development of safety training and/or programs for Techshot employees, as well as operators of its products.
- Develop inherent knowledge of NASA flight safety requirements and the safety review processes.
- Remain knowledgeable and current in the NASA flight safety system, industrial, mission, integration, and test/operations safety programs as outlined by applicable NASA centers of operation.
- Where necessary to meet the requirements of the projects, oversee and/or develop:
 - Reliability and maintainability predictions in accordance with MIL-STD-217.
 - Reliability modeling and allocation processes as defined in MIL-STD-785.
 - Failure Mode and Effects Analysis (FMEA) as defined in MIL-STD-1629.
 - Fault Tree Analysis (FTA)
 - Mean Time Before Failure (MTBF) analysis.
- Review product assurance publications, articles, and abstracts to stay abreast of technical developments in industry.
- Maintain facilities safety program for all Techshot facilities.
- In addition to these responsibilities, assistance with additional tasks deemed suitable by the Product Assurance Manager will be requested from time to time. Detailed instructions will be given in accordance with each task when assigned.

To apply, please email your résumé to: careers@techshot.com