

# **BURTON INDUSTRIES JOB DESCRIPTION**

## **ELECTRONICS ENGINEER**

Under the supervision of engineers, the Electronics Engineer will work to ensure the reliability of products through the analysis, troubleshooting, modification, and repair of electronic components, parts, equipment, and systems at various stages of the productions process as well as the development of test apparatus and methods to prove that functionality and design meet industry and customer specifications. The Electronics Engineer will assist in managing the evaluation, recommendation and implementation of testing procedures and strategies for products, systems, components, or modifications. Electronics Engineer will assist in reviews for manufacturability as well as review and selection of electronic components and potential alternates.

### **Essential Functions**

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

1. Interacts with other engineering groups to define, document, analyze, perform, and interpret tests for products, systems, components, or modifications. Identifies functional problems and suggests resolutions.
2. Assists in the definition of internal quality control standards and the maintenance of reliability programs.
3. Documents and analyzes test cases and provides regular progress reports.
4. Ensures testing procedures are in compliance with any required industry specific standards.
5. Determines how to create a process that will test a particular product in manufacturing and assure that the product meets applicable specifications.
6. Responsible for determining the best method of achieving the highest test coverage using different test processes.
7. Tests the functional performance of systems, subassemblies and parts to identify and correct defects and malfunctions.
8. Constructs and utilizes test fixtures and procedures to identify malfunctions and correct failed assemblies.
9. Identifies malfunctions and coordinates with engineering staff on continuous improvement methods for effective fixtures and procedures to assure the production of error free components.

### **Responsibility for Quality**

Engineer has the responsibility for quality as specified in the Quality Manual, Standard Operating Procedures, and Work Instructions and any verbal or written instructions. These responsibilities include:

1. Ensure compliance to ISO requirements
2. Initiate action to prevent occurrence of any non-conformities relating to product, process, and quality systems.
3. Identify and record any problems relating to the product, process, and quality system.
4. Initiate, recommend, or provide solutions through designated channels.
5. Verify the implementation of solutions.

6. Control further processing, delivery, or installation of non-conforming product until the deficiency or unsatisfactory condition has been corrected.

## QUALIFICATIONS & SKILLS

- Concentration to keep track of several design elements and technical characteristics when designing and developing electronic products and components testing
- Initiative and drive to complete tasks quickly and efficiently
- Interpersonal skills to work well within a team environment during the manufacturing process to ensure plans are correctly implemented
- Advanced math knowledge including calculus help to design, analyze and troubleshoot processes and equipment
- Speaking skills to clearly explain their reasoning and designs to provide instructions during development and production
- Writing skills to develop technical publications, including design methods documents, product proposals, parts lists, operation manuals and maintenance manuals related to the equipment they create

## Preferred Education and Experience

- Bachelor's Degree (or working towards) in Electrical Engineering or related field
- Must have board level understanding of In-Circuit Test (ICT), Flying Probe Test (FPT), Boundary Scan Test (BST), Automated Optical Inspection (AOI), Automated X-Ray Inspection (AXI), and Design-for-Test (DFT) strategies to ensure test capability.
- Must have an understanding of Functional Test manual and automated test strategies.
- Must have an understanding of Reliability Run-in, Burn-in, and Environmental Stress Screen (ESS) test techniques and strategies.
- Experience in testing processes; experience using equipment such as a dynamometer, sound meters, strip chart recorders, multimeters, oscilloscope and fatigue analysis equipment; experience with test techniques related to vehicular electrical systems.