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| Job Title: | Quality Engineer |
| Position Status: | Full Time |
| Department: | Quality Assurance |
| Supervision Received: | Director of Quality Assurance |
| Supervision Exercised: | May provide informal leadership for Quality Coordinators and Technicians. |
| Location: | Mountain Iron, Minnesota (on-site) |

PRIMARY FUNCTIONS

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| A. | Training, Lean and 5S | 20% |
| B. | Audit – 3 rd Party and Customers, Document Control | 20% |
| C. | Quality Key Performance Indicators, Quality Control Plans | 15% |
| D. | In Process and offline Test Methods | 15% |
| E. | Non-Conformance | 15% |
| F. | Incoming and in Process inspections, Calibration | 10% |
| G. | Other Duties as assigned | 5% |
| | | 100% |

The Quality Engineer (QE) works with the team to ensure the quality systems are realized and are in place at Heliene. The duties of a QE include but are not limited to, the daily collection/evaluation of quality data, development and monitoring of Key performance indicators (KPIs), Development and implementation of in-processing and incoming manufacturing inspection, new inspection and test methods, training for team members on measurement methods, support Product Engineering projects, manage internal and external audits from customers. The position requires strong leadership to help drive, improve, and enforce the quality standards driven by internal and external customers. This role must grow with

RESPONSIBILITIES

the growth of the organization.

- A. **Training, Lean, and 5S (20%):**
- Accomplishes quality assurance human resource objectives by supporting the training of the quality operations team on the appropriate process of quality inspections.
 - Help support department and organization reputation by reducing process waste and improving organization and cleanliness, driving assigned projects to successful completion. exploring opportunities to add value to the organization.

- B. **Audit – 3rd Party and Customers, Document Control (20%):**
- Serve as host/guide for external quality audits and third-party surveillance activities.
 - Lead/conduct internal quality audits to drive QMS improvement and maintain ISO 9001 registration.
 - Drive and monitor the required actions based on the audit activity listed above.
 - Monitor and maintain active and effective document control systems in support of the QMS and effective/efficient operation.
- C. **Quality Key Performance Indicators, Quality Control Plans (15%):**
- Achieves Key Performance Indicator (KPI) objectives by helping develop the appropriate production/quality data collection process, collecting data (including nonconformance), and conducting the appropriate analysis to allow for the appropriate continuous improvement strategic plans to be enacted. This includes owning a project or being a part of a team that implements Corrective or Preventative action to ensure the KPIs are met.
 - Develop quality control plans (QCP) by identifying critical control points and implementing preventive measures or test methods, understanding machine or material process limits, monitoring production inspection results, and verifying or updating quality procedures.
- D. **In Process and offline Test Methods (15%):**
- Develop and/or support the development of in-process test methods that include (but are not limited to) EL, Flash Test, Hipot, Stringer and Laminate pull tests, Gel content, Ribbon and Jbox solder tests, and Environmental controls. Develops and maintains the onsite test lab and module testing/verification process.
- E. **Non-Conformance (15%):**
- Manages internal aspects of the nonconformance system (NC). Supply reports by collecting, analyzing, and summarizing information and trends including non-conforming assemblies, processes issues, and Supplier (raw material and module) issues. Work with QSE on supplier-related issues. Work on the RMA team to address customer issues. Support root cause and corrective actions and validations.
- F. **Incoming and In Process inspections, Calibration (10%):**
- Developing incoming documents and completing dimensional inspections of incoming and in-process products using various variable and attribute gauging methods based on QCP and Product Engineer drawings and specifications. Help support the process of going electronic.
 - Responsible for ensuring the compliance of the calibration system and requirements.

- Support Engineering teams to support design review and tolerances definition in line with manufacturing equipment and supplier process capabilities.

G. Other Duties as Assigned (5%):

- Any other duties assigned by the Director of Quality Assurance or designated individual.

Qualifications:

Bachelor of Science in engineering or quality with at least 3 years of experience, or an equivalent combination of education, training, and experience.

- Strong understand GD&T.
- Certification as a lead auditor is considered an asset.
- ASQ certification as a quality engineer is considered an asset.
- Experience in the manufacturing of PV modules or other solar/renewable energy equipment is considered an asset.
- Must understand and be able to develop and document inspection methods and practices.
- Experienced in Root Cause Analysis and Corrective Action systems and follow through.
- Able to work within a cross-functional team environment.
- Strong data collection and analysis skills.
- Strong understanding of quality and Process Controls.
- Understanding of Quality Audits (internal and external)
- Strong statistical analysis
- Working knowledge of Lean and Six Sigma tools – DMAIC problem-solving.
- Must have a valid passport and ability to travel internationally.
- Must have a valid driver's license and reliable transportation.
- Employment is contingent upon successful completion of background check and drug screening.