

## **SENIOR MANUFACTURING & QUALITY ENGINEER**

Extensive product and process development experience with an emphasis in design and fabrication of precision electromechanical systems. Proven track record in product implementation from concept to volume manufacturing. Led cross-functional technology resources and established global production processes. Practical experience applying statistical methods to achieve capability and process control. Core strengths include:

- Production Efficiency Applications: SPC, Continuous Improvement, Lean Manufacturing, Line Balance Modeling, ERP System knowledge.
- Automotive, Medical and Renewable Energy experience.
- Database management and querying using Business Objects and Agile MAP.
- Experience with CAD software.
- MS Office applications: PowerPoint, Project, Word, Visio, and Excel.

## **PROFESSIONAL EXPERIENCE**

**MEDTRONIC**, Louisville CO  
Supplier Quality Engineer

2022-2024

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- Supplier Quality Engineering Experience. Managing supplier projects and carrying out supplier qualifications.
  - Collaborate with suppliers to develop and implement quality improvement plans.
  - Analyze supplier performance data to identify trends and areas for improvement.
  - Strong background in Validations and PPAPs.
  - Work with design engineering and manufacturing engineering to determine root causes. Be the main point of contact to ensure suppliers fix the issue.
  - Conduct quality audits of suppliers to assess compliance with standards.
  - Work with R&D and other function group on design, manufacturing, and FDA regulatory requirements.
  - Knowledge of quality documentation and Change controls.
  - Experience in Process Validations (IQ/OQ/PQ), and working with suppliers.
  - Remediation of existing Quality Records to meet Good Documentation Practices (GDP).

**HONEYBEE ROBOTICS**, Longmont CO  
Quality Engineer II

2021-2022

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- Key responsibilities include reviewing customer proposals and mandatory Quality Clauses.
  - Develop thorough End Item Data Packages (EIDP's) for critical customers, which includes build documentation completeness and creating CoC's.

- Lead Material Review Board (MRB) and drive closure to nonconformances by determining root cause and drive Internal Corrective Action Report (CAR).
- Reconcile nonconforming materials and NCR's.
- Review detailed Work Order Authorization (WOA) process procedures and Acceptance Test Procedure (ATP).
- Perform incoming inspection of materials and ensure traceable documentation. ● Address Supplier Corrective Action Request (SCAR).

**NEOTech**, Longmont CO  
Manufacturing Process Engineer

2020-2021

- Key responsibility includes being the representative for process engineering in the Customer Focus Teams (CFT's).
- Responsible for taking customer PCBA and Box Build documentation and developing the factory build process. This includes; determining necessary tooling required, ordering and implementing tooling, writing detailed process instructions, and supporting the factory floor ensuring smooth builds by establishing efficient process flows.
- Supporting the factory floor by training operators and implementing continuous improvements.
- Providing process engineering support for several machines on the floor, including, Press Fit, CPI router, DEK screen printing, and Reflow oven thermal profiling.

**AQUA-HOT HEATING SYSTEMS, INC**, Frederick CO  
Senior Quality Systems Engineer

2012 – 2019

- Key responsibility included being the hub between Supply Chain Management, Customer Service, and Manufacturing. Collaborated with all groups to ensure transparent communication.
- Developed, implemented, and maintained the Quality Manual. The manual included key metrics of the company's disciplines to ensure successful standardized processes.
- Created and maintained the Internal Audit System. This included training staff how to perform a thorough audit. All questions that did not meet the criteria had corrective action items assigned to key contributors. These action items were tracked to prevent recurrence.
- Initiated and managed all corrective and preventive action (CAPA) to eliminate causes of non-conformities or other undesirable situations. This included internal and external customers, as well as suppliers.
- Tracked both field and production component failures (Top 5) using statistical methods. Assigned champions to perform failure analysis to determine the root cause and corrective action to greatly reduce the defect.

**ADVANCED ENERGY**, Fort Collins CO  
Manufacturing Engineer III

2010 – 2011

- Defined and qualified entire manufacturing process specifications of Solar Inverters during engineering builds, ensuring successful transfer to operations group. Included increased output from 20 to 40 units per week.
- Estimated manufacturing costs, determined time standards, and made recommendations for tooling and process requirements of new and existing product lines.
- Implemented manufacturing-industry best-known methods in support of Continuous Improvement.
- Projects to increase efficiency and effectiveness of production. Analyzed work content and capacity requirements.
- Created Process Failure Mode Effects Analysis (PFMEA) to determine root cause and corrective action for any failure during ramp up.
- Worked with contract manufacturing and equipment suppliers to ensure on-time delivery for roadmap schedule.

**SEAGATE TECHNOLOGY**, Longmont CO  
Manufacturing Engineer

1996 - 2007, 2008 - 2009

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Recruited back to Seagate as a technical liaison providing support between design center and overseas factories.

- Developed, documented, and implemented manufacturing processes, methods and sequences to optimize mechanical performance, reduce cycle time, and maximize output in high-volume multi-product environment.
- Functioned as coordinating lead between cross-functional teams to synchronize product design requirements with manufacturing capabilities.
- Developed precision mechanical assembly tools and metrology, including automation. Demonstrated Process Capability (Cpk) for 16 stations on robotic assembly line.
- Traveled globally as manufacturing lead to ensure production lines complied with standard development requirements at design center.
- Achieved over 90% specification conformance prior to product launch by conducting Design for Manufacturability (DFM) meetings with design engineering.
- Developed transfer checklist to ensure successful and on-time product launch. Included Measurement System Analysis (MSA), cleanliness testing, and packaging qualification.
- Improved product launch cycle by three months by bringing product into design center from factory. Met aggressive time-to-market requirements, enabling high margin profitability.
- Tasked to improve process capability earlier in product life cycle. Allowed factory to move to audit level testing, increasing throughput, reducing handling damage, and increasing yields by at least 20%.
- Successfully completed Black Belt project to determine Key Process Input Variables (KPIV's) that contributed to Pitch Static Attitude (PSA). Enforced tighter requirements on suppliers and ensured internal factories monitored stability of metrology.

**UQM TECHNOLOGIES** Frederick CO  
Quality Systems Engineer

2007-2008

- Designed and implemented production equipment to fabricate DC-DC Converters, DC-AC Inverters, and power electronics used in automotive industry.
- Developed factory floor layouts to maximize throughput and minimize floor space.
- Created manufacturing process instructions, trained production personnel, and supported all production builds. Installed robotic equipment used in manufacturing of the product.
- Collected and analyzed data during process upgrade used in the automotive Production Part Approval Process (PPAP) submitted to customer.

### **EDUCATION AND PROFESSIONAL DEVELOPMENT**

- BS in Mechanical Engineering, Northern Arizona University, Flagstaff, AZ
- Certified in ISO 9001 standards for Class 10 Cleanroom environments and ESD. Working knowledge of AS9100, 21CFR820, and ISO13485.
- Brown Belt certified (completed 160 hours of Six Sigma training) ● Completed Harvard Business School Management Leadership Program ● ISO 9001 Lead Auditor Certification.