

Process Quality Engineer (I, II, III)

About Caporus

At Caporus, we develop the technologies that will connect our world's energy and communications. We enable products for our customers to achieve their electrification goals through sustainable materials and design innovation.

Caporus' patented capacitor technologies enable reliable capacitive energy storage and filtering at the higher voltages and temperatures required by the next generation of high-density power conversion systems. Caporus dielectrics employ advanced materials and processes to meet the increasingly demanding requirements for power conversion systems that are key to supporting the electrification of transportation and integration of distributed energy resources on the grid. We are at the beginning of a global shift in electrification, and Caporus is at the forefront of these developments.

Caporus is backed by venture capital and has received grant support from DOE and NSF. Following incubation at Argonne National Laboratory, Caporus is expanding internal operations in Chicagoland and collaborations globally. We are a small, growing, high-energy team with a passion for developing the most innovative materials and products to positively impact society.

Position Description

Caporus Technologies, Inc. is seeking candidates for a full-time engineering position to work closely with the engineering and management team on the design, development, and testing of capacitors and related electrical products. The successful candidate will have experience in developing quality management systems, design of experiments, data analysis, and process development.

The quality engineer's responsibilities include designing quality standards, inspecting materials, equipment, processes, and products, developing quality control systems, and determining corrective actions. You will also work with management and external partners, including contract manufacturers, to implement and manage quality measures.

The quality engineer should have excellent troubleshooting skills and be able to ensure that processes and products consistently meet established quality standards. The successful candidate will be able to work independently, roll up their sleeves to tackle challenges without fear of failure, work on the cutting edge of new electrical components, and be passionate about contributing to the success of a new startup. This position will report directly to the CEO and will have an opportunity to engage on all aspects of product development and Caporus' business.

Key Responsibilities

- Management of quality control processes
- Design of Experiments for material, product, and process development
- Investigation and troubleshooting product or production issues
- Review of data collected during production runs to identify potential causes of defects or failures to make improvements to the manufacturing process
- Data analysis and design of statistical sampling process
- Review of finish products and audit of performance on same



- Failure and root cause analysis
- Development and maintenance of QA standard operating procedures, documentation, inspection plans and standards
- Development and improvement of quality plans to assure harmonized requirements of manufacturing process, customers, and engineering design
- Generation and maintenance of process qualification and validation program plan
- Maintenance of a detailed experiment log, including procedures and environmental conditions
- Verbal and written communication of experimental results, challenges, and proposed solutions
- Documentation of results and integration into new intellectual property filings
- Performance of external audits and validation of systems and critical processes
- Preparation of work and safety plans
- Other duties as assigned

Qualification Requirements

- BS or higher degree in engineering, physics, or a related discipline
- Quality management experience Six Sigma or ISO 9001/2 preferred
- 2+ years post-graduation in a quality management position
- Experience using QA software tools and processes
- Understanding of auditing processes required
- Possesses a strong understanding of core process methodologies and problem-solving techniques related to primary role
- Articulate communication both verbally and written
- Excellent project management skills.
- Acute attention to detail

Preferred Requirements:

- Experience in startup environment or small team a strong plus
- Experience with Minitab, JMP, or similar software preferred
- Knowledge of creating new Intellectual Property (patents, know-how, etc)
- Experience in a customer facing role, including customer discovery and collaboration
- Experience creating/contributing to marketing documents, such as white papers, test manuals/demonstrations
- Ability to be granted site access for work at Argonne National Laboratory preferred

Compensation

- Salary will be commensurate with experience and competitive
- Health, dental, and vision
- Compensation may include stock option grants