

Job Title:	Sr Mechanical Engineer	Approved:	03/04/26
Job Classification:	Salary	FLSA Status:	Exempt
Department:	Engineering	Reports To:	Engineering Manager
Location:	Vista, CA		

## The Role:

The Sr Mechanical Engineer will be a technical lead in the development of next-generation lithium-ion battery packs that power the electrification of industrial equipment. The Sr Mechanical Engineer will work closely with product management and internal engineering teams to define system requirements and translate them into robust mechanical architectures and product solutions. The Sr Mechanical Engineer will guide mechanical design and development including architecture, safety, structural, documentation, assembly, and testing of advanced battery platforms used across Flux Power products for scaling into the future. Advanced CAD capabilities are critical to the success of this position.

## Essential Duties and Responsibilities:

- Design high-power lithium-ion battery systems capable of delivering hundreds of amps in demanding industrial environments.
- Design and develop modular mechanical systems for scalable battery solutions.
- Utilize CAD tools (SolidWorks) and other product design software to develop new products and system architectures utilizing engineering best practices and GD&T.
- Develop and implement test methods to validate system and product performance, including fabrication, assembly, and installation processes.
- Design and conduct mechanical testing and validation to confirm system performance and reliability.
- Build and evaluate prototypes and engineering test systems.
- Lead the mechanical integration of battery cells, electromechanical components, and structural hardware.
- Work with electrical and manufacturing teams to ensure designs are robust and manufacturable.
- Analyze test results and troubleshoot issues to improve battery safety, diagnostics, and performance.
- Support the full product development lifecycle—from concept and prototyping to production launch.
- Perform additional engineering and project support tasks as required.
- Perform other related duties as assigned

## Minimum Qualifications

- Bachelor’s degree in mechanical engineering or related field
- 8+ years of experience in mechanical engineering or mechanical system design
- Knowledge of high-volume manufacturing processes and/or automation.
- Experience leading engineering projects or technical development teams
- Proven capabilities using SolidWorks in a business environment.
- Strong troubleshooting and system-level critical thinking skills
- Ability to collaborate effectively across cross-functional teams and external partners

**Required Education and Skills:**

- Bachelor's degree in mechanical engineering or related field
- 8+ years of experience in mechanical engineering or mechanical system design
- Knowledge of high-volume manufacturing processes and/or automation.
- Experience leading engineering projects or technical development teams
- Proven capabilities using SolidWorks in a business environment.
- Strong troubleshooting and system-level critical thinking skills
- Ability to collaborate effectively across cross-functional teams and external partners
- Experience with lithium-ion battery systems
- Experience with sheet metal design, diecast, plastic injection molding
- Experience defining system architecture and product requirements
- Experience working with manufacturing partners and vendors to develop cost-effective solutions.
- Experience leading mechanical design from concept through production
- Experience in EV, robotics, aerospace, automotive, or energy storage industries

**Other Duties:**

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time with or without notice.