

Job Title: Technical Manager
Department: Engineering
Reports To: Chief Technology Officer (CTO)
FLSA Status: Exempt
Effective Date: September 20, 2017

Position Overview:

EnerDel designs, builds and manufactures lithium-ion energy storage solutions and battery systems with a focus on heavy duty transportation, on- and off-grid electrical, mass transit and task-oriented applications. The Technical Manager is responsible for supervising the assigned Technical Product Team and for detailed specification and integration of Li-Ion battery packs and systems.

Essential Job Functions

- Supervises and leads assigned Technical Product Engineering Team
- Acts as an internal interface to Business Development, Cell Engineering, Systems Engineering, BMS Engineering, Program Management, Procurement and Manufacturing
- Adheres to safety standards, with high degree of regard to employee and subcontractor safety
- Assists in performing system-specific training for owner / operator of the lithium power system
- Assists in the assembly, test, validation, and commissioning of all systems as required
- Builds and promotes the company's "team" philosophy and observe respect for the existing cultural boundaries
- Coordinates system documentation releases and engineering change procedures
- Creates/Develops advanced innovative product features and processes to enhance safety, reduce cost, and improve battery performance
- Creates flow diagrams, sequence of operations, bill of material, and system layouts as required
- Creates test & integration plans, user manuals, installation guides, and commissioning plans
- Demonstrates and executes performance in best interest of EnerDel, stakeholders, and customers
- Develops, monitors, and dynamically communicates product development objectives and milestones to program teams and management to ensure that performance, cost, and scheduling are met
- Develops program specific design verification plans (DVP) with efficient test timing; coordinate test requests and schedules and sources test facilities; execute function, safety, thermal and robustness battery pack tests in laboratory
- Engineers manufacturing friendly concept designs per customer specification with the corresponding creation/execution of the design validation plan
- Ensures team's adherence to EnerDel's quality management system
- Establishes gap analysis/battery configurations and develop concept designs for the mechanical design architecture, thermal management, and packaging of the battery management systems
- Identifies and resolves design issues and performs data analysis and generate comprehensive technical reports
- Interacts with customers on a frequent basis to support technical issues regarding system start-up, operation, repair, or warranty
- Manages systems throughout their life-cycle and performing DFMEA, FEMA, 8-D, and other types of analysis when necessary
- Oversees and ensures the deliverables of AIAG's APQP process for product development strategy and mapping to achieve customer PPAP
- Performs value engineering to provide cost effective results while maintaining customer satisfaction
- Practices the product/process development philosophy of 'set based concurrent engineering'.
- Regularly documents all innovative concepts and initiate invention disclosures to promote the growth of EnerDel's I.P. portfolio
- Serves the engineering team to a designed battery system by utilizing the necessary skill sets, tools, and metrics needed to defend and promote the technical solutions that are mandated by the (automotive, stationary power, and military) markets
- Serves and interfaces directly with, the customer by providing the necessary technical capabilities and resources to meet their application requirements
- Supports customers onsite with installations, integrations, commissioning, and troubleshooting – 15% travel (domestic/international)
- Supports field service team, providing feedback, diagnostics troubleshooting, and next-steps
- Travel may be required (~15% travel (domestic/international))
- Perform other duties as assigned

This job description is intended to convey information essential to understanding the scope of the job and the general nature and level of work performed by job holders within this job. This job description is not intended to be an exhaustive list of qualifications, skills, efforts, duties, responsibilities or working conditions associated with the position.

Required Knowledge, Skills, & Abilities:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills, and ability required.

- Preferred:
 - Bachelor's Degree in Electrical Engineering, Mechanical Engineering or related field
 - 8-10 years of experience in electrical, mechanical, software, and control systems engineering
 - Working knowledge and experience in high voltage electric vehicle (EV) and grid energy storage systems (GESS)
 - Working knowledge and the ability to work on high voltage systems

Supervisory Responsibilities: Supervises and leads Technical Product Team.

Physical Requirements/Hazardous Working Conditions:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential work functions.

Physical Demands

- Standing
- Walking
- Sitting
- Lifting
- Carrying
- Pushing/Pulling
- Climbing
- Balancing
- Stooping
- Kneeling
- Reaching
- Handling
- Feeling
- Talking
- Eye/Hand/Foot Coordination
- Vibration
- Typing/Keyboarding

Vision/Sight/Hearing

- Vision-Far Acuity
- Vision-Near Acuity
- Vision-Depth Perception
- Vision-Peripheral
- Color Vision
- Listening/Hearing

Environmental Conditions

- Temperature Changes
- Infectious Disease
- Humid
- Noise

Physical Strength

- Sedentary Work
- Light Work
- Medium Work
- Heavy Work
- Lifting up to 10 lbs.
- Lifting up to 25 lbs.
- Lifting up to 50 lbs.
- Lifting over 50 lbs.
- Hazards
- Wet
- Hazardous Chemicals
- Blood/Body Fluids

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