



Job Title: Electrical Engineer

Reporting To: Electrical Team Lead

Location: Vancouver, BC

Position Summary:

Proactive, enthusiastic personality that must take full ownership of the delivery of components to requirements and all issues related to that delivery. Produce practical engineering designs to tight timescales in a supportive team environment. This is a varied job with varying degrees of responsibility, with differing types of tasks ranging from initial design to vehicle sign-off, in-field support, supplier sourcing and liaison, but with practical design remaining central to the job. Responsible for the vehicle electrical system, to include hardware development, components selection & specification, circuit & harness design and 3D harness routing support systems.

Essential Duties & Responsibilities:

- Design and engineering responsibility for vehicle sub-systems to include one or more of the following:
 - EDS (electrical distribution system)
- Responsibilities include but are not limited to:
 - Creating and documenting design requirements
 - Creating and documenting DFMEA
 - Creating and documenting DVP
 - Concept development
 - Design calculations, simulation and analysis
 - Conduct design reviews (and create supporting presentations)
 - Represent sub-systems in engineering and management reviews (report progress against key activities, identify risks/shortfalls and recommend resolutions).
 - Hands on approach required to support other engineers key tasks in times of peak workload. Highly developed fault finding experience.
 - Professional communication and coordination in data gathering for engineering, service and marketing teams.
 - Work with manufacturing personnel and vendors to further improvement of products.
 - Ensure electrical compliance with relevant legislation for a global product.
 - Vehicle fusing & grounding strategy creation and modification

Knowledge, Skills & Experience:

Essential:

- Sound understanding of electrical engineering principles
- An enthusiasm for electrical engineering. A practical experience/background is essential
- Highly develop communication experience
- Have a proven electrical design background, ideally gained within at least one of the following environments
 - Automotive electrical design to include harness design
 - HV DC electrical design (up to 650Vdc)
 - Single phase & 3-phase AC distribution design experience



- Electrical component design and testing
- Have the ability work side by side with vendors, engineers and other technical staff.

Preferred:

- Detailed experience in the use and correct application of the following tools and techniques:
 - DFMEA
 - FE analysis
 - DVP
 - VAVE
 - 8D
 - DDR (design decision record)
 - TDR (technical design review)
 - Proven history of delivery of vehicle systems from concept to launch (preferably in a Powertrain environment) to include the specification of systems and components.
- EMI/EMC
- 12V charging systems
- HEV/EV design and development experience / knowledge of main components.
- AutoCAD LT
- SolidWorks
- Proficient with 2D harness design. (ideally VeSys)
- A good understanding of BOM's, their generation, and management.
- A good understanding of quality procedures.
- Knowledge of homologation issues and their relevance to commercial vehicles would be advantageous.
- Working within a change management system, including a deviation sub-system.

Qualifications Required:

Electrical engineering degree, with 5 years experience.

Personal Qualifications:

Clear and concise communicator; Good team member; Flexible approach; Able to work autonomously; Work to project milestones under pressure; keen to take on responsibility.