

| Job Title: Electrical Engineer/Designer |                                     |
|---|-------------------------------------|
| Job Status: Office                      | Location: Mount Pleasant, Wisconsin |

#### Job Summary:

Conveniently located in Mount Pleasant, Racine Railroad Products is a Wisconsin family-owned business, proud to provide innovative equipment and tools to the most prominent rail customers in the world. Our Maintenance-of-Way equipment is designed to ensure our customers receive the benefit of improved safety, performance, and reliability.

The Electrical Engineer will work with project teams composed of Design Engineers, Software & Controls Engineers, and Project Managers to assist in the design of railroad maintenance of way equipment. Duties to include research, selection, and analysis of electrical components. Design and documentation of electrical schematics, wiring interconnects, control boxes, HMIs, and electrical junction boxes. Machine analysis to include load calcs, circuit analysis, fit for purpose testing.

## **Essential Duties:**

| 60% | Research, design, analyze, and document machine electrical/control systems for new development projects.        |
|-----|---|
| 20% | Maintain, review, and edit existing electrical system documentation.  |
| 10% | Assist manufacturing and troubleshooting of first production runs of new equipment and projects.                |
| 10% | Collaborate with project managers to estimate the required timetable, tasks, and resources needed for projects. |

# **Skills & Qualifications:**

- Plan, organize, and coordinate electrical engineering and multi-disciplined team/design projects while engaged in the planning, design, and construction phases of engineering projects.
- Prepare and modify electrical design drawings (e.g., schematics, wire harnesses, wiring interconnects, connectors, control boxes, junction boxes, electrical cabinets, HMIs, and component drawings).
- Conduct load analysis of circuits and machine systems.
- Ability to research new technologies for suitability and adaptability to mobile equipment environment.
- Ability to work independently and with teams.
- Training and experience with CAD Software (SolidWorks and AutoCAD).
- Properly interpret and apply American National Standards Institute (ANSI) and International Standards Organization (ISO), and customer design requirements for the preparation of electrical design/construction documents, specifications, and system descriptions related to assigned tasks.
- Familiarity with engineering processes (Engineering Notices, Engineering Release Orders, Engineering Change Orders, and etc.).



### **Preferred Qualifications:**

- Previous rail industry experience.
- Familiarity with electrically controlled hydraulic systems, pneumatic systems, and CAN bus communication systems.
- Bachelor's degree in engineering preferred but not required if supplemental training and work experience demonstrated.
- Familiarity with PDM software such as SolidWorks PDM Enterprise and SolidWorks Manage.
- Passionate about seeking improvement and driving change within our business and engineering processes.
- Driven to explore new technologies and how to adapt them to railroad industry.

### Benefits Include:

- Insurance coverage including medical, dental, vision, life insurance, as well as a health savings account (HSA)
- Culture committed to work life balance with hybrid schedules and generous PTO
- Company-wide bonus program
- Assistance with continuing education

If this opportunity is a fit for you, please send your resume and starting salary requirements directly to <u>careers@racinerailroad.com</u> and we'd love to get the process started.

If you'd like to learn more about the Racine Railroad Products family, please visit our website at <a href="https://www.racinerailroad.com">https://www.racinerailroad.com</a> or on LinkedIn at <a href="https://www.linkedin.com/company/racine-railroad-products/">https://www.linkedin.com/company/racine-railroad-products/</a>.