



Job Title: Design Engineer

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 (MOW) is designed to ensure our customers receive the benefit of improved safety, performance, and reliability.

The Design Engineer will report to Project Manager and work alongside other Design Engineers, Designers/Drafters, Software & Controls Engineers, and Electrical Designers to assist in the design of railroad maintenance of way equipment.

Essential Duties:

- Work on New Product Development and/or Product upgrades/maintenance projects under the guidance of project manager
- Create railroad MOW machine design concepts, including components, weldments, assemblies for mechanical, electrical, hydraulic, and pneumatic systems
- Participate in Design validation via analysis, calculations, prototyping & testing
- Production support including completing/updating engineering documentation and assembly instructions
- Perform Finite Element Analysis using Solidworks simulation software (Asset)
- Participate in project team meetings/design reviews and communicate design ideas with peers and cross-functional teams in a clear and concise manner
- Complete & Review engineering drawings, documentation, and models for accuracy and adherence to project plans, design goals, and accepted practices.
- Estimate time durations for drafting/modeling tasks and resources for use in developing project schedules, budgets and comply with defined critical deadlines.
- Utilizing PDM vault & SW Manage Systems to store and manage product lifecycles

Skills & Qualifications:

- 5+ years of relevant design experience in Railroad or Off-Highway mobile equipment industry (Preferred)
- Ability to research new technologies for suitability and adaptability to mobile equipment environment.
- Ability to generate and review design work, including adherence to design requirements, customer specifications, industry guidelines, and regulatory requirements.
- Ability to perform analysis in mechanical, hydraulic, pneumatic, and electrical systems including motion analysis
- Ability to perform, interpret, and evaluate computer simulations for Finite Element Analysis (FEA) using SolidWorks simulation software.

- Ability to work independently and with teams
- Training and experience with CAD Software, primarily SolidWorks and some AutoCAD.
- Familiarity with engineering processes such as Engineering Notices, Engineering Release Orders, Engineering Change Orders, Engineering Change Requests, and etc.
- Familiarity with design and production of metal fabrication processes for weldments, machined components, castings, sheet metal, large assemblies and etc.

Preferred Qualifications:

- Previous railroad industry or off-road equipment design & manufacturing 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.
- Excellent quantitative and analytical problem solving skills
- 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.
- Familiarity with design & process improvement methodologies (DFMA, Six-Sigma, Lean Manufacturing, Kaizen, etc.)
- Ability to travel with hands on capability in shop and field environments.

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 careers@racinerailroad.com 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 <https://www.racinerailroad.com> or on LinkedIn at <https://www.linkedin.com/company/racine-railroad-products/>.