RENEWABLE INNOVATIONS, INC.

Job Description

Division/Department:	Engineering
Job Title:	Thermal Engineer
Reports to:	Mechanical Engineering Lead

Class:	Type of position:	Hours_40 / week
	☒ Full-time ☐ Part-time	☒ Exempt
	☐ Contractor ☐ Intern	☐ Nonexempt

GENERAL DESCRIPTION

Department Objectives

General Overview

Renewable Innovations is seeking a talented Thermal Engineer to help with the design and integration of liquid cooling systems for use with proton exchange membrane fuel cells (PEMFC). As a team player, you will play a key role in analyzing, designing, and specifying thermal related components to utilize in various cutting-edge products.

Technical

- Design thermal systems utilizing SolidWorks with primarily focus on:
  - Implementing best practices in
    - Technology
    - Safety
    - Performance
    - Maintenance
  - Utilize strong analytical skills to calculate heat rejections, pressure losses and size system components.
  - Write & conduct tests on thermal systems.
  - Create drawings and P&ID diagrams.
  - Develop work instructions for production personnel.
  - Assist in creating bill of materials with supporting documentation.
  - Develop and maintain engineering files and drawings.

Other

- Bring excitement and joy to your work and projects. Uplift others around you. Promote the company's objectives of Green, Clean, and Exciting.
- Continue to learn and improve using on-going lessons learned and studying best practices.
- Study continually the industry, technology, and safety best practices and implement them.
- Make sure your tools are always sharp, clean, and ready (metaphorically as well as actually).
- Must have a strong work ethic and willing to take on new challenges.
- Works and collaborates well in groups as a contributing team member.
- Enjoys working in both office and fabrication shop settings.

EDUCATION

- Minimum of a BS in Mechanical engineering with an emphasis on Heat transfer or Fluid Dynamics.
- Industry and other Educational Experience.

EXPERIENCE

- Min 3+ years working as a Thermal Engineer designing liquid cooling systems (Required).
- Min 3 years in SolidWorks, or 5 years in other 3D modeling software.
- Demonstrated experience utilizing SolidWorks Flow simulation.
- SolidWorks PDM.
- Experience in specifying thermal related components.
- Deep understanding of sizing pumps, fans, radiators, heat exchangers, valves & fittings (Required)
- Strong knowledge of materials and how they interact with one another.
- Hands-on shop experience is a plus in the following areas:
    - Welding
    - Machining
    - Flatwork
    - Understanding of finishing processes (paint, powder coating, galvanizing & anodizing)
    - 3D Printing
- Worked in a research and development setting.

SKILLS

- Any that you can bring to the team to improve the product, the company mission, the team, etc.

CURRENT AND NEW TRAINING

- Safety Standards
- SolidWorks (All Modules)
- Understanding the development process
- Safety
- Lean manufacturing
- Leadership
- Writing
- Communication and Marketing

PERFORMANCE EVALUATION CRITERIA

Self

- Set 3 self-goals of improvement quarterly.
- Let your peers and manager know what they are.
- Evaluate your progress often.

Peer

- Work with your peers and help them improve.
- Work as a team to be the best Engineering professional in the industry.
- As you meet with other engineers learn as many “best practices” as you can from them.

Manager

- Work closely with your manager so they can help with your quarterly goals.
- Your manager will focus on your improvement and team contributions to elevate you, the team, and the company.