

## Design Engineer

### Why ClearFlame

Diesel engines are critical to world economies and quality of life. However, they are currently coupled to dirty diesel emissions. At ClearFlame Engine Technologies, we are breaking the bond between the diesel engine and diesel fuel, clearing the path to gigaton scale emissions reduction for hard-to-electrify applications, including heavy-duty trucking, power generation, and other off-highway markets.

Easily integrated into existing engines and new production, ClearFlame maintains the same rugged performance and practicality at a much lower cost than current alternatives, offering a rapid pathway to decarbonizing diesel-dominated sectors worldwide. By allowing these engines to keep fulfilling their vital functions—but replacing diesel with plant-based, low-carbon liquid fuels—ClearFlame simultaneously addresses their climate impact, as well as the energy equity and environmental justice issues that disproportionately affect underrepresented populations globally.

We are on a mission to free global economies from a need for petroleum-based fuels in heavy-duty applications. We have big ambitions, but we can't do it alone. We need talented, passionate individuals to help make our vision a reality. In return, we provide comprehensive benefits and are committed to providing a positive team culture—supporting our team relentlessly and focusing on creating personal successes as well as organizational ones.

### About the Position

#### Summary

The individual will lead efforts that include new designs, improvements to existing designs, prototype development, testing and manufacturing support for our low-Carbon, Engine conversion kits. An engineering background and education will be important to quickly learn and support the engineering efforts of ClearFlame's technology and products. This position requires a detail-oriented individual with excellent communication skills and technical knowledge. The ideal candidate will be an energetic and agile person that contributes strong technical expertise to a fast-paced environment.

## Essential Duties and Responsibilities

- Perform a full lifecycle product development (design, develop, test prototypes, manufacture and implement) for our low-Carbon, Engine conversion kits
- Own a wide variety of technical, documentation, procurement, and organizational tasks as part of a small, agile team
- Engage in hands-on debugging, root cause analysis and implementation of corrective actions in collaboration with cross functional teams consisting of multiple engineering and operations disciplines
- Integrate various inputs based on schematics, test requirements, and engineering guidance into testable solutions.
- Support supply chain and manufacturing, including collaboration with suppliers to improve manufacturability and reduce costs
- Deliver complete documentation of product design- including 3D design of parts and assemblies, associated 2D drawings, analysis reports, test plans and manufacturing instructions
- Work with test engineering teams to validate systems and components with fast cycles of learning for deployment into the next generation of Conversion kits
- A positive, team player attitude with a passion for contributing to the overall success of the team and ClearFlame Engines.
- Performs other duties as assigned.

## Education and Experience Requirements

- Bachelors in mechanical engineering or equivalent with proven working experience in related field
- Excellent verbal and written communication skills, with specific ability to write at a professional and technical level
- Desire to work in a fast-paced, entrepreneurial environment
- Curiosity, willingness to learn and adapt to a wide degree of task and situations
- Highly adaptable self-starter with the ability to thrive in a dynamic environment and willingness to learn and adapt to a wide degree of task and situations.
- Solid understanding of core Engineering concepts including mechanics, kinematics, thermodynamics, materials science etc.
- Expert user of 3D CAD on at least one platform (AutoCAD Preferred), package and proficiency with basic GD&T, in addition to familiarity with PDM/PLM systems for engineering change control
- High level of analytical ability where problems are complex
- Strong fundamentals in IC engines, Thermodynamics, and Fluid mechanics
- Knowledge of MS Office tools is **(Preferred)**.

## Physical Requirements

- Prolonged periods of sitting at a desk and working on a computer
- Must be able to lift 25 lb. unassisted at times
- The position location is in the corporate headquarters in Geneva, IL.

## Equal Opportunity Employer:

ClearFlame is an Equal Opportunity Employer. Employment decisions are made without regard to race, color, religion, national origin, gender, sexual orientation, gender identity, age, physical or mental disability, genetic factors, military/veteran status or other characteristics protected by law.