

Mechanical Engineer

Reports To: Lead Engineer

Manager Once Removed: Director, Operations

Purpose: To provide engineering services for new or existing product related to diesel engine applications. Including but not limited to 3D design of supporting or protective metal structures, technical pre-sales support, transitioning prototype product into production.

Excellence in Role Requires Ownership and Accomplishment of the following:

- Research, analyze and creatively design new products to meet customer needs and study specifications, manuals, and other data to evaluate the feasibility, cost, and maintenance requirements of these designs or applications.
- Assist in the preparation of production cost quotations; by aiding with estimates of equipment, material and labor costs.
- Skillfully and tactfully negotiate project scope of work requirements and quality issues, with all parties.
- Work extremely well coordinating customer needs with sales, production and materials management staff; understanding the customer's requirements, contributing technical expertise, commercial acumen, and assist in closing the sale and maintaining positive relationships with clients.
- Specify system components or direct modification of products to ensure conformance with engineering design and performance specifications.
- Develop the structural design of products; prepare drawings using computer-assisted design/drafting equipment and appropriate software.
- Conduct trouble shooting and root cause analysis, develop product quality metrics and create and update written quality systems and procedures.
- Write performance requirements for product development or engineering projects.
- Conduct research that tests and analyzes the feasibility, design, operation and performance of equipment, components and systems.
- In a team environment, confer with engineers and other personnel to implement improved operating procedures, bills of material, resolve system malfunctions, and provide technical feedback.
- Support shop floor staff by trouble-shooting process and/or quality issues and continually review and optimize existing manufacturing processes to increase productivity and quality utilizing Lean solutions
- Design test control apparatus and equipment and develop procedures for testing products and devise processes for assuring quality production
- Investigate equipment failures and difficulties, diagnose faulty operation, and recommend design modifications to eliminate machine or system malfunctions.
- Organizing the archive of engineering specifications, drawings, test results and customer specifications and maintain traceability of documents, according to discipline and itemization criteria, by proper filing and indexing.

Education, Skills and Work Experience:

- BS Mechanical Engineering with core knowledge of structure, fluids, heat transfer; and engines
- 2-5 years of experience in internal combustion application engineering.
- Comprehensive knowledge of mechanical design, 2D/3D modeling ability (SolidWorks preferred).
- A background / passion for internal combustion engines preferred.
- Basic knowledge of electrical components, circuits and generators.

Behavioral Guidelines:

- Being coachable.
- Ability to self-generate solutions to complex challenges.
- A passion for creating new products and processes.
- Enjoy and thrive working in a no-excuse, highly accountable environment with other similarly motivated individuals.
- Excellent communicator; communicate with regular frequency, to project stakeholders so that no one is left guessing regarding status.
- Adheres and is an example of corporate values of integrity, excellence, respectfulness, positivity and perseverance.
- Accountable to fulfilling our Customer Promises.

Specific Job Requirements:

- 20% Travel.
- 20% Time on Shop Floor, R&D or Production cells.
- Valid driver's license.
- Ability to drive a forklift/reach-truck.
- Ability to lift 50 lbs.