POSITION DESCRIPTION

Job Title: Mechanical Engineer II – Temporary
Department name: Mechanical Engineering
Manager: Manager, Mechanical Engineering
Work location: Billerica, MA

Exempt ☐ Non-exempt ☐

Job summary
Performs mechanical engineering work that requires a high degree of technical competence. Conducts independent technical investigations involving the application of a wide variety of mechanical engineering principles.

Essential duties and responsibilities

☐ Will actively participate as a global team member with other Engineers, Designers, Sales, Marketing, Manufacturing, and Purchasing personnel to complete design projects quickly and cost effectively.
☐ Coordinate project tasks and schedules, delegate work to designers or drafters and support staff as required.
☐ Responsible for the design, prototyping, testing, specification and documentation of thermal processing systems, subassemblies and components. Responsible for the layout and detailed mechanical design and documentation of subsystems and subassemblies.
☐ Drive projects involving new concepts and approaches to the design on new products.
☐ Recommend materials and components for inclusion in design specifications based on past experience and on catalogue reference data.
☐ Solve technical problems with equipment in the field, provide technical expertise to the Sales organization, work with and develop suppliers, interact and direct engineering activities.
☐ Strong understanding of Pro-Engineer and detail drawings/models applying large CAD Model assembly management skills.
☐ Study industry standards and ensure that designs are safe and meet applicable industry safety requirements.
☐ Actively Participate in Design Reviews. Review designs with other Engineering, Manufacturing, Sales, and Marketing personnel as well as equipment users to ensure that designs meet all requirements.
☐ Prepare and present written, oral visual material to support proposals, presentations, design reviews and written reports.
☐ Develop cost estimates for proposed projects which include labor and material costs.
☐ Organize and maintain project folders and report project status to Manager, Engineers and others on a regular basis. Must keep technical information updates and a folder system that works for the department.
☐ Plan, perform or direct and document experiments to prove design performance.
☐ Deal with work-processes, optimization methods, and risk management tools in such projects.
☐ Strictly adhere to all BTU safety polices.
Other duties and responsibilities

☐ High Temp material selection – A ceramics background would be a plus, along with corrosion experience.
☐ Thermodynamics – The understanding of heat transfer, phase transitions, chemical reactions.
☐ Project Management skills, or willing to be trained in this subject.
☐ Provide the ability to bring together component or sub-systems.
☐ Some travel may be required.
☐ Manufacturing experience helpful.

Skills and knowledge

☐ Good verbal and written communication skills. Must to be able to clearly explain the perspective of the engineering department to upper management as well as to the engineering team.
☐ Apply intensive and diversified knowledge of mechanical engineering principles and practices.
☐ Able to make decisions independently on engineering problems. Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
☐ Able to handle multiple projects and tasks concurrently.
☐ Understanding of sheet metal and machined part fabrication practices and documentation standards.
☐ Strong ability to work with others and be an active part of a cross functional team.
☐ Identify complex problems and reviewing related information to develop and evaluate options and implement solutions.
☐ Highly organized and detail oriented with the ability to prioritize, manage multiple projects and work to a schedule.
☐ Proficient in Microsoft Office.

Education and experience

☐ BS in Mechanical Engineering
☐ Minimum of 4 - 6 years of experience as an Engineer I or similar role