Job Description – Mechanical Design Engineer

Location: United Kingdom
Site: Saffron Walden
Reporting to: Principal Mechanical Design Engineer

Department: Engineering
Employment: Full-time, Permanent,

About LPA

LPA Group plc (AIM: LPA) is an innovation-led engineering company that designs and manufactures electronic and electro-mechanical components and systems. Founded in the mid 1800's, the Company has a long product development history where high reliability, low maintenance and life cycle costs are an intrinsic part of our product design and build ethos. All companies are ISO 9001 certified.

Overview:

We are seeking a Mechanical Design Engineer to support the design and development of mechanical products, components, and systems. This role requires strong technical capability, attention to detail, and the ability to work collaboratively within a multidisciplinary engineering team to deliver high-quality, innovative solutions aligned with business and customer requirements.

Key Responsibilities:

- Design mechanical components, systems, and products using 3D CAD software (CATIA preferred).
- Develop and improve existing products, ensuring performance, manufacturability, and cost-efficiency.
- Work within the Product Development Process to ensure consistent documentation, traceability, and quality.
- Produce 3D CAD models, detailed manufacturing drawings, Bills of Materials (BOMs), and supporting technical documentation.
- Support prototype development, testing, and validation activities.
- Conduct technical investigations and contribute to problem-solving and root cause analysis.
- Prepare technical reports, datasheets, and documentation to support internal and external stakeholders.
- Ensure designs comply with relevant standards, directives, and environmental requirements (e.g. LVD, MD).
- Collaborate with cross-functional teams including electrical engineering, production, and quality to deliver integrated solutions.

- Participate in design reviews, risk assessments, and engineering change processes (e.g. FMEA/FMECA).
- Participate in meetings and customer events including exhibitions and inward visits to our facilities, setting a leading standard for design excellence.
- Travel as needed in UK and Globally

Required Skills:

- Proven experience in mechanical design and product development.
- Proficiency in 3D CAD software (Catia preferred), including part modelling, assemblies, and drafting.
- Strong understanding of manufacturing processes, materials, and design for manufacture/assembly (DFM/DFA).
- Ability to interpret and create engineering drawings and technical specifications.
- Good problem-solving skills with a methodical and analytical approach.
- Strong communication skills and ability to work effectively within a team environment.
- Awareness of engineering standards (BS/ISO), compliance, and quality requirements.

Education & Experience:

- Bachelor's degree in mechanical engineering (or equivalent).
- 2-5 years of experience in a mechanical design or product development role.

Key Competencies:

- Solid technical capability in mechanical design and engineering principles.
- Strong attention to detail in design, documentation, and execution.
- Effective time management and ability to meet project deadlines.
- Proactive approach to problem-solving and continuous improvement.
- Ability to work collaboratively across multidisciplinary teams.
- Adaptability in a dynamic and evolving engineering environment.
- Good communication skills with both technical and non-technical stakeholders.
- Commitment to quality, safety, and compliance standards.

This job description outlines the key duties and responsibilities but may evolve to reflect changes in the company's strategy, technology landscape and business needs.