

# Senior Mechanical Design Engineer

---

## Position Overview:

We are seeking a skilled and detail-oriented Senior Mechanical Designer to join our engineering team. The ideal candidate will have extensive experience in mechanical design, a strong technical background, and a passion for innovation. The Senior Mechanical Designer will be responsible for leading the design and development of complex mechanical systems and components, ensuring compliance with industry standards and customer requirements.

## Key Responsibilities:

### Design and Development:

- Create and develop detailed mechanical designs, models, and drawings using SolidWorks CAD software.
- Ensure designs meet project specifications, functionality, performance, and manufacturability requirements.
- Perform tolerance analysis, material selection, and stress calculations for mechanical components.
- Review of technical documentation and drawing checking.
- Specifying equipment and obtaining quotations

### Project Leadership and Management:

- Lead internal and external design reviews and provide technical guidance to team members.
- Collaborate with cross-functional teams including software/control engineers, electrical engineers, and technicians/manufacturing.
- Manage multiple projects, prioritise tasks, and ensure deadlines are met.
- Manage customers, suppliers and external services

### Quality Assurance:

- Conduct prototype testing and validate designs against performance criteria.
- Identify and troubleshoot design issues, recommending and implementing solutions.
- Ensure compliance with industry regulations, standards, and safety guidelines.

### Documentation:

- Prepare project proposals, timing plans and costings for potential projects
- Prepare and maintain detailed technical documentation, including BOMs, assembly instructions, user manuals, test procedures, risk assessments and UKCA compliance documentation.
- Maintain and update design databases and records.

### Continuous Improvement:

- Stay up-to-date with advancements in mechanical design technology and industry trends.
- Identify opportunities for process improvement and cost optimisation in design and manufacturing.

## Qualifications and Skills:

- Bachelor's degree in Mechanical Engineering, Industrial Design, or a related field.
- 7+ years of experience in mechanical design, with a focus on manufactured parts and test rig design
- Proficiency in SolidWorks CAD.
- Strong knowledge of materials, manufacturing processes, and industry standards.
- Strong knowledge of GD&T.
- Experience with finite element analysis (FEA) and computational fluid dynamics (CFD) tools is a plus.
- Excellent problem-solving skills and attention to detail.
- Strong communication and collaboration skills.
- Ability to work independently and mentor junior designers.

## Preferred Skills:

- Experience in industries such as aerospace, automotive, or R&D.
- Experience in pipework and framework fabrication design, including flange connection calculations
- Experience in producing P&ID's
- Awareness of electrical and software/control equipment

## Work Environment:

This role involves working in an office setting, with occasional visits to manufacturing facilities or customer sites. Depending on project needs travel may be required, including overnight stays, to support/conduct testing, commissioning and site acceptance tests.

## Company benefits

We offer a friendly working environment in Derby. Company benefits include:

- A competitive salary of £40k - £60k based on experience
- Bonus scheme
- Competitive company pension contributions
- Private medical cover
- 25 days annual leave + bank holidays + discretionary Christmas shutdown
- 40 hour working week (primarily office based) with flexible working pattern

This position is ideal for a motivated individual who thrives in a collaborative, fast-paced environment and is eager to take on challenging and impactful projects.

## Security clearance

Please note that Security clearance via Experian Background Checking Services will be required if the candidate is offered the role.

## How to Apply

If you would like to join our team please send your CV to [zoe@scitekconsultants.co.uk](mailto:zoe@scitekconsultants.co.uk)