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## Mechanical Design Engineer – Additive / Bespoke Machinery

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Location: Bicester, Oxfordshire  
Contract: Permanent  
Report to: Engineering Project Manager  
Salary: Negotiable dependent on experience

KW Special Projects Ltd requires a mechanical design engineer to join the engineering team in this ambitious and growing high performance engineering business. The role will work primarily across additive and composite engineering requirements in a diverse range of business sectors. We are looking for someone with a “can do” attitude and strong lateral thinking skills with a keen interest in additive manufacturing. We want someone who is excited by the engineering process and can apply their skills to a variety of diverse projects using their initiative and knowledge.

### **About KWSP**

KWSP operates within the high-performance engineering sector – designing, manufacturing and supplying complete solutions.

Evolved out of its sister company KW Motorsport, KWSP provides services to meet the rapid growth in demand for a non-conventional approach to the integration of new processes and technologies into high performance engineering and manufacturing.

Guided by the principles of motorsport, the need for speed, efficiency and precision through the use of technology, materials and processes, KWSP takes a disruptive approach to a clients’ creative ideas - facilitating the transfer of knowledge from one sector to another. We work in many sectors including high performance engineering, automotive, motorsport and bespoke machine design.

### **Our capabilities include**

- High Performance Engineering
- Digital Fabrication
- Additive Manufacturing
- Automation
- Lightweight structures and composites
- Industrial Inkjet
- High Performance Engineering project management
- Special purpose machine design and manufacture

### **About the role**

Reporting to the Engineering projects manager you will work independently on small projects or as part of a team on our larger projects. We do a wide range of work at KWSP and whilst your prime role will be to work on additive and bespoke machine design, you may be exposed to other areas of our business as part of a larger team.

You will be communicating with clients at all levels. As a result, you will also need to demonstrate effective communication skills.

The role would appeal to someone who works best when they need to think creatively about a design solution, adaptable to client requirements and is able to work independently whilst communicating with the team.

Specifically, the role will involve.

**Design:**

- Use of CAD and build software (Solidworks, Magics etc)
- Experience of control systems and programming desirable - (Beckhoff)
- Specification of electrical mechanical control system requirements
- Machine system and architecture design for additive processes
- Developing concepts schemes to releasing designs for manufacturing
- Working with design specifications to meet budget requirements in terms of time and costs.
- Preparing detailed design models and drawings
- Creating and managing Bills of Materials
- Liaison with suppliers

**Managing Customer Relationships**

Communicating with customers effectively at all levels in relation to;

- Preparing Specifications
- Design reviews
- Project reviews
- Project delivery

**Project co-ordination / management:**

- Control own work to time and work within budgetary requirements / constraints
- Manage others as required
- Plan and estimate work and budgets

**Opportunities for Career Development**

KWSP is a small but growing business. For someone with the right “can do” attitude, technical skill and initiative there may be future opportunities within the business

**Person Specification: Core competencies and experience.**

Applicants will preferably have a degree in mechanical engineering or a related discipline. We will however consider applicants with an HND in mechanical engineering or a related discipline. We will also consider individuals with equivalent experience/combined education such as completion of an Apprenticeship or progression from a hands on role.

- All applicants are required to have;
  - Proven and skilled use of software Solidworks, Magics and/or other geometrical/build suites
  - Demonstratable understanding of control and automation design and development
  - Competent in generation of machine electrical specifications
  - Evidence of client-facing experience
  - Exceptional written and verbal communication skills
  - Ability to prepare specifications and deliver these within budget
  - Confident use of MS-Office applications
  - Experience in drawing office procedures
  - Experience or awareness and appreciation of FEA, CFD and simulation techniques
  - Knowledge of normal DO procedures and sign off processes
  - Creation and dissemination of good working practises and processes

- Practical hands-on assembly experience
- Ideally have or be working towards Chartered status or would like to do so
- The successful applicant will be;
  - self-motivated,
  - a problem solver/have strong lateral thinking skills
  - able to demonstrate a commitment to quality and meeting customer requirements
  - able to show initiative
  - tenacious in meeting deadlines
  - practical as well as creative and prepared to be hands on
  - able to demonstrate precision and attention to detail including good record-keeping
  - able to work effectively under time pressure
  - flexible
  - able to work with health and safety in mind in terms of design and working procedures

This role is suited to someone with career experience

The role may require you to work out of main office hours or to travel around the UK or abroad and spend periods of time with our customers off site.

Whilst every effort has been made to explain the main duties and responsibilities of the post, each individual task undertaken may not be identified.

Employees will be expected to comply with any reasonable request from a manager to undertake work of a similar level that is not specified in this job description.

To apply for this role please send a CV and covering letter to [recruitment@kwspecialprojects.com](mailto:recruitment@kwspecialprojects.com). In your covering letter please **provide examples to demonstrate you have the competencies, skills and experiences referred to in the Person Specification section**

KWSP is an equal opportunities employer