



Principal Engineer e-Machine Design

ADVANCED POWERTRAIN SOLUTIONS
Leamington Spa, Warwickshire

Reporting to Engineering Manager

Do you strive to work in an **innovative and dynamic environment**? Yes? Then take a look at this **unique opportunity** at our **Leamington Spa office in Warwickshire**.

Drive System Design (DSD) is a growing engineering consultancy. **What makes us different? Our people!**

As we expand, we need to ensure we have the right people in our team to continue to achieve our strategic vision.

OUR VALUES

How do you apply our values of **Drive, Expertise, Collaboration & Innovation**? Our people live and breathe our core values in everything they do.

WE'LL OFFER YOU

- ★ An environment where you can be yourself and realise your full potential by having the support of the people you work with.
- ★ A people-oriented work culture, where we always follow through on our projects, no matter how big the challenge, and aim to build lasting relationships with our clients.
- ★ A competitive salary and benefits package which recognises your exceptional value to our business.

QUALIFICATIONS

Degree educated in mechanical, electrical or control system engineering or related discipline OR equivalent demonstrable experience.

KEY SKILLS

- Strong leadership qualities
- Commercially astute
- Confident in dealing with people matters
- Innovative thinker and problem solver
- Project management

HOW TO APPLY

Please send your CV and covering letter to hr@drivesystemdesign.com

YOU WILL BE

Joining a talented and ambitious engineering consultancy who collaborate with customers from some of the largest organisations in industry. We strive to engineer products and technologies that genuinely benefit both our customers and the wider world.

As a Principal Engineer, you will be responsible for providing considerable in-depth technical knowledge and expertise on complex major projects. You will apply engineering knowledge and principles to devise innovative solutions to unique engineering challenges for a wide variety of customers, markets and sectors. Working closely with your team to identify and develop DSD's future capability and direction. Supporting, coaching and mentoring engineers, ensuring they are developing skills and capabilities whilst using the most appropriate methods. Providing knowledge and experience in business development activities.

CAN YOU SAY YES TO THE FOLLOWING?

- ✓ You have engineering experience relevant to a technical consulting or engineering services environment; working on multiple disciplinary projects for a variety of customers
- ✓ You are a natural collaborator, able to build and manage effective working relationships with your direct team and colleagues
- ✓ You provide clear technical leadership to major projects, using and developing specialist skills in self and others
- ✓ You effectively communicate complex ideas and information to a range of audiences and stakeholders
- ✓ You have a "can do" attitude with high levels of commitment, enthusiasm and motivation
- ✓ You are open and honest with high professional standards and ethics; credible internally and externally

KEY RESPONSIBILITIES

- Contribute to design and development activities for electric machines across automotive, commercial transport, off-highway and aerospace sectors
- Apply knowledge of electromagnetic, thermal and mechanical design to optimise hybrid and traction machines to best in class standards of performance
- Support research into machines and associated systems to push relevant technology beyond state of the art
- Act as knowledge source for problem solving of complex interaction issues such as NVH, control instability and EMC.
- Supervise build and test of prototype machines
- Manage and deliver internal and external projects to a high standard within time and cost constraints
- Provide direction and guidance for a growing department across the entire product development lifecycle
- Carry out engineering tasks, executed to the highest level whilst following and developing DSD technical processes and procedures
- Develop and maintain strong collaborative relationships with peers, business development and technical leaders
- Support the business development team in the creation of technical project proposals and resourcing estimates

WHAT YOU WILL NEED

- A degree (2:1 or above) or PhD in electric drives, electrical engineering or a related subject
- Deep understanding of multi-phase synchronous and asynchronous motor design theory and practice, covering induction, IPM, SPM, hybrid reluctance and SR
- Experience in the design and development of a range of electric machines and drives using electromagnetic and thermal design software packages such as MotorCAD (preferred), Altair Flux, Infolytica MagNet, JMAG etc.
- Experience in the manufacture of machine components including magnets, laminations, windings and containment sleeves
- Be able to positively motivate the team working on a wide variety of electric machine & actuator design projects from low power actuators to high performance traction drives
- Ability to interface with clients with a positive, inquisitive and value-adding approach