



## Job Title – Chief Electrical Systems Engineer

<b>Date position required:</b>	January 2018
<b>Reports:</b>	None
<b>Salary:</b>	Competitive
<b>Benefits:</b>	Pension, 28 days holiday (+ bank holidays), salary sacrifice
<b>Site:</b>	hofer powertrain UK, 2, Titan Business Centre, Spartan Close, Warwick CV34 6RR
<b>Applications required by:</b>	ASAP
<b>Application format:</b>	CV and covering letter

## hofer powertrain – Part of the hofer AG (Group)

hofer, established in the 1980's, is a privately owned, German based, automotive engineering consultancy growing to in excess of 1,000 people over the next few years. We work with many of the world's automotive OEMs, Tier 1 suppliers and automotive technology centres and have numerous powertrain components in mass production; including hofer designed electric motors and hybrid modules to full dual clutch transmissions.

With numerous offices across Germany, Austria, Italy, America, China and the UK, hofer has a truly global presence allowing comprehensive support for powertrain projects across all vehicle sectors.

- Specific sites setup to support many of the German OEMs
- hofer mechatronik GmbH (Part of the hofer group) is the largest independent automotive hydraulics consultancy in the world
- hofer has its own inverter / electric control technology and has designed hybrid modules and e-motors that are in production across the world
- Full design to production experience of hybrid powertrain technologies from energy storage to the road
- Full engine and motor driven test capability
- Production supplier to VAG group

As part of hofer group's global growth, and the continuing expansion of hofer powertrain UK, a vacancy has arisen for a Chief Electrical Systems Engineer to join the business at the Warwick office. Reporting to the Engineering Manager, hofer powertrain UK seeks an Electrical Engineer with a broad experience of automotive electrical systems and their development for production; particularly e-powertrain solutions and their associated power electronics and energy storage systems.

The hofer powertrain UK Electrical department is currently involved in the customer-facing delivery of both hybrid and pure electric drivetrain solutions, supported by a team of 110 e-machine; power electronics and software specialists predominantly based in Würzburg, Germany.

**The key functions of the role:**

Lead the delivery of hofer e-powertrain systems and solutions into multiple customer applications, interfacing directly with the customer; representing their interests with the internal team of technical experts and designers.

Manage the electrical attribute owners to ensure hofer e-powertrain systems are correctly electrically integrated into customer applications, and manage interfaces outside of the electrical domain.

Direct the capture, management and development of customer's electrical powertrain system requirements, ensuring alignment between internal team(s) and the customer.

Liaise with, including travel to, other hofer sites in order to co-ordinate design activities and ensure their delivery is in line with the programme requirements.

Direct the development of client electrical system(s) and components to the agreed requirements and processes.

Lead system and component-level safety case development, and follow industry standard techniques to ensure a robust design, e.g. FMEA.

Plan, manage and action Design Verification and Validation activity at a system and/or vehicle level.

Manage and co-ordinate the release of electrical components into hofer and client PLM systems, and support through PPAP into production across multiple projects.

Build and maintain a strong customer relationship, to facilitate technical interfacing between hofer teams and the client.

Manage interfaces between the electrical system(s)/component(s) and the rest of the vehicle, liaising with cross-functional teams within hofer and the customer.

**Qualifications / Education / Experience required:**

Degree or equivalent in a relevant Engineering or Science related discipline.

A minimum of 10 years' demonstrable experience in an automotive or similar engineering environment, with a preferred focus on EV and hybrid vehicle technologies.

Proven experience of working on automotive e-powertrain systems (such as motors; inverters; batteries/energy storage; power electronics) and understanding their interfaces and integration into the vehicle.

Thorough understanding of automotive HV standards; design methodologies and working practices.

A solid understanding of Functional Safety processes and concepts.

Verifiable experience in System Specification; Requirements Capture/Management and Design Validation processes.

Confident user of MS Office products and competent user of industry-standard network tools, e.g. Vector CANalyzer.

Good understanding of industry-standard calibration tools, e.g. Vector CANape, ETAS INCA.

Experience of using vehicle diagnostic tools (engineering and service level) and electrical debugging of prototype vehicles.

Confident at reading vehicle wiring diagrams, and understanding component electrical interfaces, e.g. Device Transmittals; External World Diagrams.

An understanding of automotive in-vehicle networks, their applications and attributes.

Proven experience of leading the delivery of automotive electronic and/or electrical systems and their components into series production.

### **Other beneficial attributes:**

Ability to read electrical hardware schematics.

Experience of delivering high-ASIL systems into production applications and a detailed understanding of ISO26262.

Familiarity with MATLAB/Simulink.

Detailed vehicle networks knowledge (e.g. LIN, CAN, Flexray)

Competent user of ETAS INCA and/or Vector CANape.

Knowledge of German language.

### **Personal attributes:**

Excellent attention to detail with good planning skills.

Strong communicator, capable of interacting with cross-functional teams both internally and externally.

Highly self-motivated and independent, with a willingness to seek guidance and involve others whenever required.

Remain focussed under pressure, familiar with working outside their normal comfort zone.

Proven record of operating in a customer-facing environment.