

Job Title – Principal Electrical Systems Engineer

Date position required:	March 2019
Reports:	None
Salary:	Competitive (Permanent)
Benefits:	Pension, 28 days holiday (+ bank holidays), salary sacrifice
Site:	hofer powertrain UK, 2, Titan Business Centre, Spartan Close, Warwick CV34 6RR
Applications required by:	ASAP
Application format:	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 powertrain production design and supply company employing over 850 people within the Group. We work with many of the world's automotive OEMs, Tier 1 suppliers and automotive technology centres and have numerous powertrain components in production; including hofer designed electric motors and hybrid modules through 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 system design and supply projects across all vehicle sectors.

- System supplier for complete automotive powertrain systems.
- Full electrical and mechanical capability from clean sheet through to quality accredited production.
- Specific sites setup to support a lot of the global OEMs.
- Production supplier for many of the current and future advanced powertrain systems and components.

As part of hofer group's global growth, and the continuing expansion of hofer powertrain UK, a vacancy has arisen for a Principal Electrical Systems Engineer to join the business at the Warwick office.

Reporting to the Chief Engineer of Electrical Systems, hofer powertrain UK seeks an Electrical Systems 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:

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

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

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

Develop 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 and action Design Verification and Validation activity at a system and/or vehicle level.

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 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.

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

An appreciation 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.

Working 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.

Other beneficial attributes:

Ability to read electrical component 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 or other European languages.

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.