

## **Job Description: Senior Engineer – EDS (Electrical Distribution Systems – 2D Harness)**



**Department:** Design, Electrical and Electronic Systems

**Job role overview:** To allow for the introduction of new and exciting automotive technology across our range of motorcycles, the Electrical and Electronic systems team is looking to bring in an experienced Electrical Distribution Systems (EDS) engineer to support immediate project requirements.

Main duties will relate to EDS 2D harness Design. Senior Engineers are expected to have significantly more experience, be capable of mentoring engineers, have a good understanding of wiring diagrams, chair work product reviews & meetings within the Company, including peer reviews and sign-off of EDS 2D harness designs when required.

**Report to:** Team Leader – Electrical Distribution Systems

**Location:** Hinckley, UK, LE10 3BZ

### **Duties and Responsibilities:**

- EDS project responsibility for new bike models and variants.
- Design and development of whole vehicle electrical distribution systems using Vesys 2.0 / Capital Essentials Design and Harness and release using PLM Systems.
- Interpreting technical drawings and specifications of a wide variety of electrical / electronic components while defining EDS designs.
- Justification of design decisions with released documentation for harness electrical hardware architecture, relays, fuses, wire sizes etc.
- Advising the mechanical (chassis) engineering team on the physical layout of wiring harness and associated electrical systems on the vehicle. Transferring this information into Vesys 2.0 / Capital Essentials 2D harness layout drawings and synchronising with circuit designs.
- Reading circuit drawings and be able to make changes if required.
- Tracking of project electrical issues, timing, risks, actions and interfacing directly with the project managers, manufacturing departments and chassis / powertrain / systems teams.
- Chairing internal electrical team meetings reviewing status of assigned projects.
- Design for EMC and provide support for pre-compliance vehicle level testing.
- Work with existing worldwide suppliers and identify potential new suppliers to ensure timely introduction of new components and harnesses.
- Coordination and reporting of vehicle level signoff testing and generating test reports for approval.
- Continual improvement to advance supplier relations, design procedures, advise best practice and improve quality and efficiency.
- Inspection/confirmation of wire harnesses to drawing and supporting on-bike routing assessment sessions to improve the harness fitment at later prototype stages.
- Closely support prototype and production build phases to ensure electrical issues are identified and resolved promptly.
- Reviewing technical service manual documentation relating to the vehicle electrical system.
- To undertake and assist with projects as required by your Manager.
- Any other duties as required by your Manager.

# Person Specification: Senior Engineer – EDS (Electrical Distribution Systems – 2D Harness)



	Essential	Desirable
<b>Qualifications and Attainments</b>	BEng or MEng in Electrical / Electronic engineering or have an HND level qualification and proven relevant experience	
<b>Professional Experience and Skills</b>	<p>Proficient in 2D and circuit EDS design using Vesys 2.0 Design and Harness (or Capital Harness).</p> <p>Proficient in Microsoft packages including Excel, Word and Outlook.</p> <p>Excellent trouble shooting skills.</p> <p>High level awareness of automotive electrical architectures and latest technological developments (within the public domain)</p> <p>A good understanding of how electrical systems work.</p> <p>Experience working on automotive OEM design projects.</p>	<p>Knowledge of CAN communication and familiarity with tools such as CANalyser / CANoe (or similar).</p> <p>Ability to interpret component specifications.</p> <p>Previous experience of working within an automotive / manufacturing / industrial environment.</p>
<b>Personality and Motivation</b>	<p>Self-motivated and resilient.</p> <p>Flexible and adaptable.</p> <p>Able to take instruction and work under pressure to tight deadlines and agreed timescales.</p> <p>Excellent communication skills, clear and concise written and verbal skills.</p> <p>Logical approach to problem solving.</p> <p>Independent in seeking solutions and proactively interfacing with all areas of the business.</p> <p>Working in a multi-discipline team environment.</p>	Continuous process improvement.
<b>Appearance and Characteristics</b>	<p>Well presented and professional in approach.</p> <p>Confident with chasing people for information and not being afraid to highlight risks.</p>	
<b>Circumstances</b>	Flexible on working hours.	Willing to undertake UK and Overseas travel.