



## Senior Mechanical Design Engineer

Farnham, UK

Protean Electric is an automotive technology firm. Our mission is to drive sustainable transport through innovation, and we are looking for the best people to join us and help stay ahead of the competition.

Working with us is your opportunity to become an expert in your field and to join us in setting world-class standards in design and production quality. Diversity and inclusion are fundamental to our approach. We know that teams who share one vision whilst drawing from a range of diverse backgrounds and experiences are the most innovative.

Working here means enjoying a fast paced, dynamic and collaborative environment. Our challenges require innovative solutions and provide a unique opportunity to shine and grow with the company.

We value and measure ourselves against these “Best Self” behaviours:

- Pioneering
- Driven
- Tenacious
- Collaborative
- High Integrity
- Responsible

If you decide to apply for the role, please email your CV, cover letter and salary expectations to: [ukjobs@proteanelectric.com](mailto:ukjobs@proteanelectric.com). It is important that you quote the full Job Title in the subject line.

Thanks for taking an interest in joining us and please see the specific details below:

### The Role

We are seeking the right individual to join our Mechanical Design team.

### Main Duties & Responsibilities

As a Senior Mechanical Design Engineer, the primary duty is the design, development and delivery of electro mechanical systems for the in-wheel motor, with particular emphasis on cost quality and time. Additional duties include the design, development and delivery of prototype parts. As part of the Mechanical Design team, the Senior Mechanical Design Engineer will collaborate cross-functionally with the Engineering, Operations and Sourcing teams, to ensure delivery of Company Goals & Targets.

## Key Responsibilities

Include, although are not limited to the following:

- Creating and refining mechanical parts and assembly drawings which capture design intent and key characteristics
- Performing hand calculations and finite element analyses to validate your design
- Discussing and resolving technically complex problems with manufacturers, suppliers and customers
- Preparing and performing design reviews to pass through a gated design development process
- Producing outline designs and determining project feasibility giving consideration to implications such as cost, safety and time
- Managing tasks and small projects. Estimating required time for task / project completion.
- Performing the interface between Electronics and Mechanical Design teams to integrate electronic packs into the mechanical envelope.
- Liaising with suppliers with regard to cost, quality and manufacturability
- Producing engineering reports and giving presentations to management
- Providing technical support to other departments as and when required
- Supporting DFMEA activities
- Creation and checking Engineering drawings to BS8888
- Supporting the training, development and growth of mechanical engineering talent across the company
- Supporting the production line during snagging when deploying a new design
- Supporting the validation team with design of tests
- Providing regular updates to the engineering manager of progress and issues

Relevant Skills	Relevant Knowledge & Experience
<ul style="list-style-type: none"><li>• Creative and innovative design</li><li>• Development and analysis of engineering solutions</li><li>• Ability to communicate verbally and through technical documentation in English</li><li>• Produce drawings to BS 8888</li><li>• Produce and manipulate complex CAD models</li><li>• Ability to work in an international environment</li><li>• Ability to self-motivate and work with minimal over-sight</li><li>• Good computer skills (Microsoft Office, SolidWorks)</li><li>• Excellent personal and task organisation</li></ul>	<ul style="list-style-type: none"><li>• Sound knowledge of mechanical engineering theory</li><li>• Degree (BEng) in relevant engineering field</li><li>• Understanding of automotive mechanical design processes</li><li>• Understanding of complex calculations and FEA</li><li>• Knowledge of codes of conduct and ethical working</li><li>• Experience of using technologies such as injection moulding, fretwork, PCB and flexible circuit design</li><li>• Proficient use of SolidWorks</li><li>• Relevant experience in electro-mechanical product engineering business</li></ul> <div>Cont/...</div>



Relevant Skills	Relevant Knowledge & Experience (Cont/...)
	<ul style="list-style-type: none"> <li>• Experience of component testing</li> <li>• Experience in heat management, casting and machining techniques</li> <li>• Experience preparing and holding design reviews</li> <li>• Knowledge in application of GD&amp;T</li> </ul> <p><b>Desirable:</b></p> <ul style="list-style-type: none"> <li>• Masters' degree in relevant engineering field</li> <li>• Chartered status with a recognised engineering body</li> <li>• OEM/Tier 1 experience with vehicle systems/assemblies</li> <li>• Experience working with high power electric &amp; hybrid powertrains</li> <li>• Design experience based on ISO26262</li> <li>• Design experience based on ASPICE ME</li> </ul>

