



DRIVING THE FUTURE OF ELECTRIC VEHICLES

We are the world leader of in-wheel motors for passenger cars, light commercial vehicles and future transport solutions.

Protean Electric is an automotive technology firm with over 150 talented people globally. Our mission is to drive sustainable transport through innovation, and we are the imagination behind vehicles that travel further, perform better and use fewer components.

We believe that freedom of ideas, integrity of response, desire to improve, and collaborative thinking drive innovation. Joining Protean means working with talented experts across the organisation who value your ideas, empower you to make a difference, and encourage you to challenge yourself and others.

Mechanical Design Engineer

Shanghai, China

The Role

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

Main Duties & Responsibilities

The Mechanical Design Engineer will be responsible for 20% motor component design before B sample and 80% product engineering from B sample to mass production of in-wheel motor systems, including e-motor, motor controller as well as supporting the integration of motor & brake to vehicles, and will work closely with the UK engineering team to achieve local design and engineering capabilities to meet global engineering processes, Quality-Cost-Delivery target and mass production capabilities of in-wheel motors.

Key Responsibilities

Responsibilities include, although are not limited to the following:

- Work with UK engineering team to do motor/component design, and release from concept to mass production to meet requirement specification, program master schedule, cost target and engineering quality process
- Prepare assembly and component level design review on time with design risk mitigation, design verification specification according to engineering project delivery requirement
- Be responsible for concern resolving related to design, prototype build and test, non-compliance closure and respective engineering changes with systematic engineering methodologies and clear planning
- Delivery of qualified mechanical design documents including Stack-Ups, FEA/CFD/thermal Simulation, Safety Distance Analysis, Design Review Report, 3D and 2D, 8D report with



- necessary guidance of senior engineers
- Be responsible for component localization development, design for manufacture, design for assembly, technical review, OTS sign-off
- To support prototype and vendor and quality improvement
- Participant in cost reduction/innovations/patents generation
- Contribution to set up and enforce local development processes
- Support application team to solve customer problems
- Support motor tests and /or work with third party testing vendors on outsourced projects as and when required

Relevant Knowledge & Experience

- Master's degree in Mechanical Engineering, Mechatronics Engineering, Motor Engineering or Automotive Powertrain Engineering
- 3-5 years' solid experience of Mechanical Design, verification and Release of automotive mass production projects, preferring experience of powertrain systems in engine car or e-drive system in EV/HEV/PHEV
- Good hand-on skills of Engineering Problem Solving, GD&T, Tolerance Stack-Ups, Engineering Material and Engineering Change/ Release Process
- Well understand DFM /DFA and at least one of below manufacturing process: plastic injection, die-casting/low pressure casting and machining and stamping
- Have education background or working experience with Finite Element Analysis (FEA), Thermal Simulation or CFD
- Be familiar with DFMEA, IATF16949/ISO9001, knowledge of sealing technologies, heat treatment process, surface treating methods, cost management or technical project management will be a good plus
- Ability to think out of the box, see the big picture as well as be hands on
- Teamwork spirit, Customer-Focus, Analytical and Result-Oriented
- To be able to go on a business trip with 25% travel frequency
- Good communication skills and fluent English is a must

Should you wish to apply for this role, please e-mail your CV, welcome to contact Protean HR team: alice.wang@proteanelectric.com

More info follows us on WeChat: proteanchina

Thank you for your interest, we wish you every success with your application.

