



Job Description

## **Company and Job Overview**

Company is a industrial leading motor parts manufacturer. They are looking for an inspiring product design engineer to drive their innovation and creation!

The Product Design Engineer will be responsible for the research and design of mechanical components, with a primary focus on two-wheel braking systems.

This role involves utilizing 3D CAD and CAE tools for design and analysis, collaborating with cross-functional teams and customers to ensure product specifications are met, and supporting product development from concept to mass production. As part of the R&D team, the engineer will also contribute to new product development beyond braking systems, supporting potential expansion into other mechanical components as the business grows.

The ideal candidate shall have strong technical skills, problem-solving capabilities, and the ability to manage multiple design projects while ensuring compliance with industry standards.

## Job Responsibilities

Design mechanical parts using 3D CAD software incorporating DFM principles, based on given engineering requirements. Conduct design verification using CAE software, including parameter sensitivity analysis, for design optimization purpose. Prepare DFMEA document to identify and mitigate product design risks and compliance issues at the development stage. Collaborate with customers to discuss product specifications, timelines, and technical troubleshooting.

Work closely with internal cross-functional teams (purchasing, sales, quality, and production) to facilitate smooth product

development and mass production transfer. Establish communication channels to identify problems, share solutions, and drive continuous improvement. Perform product lab-bench testing for design validation and product characteristic studies. Conduct lab inspection for reverse engineering, troubleshooting and quality issue investigation. Prepare detailed technical reports documenting design issues, findings, and solutions. Stay updated on industry standards and material compliance regulations.

## **Job Requirements**

Holds a Degree in Mechanical Engineering, Design Engineering, Materials Engineering, Manufacturing Engineering, or equivalent.

Possess basic understanding of CAE principles with experience in CAE software tools. Proficient in interpreting technical drawings and experience with CAD software tools. Possess knowledge of metal forming, machining and related manufacturing process is preferred. Willing to travel overseas for product launches, client audits, and customer engagements. Familiar with IATF standards and related training.

Catherine Qu JAC Recruitment Pte Ltd EA Personnel: R22104823 EA Personnel Name: QU QIUSHI

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