

Job Description: Simulation Engineer (Involute Gear Design Focussed)



Department: Design

Job role overview: Simulation Engineer to carry out analysis within the simulation team.

Report to: Specialist Team Leader – Simulation

Location: F2

We have an exciting opportunity within our simulation department for a senior Design engineer, to support NMIP projects. The role will focus on gear tooth design and simulation, with the opportunity to support wider analysis work (e.g., FEA/CFD) across chassis and powertrain systems.

It would suit a talented engineer with excellent analytical skills. Entry level for the position is based on experience.

Duties and Responsibilities

- Design and Analyse Involute Gear Teeth for both durability and noise.
- Carry out other simulation analysis as required such as FEA, CFD etc. using various software to support and optimize motorcycle design on new and existing projects.
- Develop analysis methodology and ensure it is kept fully up to date and documented in the appropriate procedure(s).
- Ensure a consistent approach is taken to simulation modelling through close co-ordination within the simulation team and across all the vehicle teams.
- Continuous improvement to advance design procedures, best practice and efficiency improvements
- Generate procedures, technical reports, specifications and drawings etc
- To undertake and assist with projects as required by your Manager.
- Any other ad-hoc duties as required by your Manager.

**Person Specification:
Simulation Engineer
(Involute Gear Design Focussed)**



	Essential	Desirable
Qualifications and Attainments	Degree in Mechanical Engineering or equivalent	
Professional Experience and Skills	<p>Proficient in Microsoft Packages including Excel, Word and Outlook.</p> <p>Excellent computer and analytical skills</p> <p>Experience in Involute gear design and analysis.</p>	<p>Experience in FEA simulation and stress/fatigue analysis.</p> <p>Experience with SMT MASTA software is an advantage.</p> <p>Experience with Creo Simulate FEA software is an advantage.</p> <p>Experience in motorcycle design is an advantage but not essential</p>
Personality and Motivation	<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>Pragmatic and logical problem solving skills.</p>	
Appearance and Characteristics Circumstances	<p>Well-presented and professional in approach.</p> <p>Flexible on working hours.</p> <p>Willing to undertake UK and Overseas travel if required.</p>	