## Job Description: Specialist Engineer – Simulation



**Department:** Design

Job role overview: Simulation/FEA engineer to carry out analysis within the simulation team.

Report to: Specialist Team Leader – Simulation

Location: Hinckley, Leicestershire

We are looking for engineering analysts to join our expanding simulation team, using tools such as FEA (finite element analysis), CFD (computational fluid dynamics) and MBD (multi-body dynamics) in a pragmatic way to drive our designs forward. Whilst embedded in a dedicated simulation team, successful applicants will work alongside the whole design department on Adventure, Roadster, Classic and Racing motorcycles, analysing components and systems throughout the entire vehicle.

You will use simulation technologies to enhance and optimise designs during the design phase of projects and use the same tools to respond quickly to problems during prototype testing bringing understanding and potential solutions. Applicants will need excellent analytical, problem-solving and team-working skills.

## **Duties and Responsibilities:**

- Construct simulation models using various software (including but not limited to Abaqus, Creo Simulate, Ricardo WAVE, AVL Fire/Excite, MASTA, FE-Safe) to ensure designs meet all company requirements.
- Develop and actively promote simulation procedures within the design department.
- Clearly and concisely present analysis results at a range of levels within Triumph.
- Release analysis reports to an appropriate level of detail in a timely manner according to agreed timescales.
- Provide expert input into engineering meetings and reviews.
- Analysing and processing of test data.
- Assisting in the recruitment process of new team members.
- Applying first principles and hand calculations to engineering problems when appropriate.
- Collaborate with design engineers to evolve component geometry based on analysis results.
- Create and monitor analysis timing plans.
- Mentor and coach other engineers where required.
- Strive to improve analysis best practice, efficiency and effectiveness.
- To undertake and assist with projects as required by your Manager.
- Any other ad-hoc duties as required by your Manager.

## Person Specification: Specialist Engineer – Simulation



	Essential	Desirable
Qualifications and Attainments	Minimum 2:1 BEng/MEng Degree in Mechanical, Automotive, Motorsport, Aeronautical or Aerospace Engineering.	
Professional Experience and Skills	Proficient in Microsoft Packages including Excel, Word and Outlook.	Experience in analysis software such as Abaqus, Creo Simulate, Ricardo WAVE, AVL Fire/Excite, MASTA, FE-Safe. Note training will be given as required  Experience in CAD software such as PTC Creo.  Experience in motorcycle design is an advantage but not essential
Personality and Motivation	Self-motivated and resilient.  Flexible and adaptable.  Able to take instruction and work under pressure to tight deadlines and agreed timescales.  Excellent communication skills, clear and concise written and verbal skills  Pragmatic and logical problem solving	an advantage but not essential
Appearance and	skills. Well-presented and professional in	
Characteristics	approach.	
Circumstances	Flexible on working hours. Willing to undertake UK and Overseas travel if required.	