

## JOB DESCRIPTION

<b>Job Title:</b>	Design Engineer – Mechanical	
<b>Full or part-time role:</b>	Full time - 40 hours per week	
<b>Company:</b>	Supacat Ltd	
<b>Main purpose:</b>	Create innovative and cost-effective designs using CAD to a high standard and on time	
<b>Issue &amp; Date:</b>	Issue 06	29/06/22

SC Group encompasses a group of companies within the UK and Australia who design, manufacture and distribute special purpose machines and equipment. As an employee within the Group of companies you should work as part of the team, be flexible in your approach to your work and fulfil any reasonable request to do tasks that may arise and is within your capability. However, the information below provides details on the key responsibilities of your role.

KEY AREAS	Key Responsibilities	Other Responsibilities
	<ul style="list-style-type: none"> <li>Produce innovative mechanical <b>designs</b> centred on functionality, simplicity and economy</li> <li>Use a good base understanding of mechanical and automotive engineering and related design principals to rapidly develop suitable designs, avoiding multiple design / analysis / prototype iterations and associated rework</li> <li>Design and create models and drawings using 3D CAD software to a defined specification and standard within the hours specified for the task.</li> <li>Automotive (primarily) and other sector component and assembly design from concept to production standard using 3D CAD (Solidworks).</li> <li>Design components to include sheet metal, turned / machined, cast items, small and large fabrications, including manufacturing and through life support considerations</li> <li>Maintain accurate design records and maintain drawing issue control.</li> <li>Use the PDM system to store and issue drawings.</li> <li>Revise or amend existing designs and drawings to meet new requirements</li> <li>Work with Senior Engineers, Project Engineers and other team members to provide the best design outcomes for stakeholders across the business.</li> <li>Liaise with suppliers in order to source new components.</li> <li>Assess prototypes for correct fit and function.</li> <li>Undertake appropriate material selection to fulfil the component specification</li> <li>Assess the strength of components using hand calculations and provide input to CAE assessments where appropriate</li> <li>Prepare for and attend design reviews and incorporate review feedback into designs as necessary.</li> </ul>	<ul style="list-style-type: none"> <li>To know and understand the Company Handbook and follow the Company's policies with regard to Quality, Health and Safety, Security and IT where appropriate.</li> <li>Your role may be subject to Data Protection Act and Official Secrets Act. Confidentiality must be maintained at all times.</li> <li>To maintain an awareness and observation of Fire, Security and Health and safety regulations.</li> <li>Ensure all personal data is managed in accordance with company policy Report writing, approval and project information recording.</li> <li>Systems testing using data logging and other instrumentation.</li> <li></li> </ul>

<b>Company Player</b>	<ul style="list-style-type: none"> <li>• Effectively communicates with all members of company staff</li> <li>• Effectively communicates with customers and suppliers.</li> <li>• Deals with problems and challenges efficiently and effectively</li> <li>• Administratively effective – keeps business information updated, easily accessible and secure</li> <li>• A ‘thinking performer’ – challenges/questions the way things are done to find and implement improvements to the way we work. Doesn’t accept the status quo and shares their knowledge.</li> <li>• Uses initiative and is self-motivated. Proactive not reactive.</li> <li>• Wants to and does continuously improve themselves (skills and behaviour)</li> <li>• Embodies the company values of integrity, mutual respect, enthusiasm, quality and quantity.</li> <li>• Adds something unique to the team (e.g. skills, experience, attributes).</li> </ul>	
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<b>Employee</b>	<b>Name:</b>	<b>Signature:</b>
		<b>Date:</b>
<b>Manager</b>	<b>Name:</b>	<b>Signature:</b>
		<b>Date:</b>



## PERSON SPECIFICATION

	Essential	Desirable
<b>Work based competences</b>	<ul style="list-style-type: none"> <li>• 3D Cad skills preferably with SolidWorks, although adaptation training will be given if necessary.</li> <li>• Proven capability of creating detailed 3d models and accurate engineering drawings of components and assemblies.</li> <li>• Practical engineering knowledge of a range of automotive systems.</li> <li>• Good working knowledge of Microsoft Office.</li> <li>• Good communication skills (verbal and written) at all levels including suppliers and customers.</li> <li>• Computer literate and able to adapt to different software and resolve basic computer problems with minimal help.</li> <li>• Good report writing and project information recording.</li> </ul>	<ul style="list-style-type: none"> <li>• Experience of drawing issue control using PDM.</li> <li>• Structural analysis using first principles and FEA (ANSYS).</li> <li>• Vehicle testing using data logging and other instrumentation.</li> <li>• Presentation skills</li> </ul>
<b>Behavioural competencies</b>	<ul style="list-style-type: none"> <li>• Approachable and dependable</li> <li>• Logical and thorough approach to record keeping</li> <li>• Able to meet deadlines and control budgets</li> <li>• Drive to achieve quality in all that he/she does</li> <li>• Able to work effectively under pressure</li> </ul>	
<b>Qualifications &amp; experience</b>	<ul style="list-style-type: none"> <li>• Minimum of HNC qualification in Mechanical Engineering, Automotive Engineering or related discipline.</li> <li>• Evidence of Continuous Professional Development.</li> </ul>	<ul style="list-style-type: none"> <li>• Mechanical Engineering Degree</li> <li>• Experience of working in an engineering design role.</li> <li>• Experience of working in a workshop, manufacturing or production environment</li> </ul>
<b>Organisational fit</b>	<ul style="list-style-type: none"> <li>• Effective and honest communicator</li> <li>• Able to work as part of a team.</li> <li>• Able to work on your own initiative and maintain your own motivation.</li> <li>• Able to work on an outcome related performance system.</li> <li>• Has a positive approach to problems.</li> <li>• Understands and embodies the company core values</li> <li>• Has the desire and ability to contribute to the company as a whole.</li> </ul>	<ul style="list-style-type: none"> <li>• Balances creative flair with a disciplined approach and good organisational skills</li> </ul>