



## Position Description

Job Title	Mechanical CAD Designer – Solidworks
Reporting to	Mechanical Team Leader
Position Summary	<ul style="list-style-type: none"> <li>• Process Change Requests in Solid Works to support program deliverables</li> <li>• Design and packaging of structural mounting brackets.</li> <li>• Designer responsible for the delivery of hose routing drawings, as direct by the mechanical engineers and digital picture hardware layouts.</li> <li>• Generate assembly process drawings to aid assembly as directed by the mechanical engineers.</li> <li>• Proactive, enthusiastic personality that must take full ownership of the delivery of drawings to requirements and all issues related to that delivery.</li> </ul>
Essential Duties and Responsibilities	<ul style="list-style-type: none"> <li>• Design responsibility for Hybrid vehicle sub-systems to include one or more of the following:               <ul style="list-style-type: none"> <li>○ Structural brackets</li> <li>○ Packaging</li> <li>○ Hose (Solidworks) routing</li> <li>○ Electrical wire routing (possible)</li> </ul> </li> <li>• Responsibilities include but are not limited to:               <ul style="list-style-type: none"> <li>○ Requirements capture</li> <li>○ Concept development</li> <li>○ Create design documentation</li> <li>○ Design for manufacture reviews</li> </ul> </li> <li>• Represent sub-systems in engineering and management reviews (report progress against key activities, identify risks/shortfalls and recommend resolutions)</li> <li>• Set best practice for component and system design utilizing industry standard tools and techniques.</li> <li>• Hands on approach required to support other engineers' key tasks in times of peak workload.</li> </ul>



<p>Education, Specialized Training and Experience Required</p>	<p>The candidate should be able to demonstrate the following experience.</p> <p><u>Essential</u></p> <ul style="list-style-type: none"> <li>• Solidworks 3D CAD modeling software at the advanced/expert level.</li> <li>• Solidworks Routing, flexible tubing</li> <li>• Solidworks, Routing, electrical wiring</li> <li>• Use of CAD PDM systems in an automotive environment.</li> <li>• Manufacturing and assembly drawings using the above CAD software utilizing 3D CAD Master &amp; GD&amp;T.</li> <li>• Proven history of delivery (five years minimum) of vehicle systems from prototype to launch (preferably in a powertrain environment) and support of product manufacturing.</li> <li>• Detailed knowledge of and experience in the derivation and application of GD&amp;T, significant and critical characteristics to component drawings.</li> </ul> <p><u>Preferred</u></p> <ul style="list-style-type: none"> <li>• HEV / EV design and development experience/knowledge of main components.</li> <li>• Ability to create and run FEA simulations for component and assembly level stress and modal behavior.</li> <li>• Familiar with 3D Via Composer or equivalent software tool</li> <li>• Experience in the following tools and processes: <ul style="list-style-type: none"> <li>○ Design for Manual Assembly (DFMA)</li> <li>○ VAVE, TCM or other cost management tool,</li> <li>○ AutoCAD LT</li> <li>○ Solidworks</li> <li>○ VeSys</li> </ul> </li> </ul>
<p>Location: Duration: Tools:</p>	<ul style="list-style-type: none"> <li>• On Site at Azure - Oak Park Facility</li> <li>• 6 month contract to potential permanent</li> <li>• Azure Solid Works station</li> </ul>