



Job Description: CAD/CAM Senior

i. General Information	
Role: CAD/CAM Designer	Department: Product Engineering Armor
Division: Helmet Business	Job Grade/Level: Deputy Manager/ Assistant Manager / Sr. Engineer Design and Development
Functional Reporting: PE head	Administrative Reporting: PE head
ii. Job Objective	
<p>As a CAD/CAM designer, your job objective will be design and development of several plastic/ textile/ metallic/ polymeric products/ components. This position will be responsible for assembly of the complete product and/or accessories in the product and solving any challenge that comes up in assembly and end customer usage. CAD/ CAM designer will also be responsible for identification of standard parts that could directly be procured for assembly.</p>	
iii. Key Responsibility Areas	
Execution	<ul style="list-style-type: none"> ▪ Preparing specification sheet for new projects in BD enquiries and tenders. ▪ Prepare compliance sheet for tender and BD Enquiries. ▪ Prepare technical feasibility and cost estimation study document for tender preparation and bid enquiry. ▪ Responsible for Part Modeling, Surface Modeling, simulation, Assembly, Manufacturing Drawings, General dimensioning and tolerancing for new product development. ▪ Responsible for material selection, indent creation for sample preparation. ▪ FMEA analysis of designed product and accessory and provide countermeasure for any failure in analysis. ▪ Study QC and sales product verification report and solve queries, provide countermeasures. ▪ Provide contingency plans for risks identified in compliance sheet. ▪ Responsible for preparation of nesting plan. ▪ Prepare risk matrix for BD projects and provide contingency plan for the same. ▪ Work towards cost improvement of products by continuous improvement in vendor selection of standard parts. ▪ Selection of vendors for sample preparation and assessment with QC team. ▪ Provide countermeasure reports and CAPA for Customer complaints to QC team. ▪ Provide countermeasure and CAPA of production complaints related to manufacturing and finishing. ▪ Responsible for timely completion of all tender and BD projects. ▪ Updating the standard parts vendor list and drawings on monthly basis. ▪ Preparation of layout plan to be followed by sample manufacturing team.
Coordination & Reporting	<ul style="list-style-type: none"> ▪ Report to PE head of any delay in work completion for tenders or BD enquiries. ▪ Prepare and present project timelines to the PE head. ▪ Coordination with Project coordinator for timelines and budget adherence. ▪ Coordination with procurement team for purchase of accessories required for sample preparation. ▪ Coordination with subordinates for status tracking of each project. ▪ Reporting the project status at DMT meetings. ▪ Coordination with product manager, bid management and costing team and innovation team for identification of new projects ▪ Coordination with PE head for KPI and KRA reporting.

Development	<ul style="list-style-type: none"> ▪ Training and development plan for subordinates. ▪ Provide your insights and experience and knowledge gain through reverse engineering in product development to create USPs in the product. ▪ Identify improvement points in product assembly process to make it more cost friendly and lean. ▪ Identification of training required for getting skills to complete future Projects. ▪ Identification of standard parts supplier to make the sample preparation process more agile.
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iv. Key Performance Indicators

Timeliness	Making sure that projects are being completed on time and if there is any discrepancy then escalation of such to PE head with new estimated timeline.
Budget creep	Making sure that the projects stay under the allocated budget and if there is any discrepancy then escalation of such to PE head with new estimated budget.
Product USP	Creating USPs in current design to make a user-friendly product and going up and above the customer basic requirement.
First Pass ratio	Creating accessory designs which can pass assembly, sales, and QC verification in one go.

v. Stakeholder Interactions

Type of interaction	Interaction with	Nature of interaction
Internal	Product Engineering head	Work closely with PE head for identification of new projects to be undertaken
Internal	Project Coordinator, Bid management and Costing	Reporting timelines of projects, technical feasibility study and compliance sheet
Internal	QC, Sales	Solving queries of Sample verification and provide countermeasures for any issue identified.
Internal	Tech-Transfer	Coordinate with Tech-Transfer team to clarify issue in assembly and provide WIS for the same.
External	Suppliers	Coordinate with suppliers to tackle any queries and issues during manufacturing of designed parts.

vi. Job Specifications

Qualification	Min. qualification required	B.Tech Mechanical/ Tool design/ Plastics Engineering(Tier 2 colleges). Auto CAD, Solid works certification is must.
	Other desired qualifications	Prior Designing experience for End user product or tool designing
Relevant Experience	Min. no. of years of relevant experience required	5+ year of overall experience and 3+ year of relevant experience
Knowledge and Skills Required		<ul style="list-style-type: none"> • Good technical, spatial and design thinking. • Market knowledge for standard parts availability. • Knowledge of 3D printing and additive manufacturing (SLS, SLA, FDM etc.). • Knowledge about FMEA and DFMEA. • Knowledge about plastic processing techniques (injection molding, compression molding etc.) • Knowledge about textiles and its products. • Basic knowledge of requirement of mass assembly process.