ABHINEET

Professional Summary

Mechanical Engineer with 11 years of experience in Design & Development of Automotive products. Highly skilled in packaging and validating of CAD Assemblies using **CATIA V5** with good knowledge of AutomotiveSeating System, Steering Wheel and DAB Systems.

Knowledge & Skills

- 11 years of experience in Automotive Product Design and Packaging. Worked on **Automotive Seating, Steering Wheel, Wiring Systems and DAB Products and highly proficient in using Catia V5**
- Good experience in packaging, design and development of **Seating Structures & Foams**,**Steering Wheel & DAB Products.**
- Experienced in working with **CFTs** like Proto-lab, Suppliers, Clients and Program Management Departments.
- Good Understanding of Testing Procedures.
- Extensive hands-on experience in Verification and Validation of **Wiring** Harness, Energy Components, ECUs,
- Instrument Cluster, Exterior lighting modules and related diagnostics in automotive domain
- Proficient in using Part Design, GSD, Assembly Design and Drafting modules in **CATIA V5.**
- Good in designing with respect to **DFMEA, DFM** and **DFA** Knowledge.
- Good Understanding of **Plastic Parts** manufacturing, tooling and design principles.
- Good Understanding of **Sheet Metal Parts** design and forming operations.
- Concept Development, Component & System Design, Clearance & Interference checks.
- Experienced in creation of quotation, sourcing and tooling **Drawings** using **GD&T.**
- Comfortable in working with **Team Center** and **Enovia** PLM environments.
- Proficient in using MS Excel, PowerPoint Presentation and Word.

Software skills

- **CAD Packages :** CATIA V5 (Part design, Assembly design, Generative shape design, Drafting)
- **PLM tool :** Team Center and Enovia
- **OTHER :** MS office tools

Educational Qualification

- B.E in Mechanical Engineering from City Engineering College, Bengaluru. Affiliated to VTU

Experience Summary

COMPANY : AUTOLIV INDIA PVT LTD

- Duration : April 2017 to till date
- Designation : Associate Lead Engineer

Commodities Handled:

STEERING WHEEL AND DAB (Wire Routing, Plastic, Sheet Metal & Casting Components)

- Packaging Feasibility Study to Design and accommodate different parts of DAB & Steering

Wheel Modules and developing interface integration.

- Evaluation of given class A-surface for given tooling direction.
- Developed B-Surface according to the required thickness.
- Working on Master Sections to understand clearance and packaging space issues initially.
- Initial concept creation of different interfaces of Steering Wheel & DAB and validating theconcepts for DFM and DFA. Creation of Part and Assembly drawings for the entire product.
- Co-ordinating with CFTs throughout different phases of program and handling supplierside discussions regarding DFM and other issues.
- Research on Value Addition (VA) and Value Engineering (VE) for new concepts.
- Following design & validation standards based upon various observations & studies doneduring design, development & validation phase (DVP).
- Wiring harness routing to establish connection between different components of SteeringWheel and DAB with ECU.
- Derive Wiring harness EE Lab testing activity . Track and maintain Error free Wiring harness complexity chart to meet vehicle milestones w.r.t engineering change.
- Perform band analysis and clash analysis for complete Steering Wheel assemblies and generate clearance - clash report, considering datum principles and packaging conditions.
- Coordinating with different departments such as PU Molding, Graining Evaluation, Leather Wrapping, Plastic and Metal tooling for DFM and Craftsmanship validation.
- Guiding team members in their daily activities and discussing the tasks, managing the deliverables of each reporting member and keeping track of KPIs, Time Sheets, Certifications and other documentations.
- Typical Steering Wheel assembly includes plastic, sheet metal and cast components suchas: Back Cover, Decoration Bezel, Foam Assembly, Armature, Heater Element, Leather and Switches.

COMPANY : EASI ENGINEERING (Deputed to **FORD TECHNOLOGICAL SERVICES INDIA**).

- Duration : December 2015 to April 2017
- Designation : Senior Designer

Commodities Handled:

REAR SEATING STRUCTURE, FRONT SEAT FOAMS AND PLASTIC PARTS

Projects

1. Packaging Rear Seat Structure for a North American Program

- Packaging Study for New Vehicle Program, designing brackets, tubes and wires along withpackaging latch assembly into the structure
- Worked on Master Sections creation to understand initial packaging issues
- Designed parts such as Raisers, Hinge Brackets, Recliner Brackets, Armrest Tubes and Wires
- Developed the proposals with the given standards and maintaining clearances w.r.t the environment parts, meat to metal requirements and complying with Comfort and Class-A requirements
- Managing Bill of Material (BOM) throughout program cycle
- Involved in VAVE activity to reduce weight and cost of the Seat Structure
- Modifications in different stages as per the Class-A changes that affect the packaging
- Managing the Product data in the Team Center PLM at different stages of program milestonesand supporting Design Release activities

2. Foam Modelling of Front Seat

- Evaluation of given class A-surface for given tooling direction.
- Designing Cushion and Back Foams from scratch using STO, H-Point, Back and Cushion angles
- Developing B side cutter parts using Seating Structure data
- Modifications of Bolsters for the new over-build and under-build conditions required as per

updated Class-A at different stages

- Review with different departments to check the continuously updating Structure, Plastic andClass-A data

3. Plastic Parts Creation (Raiser Covers, Height Adjuster Cover)

- Working on developing new Height Adjuster Cover for Metal Lever
- Studying clearances and packaging rules w.r.t environment and design Cover that meets Class-Aand mechanical needs
- Designing Raiser Bracket Covers and updating the parts as per the structure updates at differentstages

COMPANY : ADIENT INDIA (Plant) (Formerly **JOHNSON CONTROLS PVT LTD)**

- Duration : October 2014 to December 2015
- Designation : Senior Design Engineer

Commodities Handled:

REAR SEATING STRUCTURE AND FRONT & REAR SEAT FOAMS

Projects

1. Feasibility Study of Build To Print Rear Seat Structure Parts

- Reviewing of drawings received from Customer and create studies based on DFM and DFAfeasibility
- Involve in meeting with customer and supplier to understand critical requirements and proposechanges that improve the design
- Integrate with CFTs such as Program Management, Prototype and Trims to ensure timeline adherence of program
- Managing Bill of Material (BOM) throughout program cycle

2. Rear Seat Structure Packaging for a New Program

- Rear Seat Structure modification from carry over design to suit the new program requirement
- Design Tubes and Brackets for new environment and new Latch assembly accommodation
- Understand the test requirements of Seat Structure and modify designs based on SME feedback
- Coordinate with Proto and Trim labs to review fit and craftsmanship
- Study different assembly lines to understand the assembly order and issues related topostproduction
- Creation of drawings for parts and assemblies at different stages
- Supporting the release activities at DV and PV stages

COMPANY : SYMPHONY TELECA CORPORATION

- Duration : August 2013 to October 2014
- Designation : Design Engineer

Commodities Handled:

SEATING STRUCTURE AND SPEED SENSOR

- Seating structure brackets parametric modeling and foam modification as part of pilot project
- Automotive speed sensor product packaging by designing Plastic Housing and Holder for PCB &Magnet and ensuring IP 67 protection
- Bench marking activity of different Speed Sensors
- Managing Bill of Material and Assembly Process Flow of different Speed Sensors

COMPANY : HCL TECHNOLOGIES (Formerly **GEOMETRIC LTD)**

- Duration : November 2011 to August 2013
- Designation : Junior Design Engineer

Commodities Handled:

AIRBUS SHEET METAL BRACKETS AND BUS INERIOR PARTS

- Parametric CAD modeling of Automotive Interior Sheet Metal Parts in CATIA V5
- Drawing creation for created 3D parts
- Quality checks for Drawings, Parts and Assemblies

Training/Workshop/Others

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- Attended Workshops and visited Manufacturing Firms for understanding Plastic Manufacturingand Sheet Metal Operations.
- Witnessed Sled Testing of Passenger Car Seats in ARAI, Pune.
- Attended training on Foam Manufacturing and JIT Assembly in JCI.
- Completed an Innovative Project "Footwear Sanitizer" and presented it in tech competition duringB.E.
- German language A1 level Certified