

Ankit Ojha

MECHANICAL DESIGN ENGINEER

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SUMMARY

Product design engineer with 7+ years of automotive industry expertise.

Experience in innovative product design and development.

I'm currently employed as a senior design technician at SKF Engineering and Lubrication, where I work on passenger vehicle wheelends.

SKILLS

- GD & T
- Vehicle Integration
- DFMEA
- VA / VE
- CREO PARAMETRIC

EXPERIENCE

Senior Design Technician

SKF Engineering and Lubrication India Pvt. Ltd. *Dec 2021 - Present*

- New bearing selection and design for passenger car wheel end hub bearings (North America)
- Calculating bearing life and fit
- DFMEA revision for new and existing failures
- Optimization of design parameters (weight, friction, packaging, and manufacturing process)
- ECN administration and follow-up
- Data collection and cost estimation for new needs
- Production and proposal drawings
- Developing a technical inquiry paper to recommend the design of supplier parts such as seals, caps, and sensor carriers

Senior Design Engineer

Onward Technologies *Apr 2021 - Dec 2021*

ELECTROMECHANICAL DESIGN AT CUMMINS INDIA

- Design of electromechanical fixtures
- Component design, stack-up analysis, and Poka Yoke
- Follow-up with project stakeholders
- Creating a manufacturing drawing

ENGINE INSTALLATION DESIGN AT CNH INDIA

- I created a 3D and 2D design for a sheet metal protection cover for the primary gasoline tank.
- Design of mounting structures and protective covers for gas tanks, external headlamps, and additional peripheral components
- Agriculture Tractor Integration
- Electric wire and gasoline hose routing
- Initial Validation and Fitment (DFS)
- Follow up with the component supplier.

- Creating manufacturing drawings.

Senior Design Engineer

TATA Technologies *Nov 2018 - Mar 2021*

- **CLIENT NAME: MCFA, DESIGN AND DRAFTING OF FORKLIFT SYSTEM:**
 - Generated CAD models, assemblies, and drawings (part, assembly, and installation) for forklift systems. While applying G.D. and T. principles.
 - Created sheet metal 3D model parts, drawings, and assemblies of the dashboard, floor, and similar other components of the forklift.
 - Created metal and hose pipe routing for hydraulic and steering systems.
 - Created skeleton modeling for assembly-level designs by utilizing the top-down and bottom-up approaches.
 - Create generic CAD models by using the Creo Family Table option.
 - Efficiently drafted markup drawings for many parts and assemblies.
 - Prepared a bill of materials and self-QCed all drawings and assemblies.
 - Used Windchill PDM for check-in and check-out of CAD and other documents.
 - New part creation, WT creation, renaming of parts, assembly, and drawing Addition of BOM structure, related CAD model or drawing, and exchange of documents
- **CLIENT NAME: TATA STEEL, DESIGN AND DRAFTING OF STEEL MANUFACTURING PLANT PARTS AND ASSEMBLIES:**
 - Created 3D models and 2D sketches in parametric from scratch conditions.
 - Used top-down and bottom-up approaches for skeleton modeling.
 - Provided design support by modeling 3D models and 2D drafting parts and assemblies with 3D annotation.
 - Provided welding symbols on assemblies according to the manufacturing process.
 - I did self-QC for drawings and assemblies for error-less delivery.
 - Designed pipe routing models by using piping tools.
 - Prepared the bill of materials.
- **CLIENT NAME: Tata Motors, DESIGN AND DRAFTING OF FRONT AXLE AND STEERING SYSTEMS:**
 - Created 3D models 2D drafting of parts and assemblies Designed pipe models by using piping tools.
 - created an envelope in CAD through the mechanisms of the front axle and steering to find fouling with other aggregates.
 - Package the front axle, steering, wheel rim, tire, and brakes to check for fouling and develop new ideas for new product development.
 - completed the DML (Design Modification List) process for design release.
 - completed the DR (Design Release) migration process as per requirement.
 - efficient use of drafting, detailing, and section with B.O.M., G.D. & T., and machining symbol skills.
 - verified part and assembly design by using JT of Team Center software.
 - Created 4D documents (DFA, DFM, DFS, and DFMEA) for parts and assemblies.
 - DFMEA analysis to prevent failure. Interacted with the supplier for design changes, modifications, or release.
 - cross-functional team meeting with a VI member (the vehicle design owner).
 - Design support for other team members of the chassis system

Junior Manager

VE Commercial Vehicle Ltd. *Feb 2017 - Nov 2018*

- **DESIGN AND DRAFTING OF THE FRONT AXLE, STEERING, AND REAR WHEEL END:**
 - 3D modeling and drafting of the front axle and steering components
 - Vehicle level layout verification "Fitment"
 - E-BOM and M-BOM creation
 - Installation and routing
 - Parts catalog creation for spares
 - Envelope design creation of the front axle and steering mechanism
 - Check sheet preparation as per CMVR rules to release the front axle design.

- Follow up with stakeholders and suppliers to meet deliverables.
- Interacted with suppliers by visiting their firm to discuss RTS points for better manufacturability on new design releases.
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- Installation and routing
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Trainee

KPIT Technologies *Jul 2015 - Jan 2017*

CLIENT NAME: HEIL TRAILER, SUPPORT FOR THE DESIGN AND DRAFTING OF A SEMI-TTRAILER (PORTABLE WATER TANKER)

- Using parametric sketch modeling, I created sheet metal pieces.
- 3D models and 2D drawings of parts and assemblies were created.
- Using a 2D layout, I created solid modeling.
- At the novice level, I learned Creo, AutoCAD, Solid Works, Unigraphics, and PDM.
- Under the supervision of the senior designer, I learned and practiced drafting, detailing, and sectioning alongside B.O.M., G.D., and T.
- For drawing and modeling, I created a Q.C. checklist.

CLIENT NAME: EATON, IMDS, SUPPORT FOR QUALITY ENSUREMENT

- The designers' Q.C. checklist was validated.
- I discovered that the NCs were done by designers.
- Solved Designers and teams have problems while designing.
- Participating in designer-client conference calls for project-related questions
- The RCA approach was used to resolve projects that were stalled.

EDUCATION

Diploma in Tool and Die making, Mechanical Engineering

NTTF (Nettur Technical Training Foundation) *Jul 2012 - Jun 2015*

I graduated with an aggregate of 70%.

Matriculation

Shogra High School *2012*

I graduated with an aggregate of 78%.

LANGUAGES

Hindi



Kannada



English

