

Objective:

To be Part of a Progressive Organization that Gives Scope to Enhance My Knowledge, Skills and to Reach the Pinnacle in the Field with Sheer Dedication and Hard Work.

Profile Summary:

- Having around 8.10+ Years of experience as a **Mechanical Design Engineer** – New Product Development, Design & Detail Engineering, and Prototyping & Reverse Engineering **using PLM / PDM Software**.
- Strong Ability to Create/Read/Interpret **3D CAD Model And 2D Engineering Drawings** in Conformance with Pre-Defined Technical Specifications with appropriate **GD&T** by **ASME Y14.5 – 2009** standard.
- Perform **Tolerance Stack-Up Analysis (WC/RSS)** to meet the Functional Requirements.
- Proficiency to Coordinate With **Manufacturing Team** and Acquired Knowledge on Manufacturing **Processes/Technologies**.
- Implementing Design changes as per customer requirement through PLM & PDM, **Engineering Change Management (ECM)**.
- Responsible for creation And Managing **BOM and Material Master List** in PLM Software.
- Apply an Effective Methodology **of (VA/VE) Value Engineering** for Identifies Alternatives to Perform the Required Function at Cost Reductions in the product & process.

Competences:

- ✓ To Ensure **Progress** is Up to Date and **Reflects the Required Levels of Maturity** at any given point in time.
- ✓ Design And Development of **Automobile Components** for **Motorcycle Accessories**
- ✓ Design And Development of **Material Handling Equipments** for OEM Shop floor.
- ✓ Design Support on **Oil Extracting Devices** for Oil & Gas Industry.
- ✓ Design Support on Engine And Power train **Component Mountings** and **Foundation Brakes**
- ✓ Expertise in **CAD Software's** – **Creo5.0/SOLID WORKS 2012/UG NX.8/CATIA V5 R21/Auto CAD**.
- ✓ Perform Dimensional Variation Analysis (**DVA**) using Team Center @ **VIS MOCK UP - VSA** the key to increasing productivity, optimizing processes, reducing cycle time and increasing quality
- ✓ **Analysis** using FEA, Ansys.12 Software and **Interpret CAE** results to ensure effective function.

Professional Journey:

Organization	Designation	Duration
Honeywell Technology Solutions Lab Pvt. Ltd.	Mechanical Design Engineer II	19/07/2021 to Current
Royal Enfield (A Unit of Eicher Motors Limited)	Assistant Manager _ Senior Design Engineer	03/07/2017 to 16/07/2021
TATA Consultancy Services	IT Analyst _ Senior Design Engineer	16/03/2014 to 21/06/2017
MEKINS Industries Ltd JV with Paul Muller	Senior Design Engineer - Product Development	02/01/2013 to 06/03/2014

Educational Journey:

Qualification	Institute	Year of Passing	Marks %
M.E Engineering Design	Anna University, Chennai, P.S.G. College of Technology, Coimbatore.	May 2012	7.01 CGPA
B.E Mechanical Engineering	Anna University, Chennai, Madha Engineering College	May 2010	74%

Professional Experiences:

4 of 4 M/s Honeywell Technology Solutions Lab Pvt. Ltd:

Working with M/s Honeywell Technology as a Mechanical Design Engineer II
- NPD/NPI Industrial Actuator Product Development.

Key Roles and Role Responsibilities:

Sr. Design Engineer 19/07/2021 to Present

- Being responsible for **Design and Development of Mechanical** Enclosure and Dynamic Parts for **Actuators and Transmitters** of castings and Plastics.
- To conduct the structural analysis for the castings and design tweaking based on the flow analysis.
- In co-operate with internal departments such as program and application management, quality and purchasing and answer all technical queries pertaining to products

3 of 4 M/s Royal Enfield Motorcycles A Division of Eicher Motors Ltd:

Employed with M/s Royal Enfield Motorcycles India Ltd, as a **Senior Design Engineer**,
- New Product Development for Genuine Motorcycle Accessories_

Key Roles and Role Responsibilities:

Sr. Design Engineer 03/07/2017 to 16/07/2021

- Being responsible for the **Design and Development of Motorcycle Specific Supplementary Products** for the **Chassis and Engine assembly**.
- Being responsible for **Progression of Design** Maturity from **Initial Concept** through to **Engineering Sign-off** and **Design Gateways**, Component level **Product Testing & Validation**.
- To Define Appropriate System- level **Engineering Targets to meet Function, Quality and Attribute** requirements of **the Vehicle Program**.
- **Progress the Design** with the **3D CAD Modeling & Drafting tool Creo5.0** in line with the **Program Timescales and Deliverable** Cadence.
- Develop and Maintain the **Design Validation Plan (DVP)** including both In-house and Supplier Testing plan and to Ensure **Development Sign-off Tests** are completed on schedule.
- Ability to **Check and Manage Clearance** to Interface parts, **GD&T and Tolerance Stack up Analysis**
- Ensuring the **Manufacturing Feasibility** of components Designed with **DFMEA / DFM / DFA Tools**.
- Ensure Sub Systems Meets **Weight Targets** achieved through **Centre of Gravity Measurement on CAD**.
- To Execute **ECR and ECN Design Changes**.
- To Work Effectively and Efficiently in **PLM Software Wind Chill.11** for Product Data Management (**PDM**)
- To Develop System **Design Specifications** incorporating **Engineering Standards, Test Procedures** and **Material Specifications**.
- To **Support Purchasing** Team in Sourcing and **RFQ activities**.
- Ensuring all Relevant **Documentations** as per **ISO& Quality Standards**.
- To Liaise with **Supplier, Manufacturing, CAE and Validation Teams** in order to come to a common solution.
- To Support **Vehicle Launch** and **Pre - Production Builds as Alpha, Beta activities**.(Virtual and Physical)
- **Ensuring** issues that cannot be resolved are **escalated to Lead Engineer**.
- Having experience on **Manufacturing Processes** such as Die Casting, Hot and Cold Forging, Machining, Injection Molding, Sheet Metal Operations and Welding Processes.

2 of 4 M/s TATA Consultancy Services Engineering and Industrial Services (EIS)

Employed with M/s TATA Consultancy Service as a **Senior Design Engineer**.

Key Responsibilities: Client #02 General Motors Company Sr. Design Engineer 01/04/2016 to 21/06/2017

- Design and Development of **Powertrain Aggregates** (Drive train, Propeller shaft, Transmission) for Automotive Application
- Design Support for ZF TRW **Brakes**, Client, Pune.
- Creating **3D Modeling and Manufacturing Drawings** with appropriate **GD&T** using CATIA/Pro-E/Creo.2
- Knowledge of **2D Design and Checking** (GD&T, Design Standards)
- Establish Detailed Engineering Requirements for Assigned Tasks that Meet Project Requirements.

Key Responsibilities: Client #01 Baker Hughes Inc. Sr. Design Engineer 16/03/2014 to 31/03/2016

- New Product Design, Value Engineering and Alternate concept generation for existing Functions.
- Scale up and Scale down of Existing design for new sizes with additional design modifications.
- Design Support for **Shale Oil Extraction Devices** for Oil & Gas Industry.
- Working for **Value Engineering Team** Involves in Designing the New Variants for the Product.
- Creating 3D models for the products using **CAD Software's**. UG NX8.0 And Solid Works And Creo.2
- Validating the Design with **Design Calculations and Tolerance Stack up**.
- Perform **Tolerance Stack-Up Analysis** to meet the Functional Requirements.
- Perform **Dimensional Variation Analysis (DVA)** simulation for critical Gaps using the Team center **Vis-Mockup-9.1** to which tuning the part tolerances for balanced product quality and cost.
- Generating Manufacturing and Fabrication Drawings, Incorporating GD&T and other all details as per Standards, Specifications and Requirement
- DFM study for design changes.

Achievement	<ul style="list-style-type: none"> ▪ Received appreciation from the clients for the successful Design Support for the projects. ▪ Done Automation with VB Script to reduce the cost and time to achieve good quality output.
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1 of 4 M/s, Mekins Industries Ltd., - JV Paul Mueller GmbH:

Employed with M/s, Mekins Industries Ltd.,- JV Paul Mueller GmbH,

- As a **Senior Design Engineer**, New Product Development for Chennai Branch.

- Well Specialized for **Material Handling Equipment** Manufacturer for **Automobile and Engineering Application** OEM's In House Material Transportation and Storage Solution provider.
- Well specialized for making Stamping Pallets & Steel Stillages for the Indian Automobile Industry. Tier One supplier for Major OEM's like – Volkswagen, Renault Nissan, Daimler, Ford& the list goes on.
- Well Specialized for making Forklift Attachments, Forklift Extension Slippers, Forklift Dumping Bins and Goods cages with required WLL as per customer needs.
- Well Specialized Fabrication Solution provider for Engineering Applications.

Nature of Work/Responsibility: Sr. Design Engineer 02/01/2013 to 06/03/2014

- Develop and Development of **Pallets/ Material Handling Equipment** and Aid Manufacturing Team for **Sheet Metal Automotive** Body Parts and for other related Components.
- Creating 3D models using CAD Software's and validating the Design with Design Calculations.
- **Structural Analysis** using FEA, Ansys.12 Software and **Interpret CAE** results to ensure effective function.
- Acquired knowledge on Manufacturing Processes.
- Aiding Production Team for day to day activities.

Technological Exposure:

Modeling And Analysis Software's	VIS-Mockup-9.1 (VSA), Solid Works.12, Pro/ENGINEER & Creo5.0, CATIA V5 R21, UG NX7.5, Auto CAD 2007, Ansys.12/Workbench, Lab VIEW 8.2. SAP 7300.2.4.1084, Team Center 9 , Wind Chill.11, Microsoft Office, (VBA) Programming,
Methods	New Product Development, CAD Modeling, GD & T, Tolerance Stack up Analysis, Dimensional Variation Analysis (DVA), Design For Six-Sigma, DFMEA, DFM, FEA.

Project Works:

- A Project on "**Design and Development of Print Head for Polymer Inkjet Printing Technology (IJPT)**". In PSG Tech, Coimbatore.
- A Mini Project on "**Designing of Vibration Absorber for a Cantilever Beam**" in PSG Tech, Coimbatore.

Personal Profile:

Age	:	32	Languages Known	:	English and Tamil
Nationality	:	Indian	Marital Status	:	Married

Declaration,

I, **Peermohamed Thowbik K**, do hereby declare that details furnished above are true to the best of my knowledge.

Thanking You

Place:

Date:

(Signature)