

Pavan Bagal

C101, Sumitra stars Housing society, • Wakad, Pune • 411057

CELL (+91) 9545329994 • E-MAIL pavanbagal029@gmail.com

Seeking challenging assignment in Design & Detailed Engineering / Part Ownership with an organization of high repute preferably in product design MNC.

PROFILE SUMMARY

- 6 years of experience in Design Engineering, Detail Engineering, Product Executions, Operations Managements, Quality Management and Process Planning/Control.
- In-depth understanding of design & Development of Casting, Plastics & Sheet Metals and conversant with DFM, DFA and DFS.
- Strong abilities in creating/ reading/ interpreting engineering drawings with proficiency in designing & developing new products in conformance to pre-defined technical specification.
- Good knowledge of Process design, CREO, PLM for Developing & implementing design to meet quality standards.
- Effective communicator & negotiator with strong analytical, problem solving and organizational abilities

EXPERIENCE

JAN-2015 **TATA TECHNOLOGIES LTD.**

(Present) Sr. Design Engineer

- Aggregate owner of Design & development of steering system for LCV, ULTRA & BUSES of **Tata Motors**.
- Coordinating with neighboring system owner's like engine, front axle, chassis, Cab for steering System designs
- Comparing designs with benchmark data of competitor's vehicles
- Concept design of various automotive component such as Drag links, Relay rods, Pitman Arms, Steering Arms and Assemblies.
- Preparing linkage to evaluate hard point and takes **Adams** run to calculate lock angle, bump steer, brake steer, Ackerman and pitman arm travel.
- Pro-Mechanism design and clearance study considering various conditions of suspension.
- Interaction with supplier for quality increment and new development.
- Co-ordinate with quality team and Preparing DFM, DFA, DFS document.
- Concept design and various proposal of casting brackets and sheet-metal brackets design.
- Coordinating for fitment trials with Vehicle owner and supplier

- Work for resolving field issue, proto development and failure modification.
- Finalize steering system assembly and hydraulic pipelines considering packaging constrain in vehicle.
- Design modification if required as per testing report.
- Creating component drawing, assembly drawing, information fitment drawing.
- Assembly creation and release vehicle.
- Working Projects:
 - ✓ Steering design of 9M electric bus with 900 and 600 floor heights.
 - ✓ Steering design of Tata Ultra (Truck and Bus), LCV and LPO buses.
 - Ultra 15T and 13T
 - LPK 1212
 - LP 707/909
 - LPT 909/1109
 - ✓ Field issue solving for HRTC bus in Shimla.

APRIL-2014 CUMMINS INDIA LTD. (contractor through ONWARD TECHNOLOGIES LTD.)

JAN-2015 Design Engineer

- Design and packaging of EGP – exhaust gas processor
- Contain Module catalyst with packaging of inlet and outlet assembly to control exhaust gas flow.
- Design of flanges, tubes with different shapes and perforations.
- Preparing concept design and drawings considering GD&T.
- Working in Creo-2.0, PDM and PLM for release process.
- Working Projects:
 - ✓ Design and packaging of cylindrical shape EGP for Cummins ISD 6 cyl, ISB, ISL 6cyl, ISF 2.8L and 3.8L for EURO4 and EURO5.
 - ✓ Design and packaging of two BOX shape EGP for Cummins ISM 6cyl EURO4.
 - ✓ Design EIEO, SISO, EISO, SIEO types EGP of BOX and cylindrical.

AUG-2013 PARAM TECHNOLOGIES PVT LTD. (Work for TATA MOTORS)

MAR-2014 Design Engineer

- Design and packaging of Air Brake system for all commercial vehicle.
- The system consists of service brakes, parking brakes, control pedal, air storage tank, quick release valve, relay valve.
- Working in Pro-e and PLM for release process.
- Working Projects:
 - ✓ Design of Air Brake System for 11T (LPT1109) with 42WB truck.
 - ✓ Design of Air Brake System for 6T (LPT 613) with 42WB truck.
 - ✓ Design of Air Brake System for 16T (LPO 1618) with 62WB bus.

JAN-2012
AUG-2013

UT ENGINEERING PVT LTD.

(Customer- **BD PHARMACEUTICAL SYSTEMS & HERAMB THERMOPLASTIC**)

Design Engineer

- Design of plastic medical equipment (Self injection systems).
- Creating fixture design for Self-injection equipment
- Concept design, modifications and Detail drawings of Self injections.
- Design by using Tolerance analysis - Statistical & Worst Case
- Custom nameplates, labels and dose printing design
- Designing of molds (i.e. core, cavity extraction and mold)
- Design of injection molding and casting for supplying finished part.
- Creating solid models and fixing (creating mold) of models imported from other software's.
- Feasibility Study for manufacturability and defects that may occur in molding
- Working in Pro-e wildfire 4.0 for release process.
- Working Projects:
 - ✓ Design of BD-Pharmaceutical Systems self injection pens.
 - ✓ Mold design of Turbine blade, Coated Rubber of Trolley Wheel and Load Roll, Spiders coupling, Mallets.
 - ✓ Fiber Tray system is used to support insulated electric cables which is for power Distribution and communication
 - ✓ Powercon company- Design of support for Electrical power transformer assembly.

EDUCATION

- B.E Mechanical
 - ✓ Visvesvaraya Technological University.
 - ✓ Graduated 2011 (67%)
- HSC and SSC
 - ✓ State Board of Maharashtra
 - Class XII – (55%)
 - Class X – (66%)

ACADEMIC PROJECT AND WORKDONE

▪ **PROJECT: - AUTOMATIC PNEUMATIC SHEET FEEDER**

- ✓ Description: Our Objective is to feed sheet into the press machine automatically working on pneumatic air. The main work is to move a definite length of the strip of metal to the forward position when ram of press is in upward position.
- ✓ Scope of project: Main criterion for selecting this project was to reduce the cost of the unit as well as manpower required & also most of idle time is saved

▪ **SEMINAR: - SOLAR DISH ENGINE**

- ✓ It converts the thermal radiation to mechanical energy & then to the electrical energy. The system uses a mirror array and concentrate incoming direct normal isolation to a receiver in order to achieve the temperature required to convert heat to work. The concentrated solar radiation is absorbed by the receiver & transferred to an engine.

SOFTWARE SKILLS

- CREO 2.0/3.0 PROE WILDFIRE–PTC CERTIFIED COURSE FOR MECHANICAL DESIGN.
Worked on PROE Wildfire and CREO (3D Solid, Casting, Surface, Sheet metal and Pro-piping)
- TEAM CENTRE(PLM)
- WINDCHILL PLM AND PDM
- BASIC ADAMS FOR STEERING LINKAGES

AWARDS AND ACHIEVEMENTS

- Two times employee of the Quarter for Tata Technologies Ltd
- 1 One Spot award winning in Tata Technologies.
- One-time employee of the month for UT designs.
- Participated & secured prizes in sports (Table Tennis, carom).