

Photograph

N. ANANDAN

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Project Lead –NEW PRODUCT DESIGN & DEVELOPMENT SPECIALIST

✕ CAD / CAM ✕ PROJECT MANAGEMENT ✕ MECHANICAL DESIGN ENGINEERING ✕

Mechanical Engineer offering nearly 18 years of rich experience in executing New Product Design & Development of Sheet Metal and Machined Components for international clients in compliance to global quality standards

Strong exposure to Mechanical Design & CAD/CAM Field entailing Fixture Designing, Product Design & Development, Equipment Design and Reverse Engineering; facilitated development of designs that can be produced economically to enhance company's competitive position

PROFILE SUMMARY

Presently associated with Onward Technologies, Bangalore as Project Lead; expertise entails:

Project Execution

Design Improvements/ Quality Assurance

Cost Savings/ MIS Reporting

New Product Design & Development

Solid & Surface Modelling

Client Relationship Management

Trained on SDP Fluid Lines

Engineering Drawings / Drafting

Team Management/ Training

- Supported all phases of **New Product Development Projects** entailing cost & effort estimation, engineering calculations, resource planning, quality & inspection and team coordination; proactively ensured completion of projects within cost, quality & time parameters
- Excels in **Design Engineering / Product Development** including conducting requirement analysis, developing conceptual design to meet customer requirements and translating the design model using CAD/ CAM tools with key focus on quality, cost & delivery
- Proven skills in managing functions related to **concept maturation, design, product testing, Fluid lines design, vendor & manufacturing support** and effectively resolving manufacturing, assembly & engineering field issues
- Technical expertise in **PRO/Engineer modules** like Part Modeling, Assembling, Sheet Metal & Detailing; working on PLM Tools such as Team Center & Autodesk Vault with strong competencies in creating, reading & interpreting Engineering Drawings
- Proficiency in **understanding client's needs and customizing the design accordingly** for ensuring high client satisfaction, repeat & referral business; worked with leading heavy construction equipment manufactures like Caterpillar, Terex

IT SKILLS: Creo, Autodesk Inventor, Solidworks and AutoCAD

WORK EXPERIENCE

Since Jul'19: Onward Technologies, Bangalore as Project Lead

Key Projects Executed:

Client: Caterpillar India Pvt. Ltd. – EPD, Bangalore (Earth Moving Equipment Manufacturer)

Software: Creo-5, Team Center Engineering,

Role: Offshore Design Engineer for EPD Team

Responsibility:

- Working with Onsite Lead Engineer for new concept of Design and Execute the same.
- Reviewing engineering/ design changes & resolving manufacturing related problems associated with design.
- Developing the conceptual design to meet customer requirement & translating the design model using CAD/ CAM tools.
- Routing experience in engine turbocharger oil & Water lines for IPSD & LPSD engines (C15, C18 & C32)
- Routing coolant hoses & pipes, Hydraulic Fluid lines & Detailing of the same

Jul'13 to Jul'19 : Cyient Limited, Bangalore as Team Lead

Key Result Areas:

- Undertaking New Product Development tasks and ensuring delivery as per schedule with required quality
- Studying the inputs & documents provided by the client and providing conceptual design for client approval

- Preparing engineering designs / drawings & technical specifications as per client's requirements
- Defining the scope from concept generation to final design; contributing in:
 - [Selecting hardware for the assemblies](#), creating product structure, detail drafting and assembly drafting
 - Designing and Modeling for Components, [creating Assembly Drawings](#) for the approved design
- Facilitating Product Designing including [Tolerance Stack-up Analysis](#), [Packaging Studies](#), [Fits](#), [Tool Clearance & Manufacturability](#)
- Translating the design model for a specific project using various tools and developing 3D models of the component
- Experience in Hydraulic hose and fittings selection
- Experience in hydraulics system (control valves, pumps, etc.,) and Hydraulic CAD Integration, Pipe Hose routing, Aggregate mounting.

Highlights:

- Overcame designing challenge during the execution of [MP project at TEREX](#).
- Effectively interacted with [Global clients](#) for inputs, [trainings](#), [new technology](#) and [documentation of ongoing project](#)
- Initiated measures [like customization of design model of FOWLER WESTRUP \(Cyient\)](#) for enhancing client satisfaction levels
- Successfully ensured quality of the end product in all respects by taking measures [like self review, peer review and maintaining the tracker for earlier encountered defects, so that the same is not repeated in the subsequent deliverables](#).
- Received Awards/Appreciations on account of excellent performance like [best performer and best performing team in Caterpillar and Fowler Westrup](#)

Key Projects Executed:

Client: Caterpillar India Pvt.Ltd. - Engineering Design Center, Chennai (Earth Moving Equipment Manufacturer)

Software: Creo-2, Team Center Engineering using CITRIX Environment

Role: Offshore Design Engineer for Power System (LEC & MEC)

Responsibilities:

- Acted as an Offshore Coordinator and coordinated with:
 - Offshore Team for effective output & performance; managed various models of Engine & Automotive Components
 - Process Partner to get project status & details
- Conducted discussions on quality & delivery metrics, CSI, project management activities and ensured on-time & error-free deliverables
- Worked on Components Modeling, Weldment Assemblies, Arrangement, Group Assemblies, Hydraulic Fluid Lines & detailing of the same

Client: Fowler Westrup - Denmark, (Agriculture Processing - Post Harvesting Machines)

Software: Autodesk Inventor, Autodesk Vault

Role: Offshore Design Engineer in Design Team

Responsibility:

- Contributed in Modeling and Detailing of Sheet Metal Parts like all Interior & Exterior Parts, Gears, Drive Assembly & Machine

Client: Terex (lifting and material processing products)

Software: Creo

Role: Offshore Team Lead in Design Team

Responsibility:

- Reviewing engineering/ design changes & resolving manufacturing related problems associated with design.
- Developing the conceptual design to meet customer requirement & translating the design model using CAD/ CAM tools.

Client: Terex Articulated Trucks (off highway vehicles)

Software: Pro/Engineer Wildfire 4.0

Role: Offshore Team Lead in Design Team

Responsibility:

- Worked for Radiator Pipe modification according to new Tier 4 Scania Engine design.
- Worked for Exhaust Full time / Part time Subs systems changes according to new Tier 4 Scania Engine design.
- Also involved in the legacy conversion of 2d data to 3D with the use of solid modeling and sheet metal part practices.

Feb'09 to Jun'13: HHV (Hind High Vacuum Co. Pvt. Ltd.), Bangalore as Design Engineer

Key Result Areas:

- Conducted process study for project planning, scoping, scheduling & tracking and implemented project plans within deadlines
- Performed various functions like:

- Developing the conceptual design to meet customer requirement and translating the design model using CAD/ CAM tools
- Reviewing engineering/ design changes and resolving manufacturing related problems associated with design
- Managing the CAD Module on Autodesk Inventor
- Resolving complex technical issues, implementing upgrades and providing technical support to the end users
- Contributed in undertaking succession planning of workforce & shift management activities, appraising member's performance & providing feedback, resolving interpersonal issues and maintaining a harmonious work environment

PREVIOUS EXPERIENCE

May'08 to Feb'09: Driktech Consulting (I) Pvt. Ltd., Bangalore as Project Engineer

Apr'06 to May'08: BonSource Technology (I) Pvt. Ltd., (US based company), Chennai as Design Engineer

Oct'04 to Mar'06: USAM Systems, Anna Nagar, Chennai as CAD Engineer - Project Development Department

EDUCATION

BE (Mechanical) from Thirumalai Engineering College, Kanchipuram in 2004; *secured 1st Division (71%)*

Diploma in Mechanical Engineering from Bhakthavatchalam Polytechnic, Kanchipuram in 2001; *secured 1st Division (80.1%)*

CERTIFICATION COURSE

Certified Advanced CAD/CAM Course from Central Institute of Tool Design, (CITD) Hyderabad

PERSONAL DETAILS

Date of Birth: 12th May 1980 | Languages Known: Tamil, English, Kannada & Telugu | Passport No.: B5875569

Address: Flat No. 303, K & T's Swarnamukhi Residency, 14th Cross, Neeladri Nagar, Electronics City, Bangalore-560100

Location Preference: Chennai & Bangalore ~ Industry Preference: Heavy Engineering, Semi-conductor

Please Refer to Annexure for Key Projects Executed

ANNEXURE

KEY PROJECTS EXECUTED

With Hind High Vacuum Co. Pvt. Ltd.

Title: Auto 500 Queensland

Client: Queensland University, Australia

Tool: Autodesk Inventor & AutoCAD

Title: Auto 500 Charleston

Client: Charleston University, Singapore

Tool: Autodesk Inventor & AutoCAD

Title: ID750 - USA

Tool: Pro/E

Title: TF600 - USAF

Tool: Autodesk Inventor

Title: TF600 – ICFO, German

Tool: Pro/E

Title: TF600 – UNSW, AUS

Tool: Autodesk Inventor

With Driktech Consulting (I) Pvt. Ltd.

Title: Modeling and Detailing of Assy. of Gear Casing

Client: FS-Elliott, USA

Tool: Autodesk Inventor & AutoCAD

Title: Modeling and Detailing of Assy. of Air Compressor

Client: FS-Elliott, USA

Tool: Pro/E & AutoCAD

Title: Modeling & Detailing of Assy. of Turbine Impeller

Client: PRAXAIR, India

Tool: Autodesk Inventor

With BonSource Technology (I) Pvt. Ltd.

Title: Design of Welding Fixture

Client: JWF Industries Ltd., USA

Title: Modeling of Coal Silos

Client: JWF industries Ltd, USA

Title: Modeling of Decorative Concrete Tool

Client:BonTool Company, USA

With USAM Systems

Title: Modeling of M.B.T.Arjun Tank

Client: CVRDE (Ministry of Defense), Avadi, Chennai

Responsibilities:

- Contributed in:
 - Doing Modeling for Assemblies, Sub-Assemblies and Details on each system of MBT Arjun Tank
 - Preparing Assembly Views, Exploded Views, Section Views and Detail Views using MDT (Mechanical Desktop)
 - Developing Render Views for all Assembly of MBT ARJUN using Autodesk Inventor
 - Calculating Mass, Volume, Moment of Inertia & Center of Gravity for Assemblies, Sub-Assemblies and Detail Parts of MBT Arjun