

Objective:

Seeking a challenging position involving analysis, design, development, application and implementation of projects in an environment where I can grow along with the organization with great responsibility.

Synopsis:

- M.Tech in Thermal and Fluids engineering (Mechanical) enriched with nearly 6 years of experience in design & development department.
- Excellent analytical, troubleshooting, interpersonal, relationship building and team building skills.
- Exposure in managing design activities, work instructions & design procedures.
- Strength includes connecting with people, self-discipline & ability to work independently and as a team.

Profile Summary:

- Technically accomplished professional with nearly 6 years of experience in Heavy fabrication as a Senior design engineer.
- Design of Pressure vessels, Storage tanks, Heat exchanger, Conveyors, Heat Pump etc.
- Expertise in CAD - Solid works 2013 & 2016, Solid Edge ST9, AutoCAD 2016, Pro-e certified
- Experience of GD & tolerance analysis and manufacturing drawings.
- Familiar with codes & standards ASME Section VIII Div.1 & 2, ASHRAE & DIN, ANSI and ASME pipe fittings.

Keywords:

Solid Edge, Solidworks, AutoCAD, pressure vessels, heat exchangers, **GA layout, welding, skid, piping, tubing, nozzle orientation, P&ID, GD&T, familiar with ASME, ASTM, TEMA, API, IS.**

Area of Expertise:

Standards

- Pressure vessels - ASME section VIII Div.1, IS 2825.
- Material Standards - ASTM, ANSI, DIN, IS...etc.
- Piping and component related standards- B16.5, B16.10, B16.19 & B31.3, B16.9 & B16.11, B16.20 and B36.10/19.
- structural components related -IS
- Piping plans standards- API 682.

Piping Design

- Design of piping system as per API 682, EIL specifications and customer P&ID.
- Knowledge of pressure, temperature, flow, level gauges & transmitters and other instruments applicable in piping system.
- Flanges and pressure-temperature ratings as per B16.5, fittings as per B16.9 & B16.11...etc.
- Piping & tubing as per project specifications, B36.10, B16.19 & catalogue and any other specific project requirements.

Design of Pressure Vessels and Heat Exchangers

- Design of cylindrical and rectangular shells, stiffening rings, dished ends, vessel supports, openings through shells and ends and other related calculations as per ASME, IS 2825...etc.
- Shell & tube heat exchanger related calculations as per TEMA

Modelling Packages:

- Solid Edge
- Solidworks
- AutoCAD
- Pro-e

Professional Qualification:

- M.Tech in Thermal and Fluids engineering (Mechanical) from Dr. B.A. Technological University Lonere; Dist. Raigad with 6.46 CGPA in (Aug.2009-Feb.2012)
- BE (Mechanical) from T.P.C. T's College of engineering, Osmanabad with 63.125% in (2004-2007)
- Diploma (Mechanical) from Eklavya Polytechnic, Pune with 62.92% in (2001-2004)
- SSC from Modern high school Pune with 60.00% in (2000-2001)

1. Thermax Limited.**Company Profile:**

Thermax Ltd. is the market leader in engineering of Air pollution control systems like bag filter systems, Electrostatic precipitator industry in India with its headquarters and main manufacturing location situated in Pune.

Designation: Lead Design Engineer

Department: EPC

Working duration: 12th February 2018 to till date

Tools: Solid edge, AutoCAD 2010, STAAD Pro

Role & Responsibilities:

- Design of pipe size as per flow requirement as well as calculate the pressure drop through piping.
- Thermal and mechanical design calculations.
- Loading and design of structure using IS code.
- Structure analysis in STAAD Pro
- Selection of materials, types of pipe and tube fittings, valves, instruments & its ranges and other related process parameters as per project requirements and catalogues.
- Preparation of mechanical data sheet, specifications of brought out items & evaluation of offers received
- Checking of basic engineering documents like GA drawing, P & ID, equipment layout diagram & manufacturing drawings
- Group review, resource planning and allocation
- Internal discussion with cross function teams like proposals, projects, quality, buyers etc.
- Checking ERP B.O.M., approved of ERP releases.
- Allotment & follow up of jobs for draughtsman to meet the engineering schedule.
- Consultation with customers for technical clarifications, project specs. and other details.
- Review drawings and submit all necessary documents to customer for approval.
- Study comments received from customer and resubmit with comments resolution sheet.

2. Cee Dee Vacuum Equipment Pvt. Ltd.**Company Profile:**

Cee Dee Vacuum Equipment Pvt. Ltd. is working in the field of design and manufacturing of transformer oil filtration machines, vacuum pressure impregnation plants, vacuum drying plants, transformer oil re-refining/regeneration units & other related equipment's.

Designation: Sr. Design Engineer

Department: Design

Working duration: 05th December 2016 to 27th August 2017

Tools: Solid edge, AutoCAD 2010

Role & Responsibilities:

- Overall responsibility for design and drawing related activities.
- Consultation with customers for technical clarifications, project specs. and other details.
- Mechanical design of heat exchangers (shell & tube type)
- Selection of materials, types of pipe and tube fittings, valves, instruments & its ranges and other related process parameters as per project requirements and catalogues.
- Preparation of 3D model of plant GA layout consisting of different systems and their interconnecting piping loops, gratings, staircase, supports for piping and other heavy instruments and structures.
- Prepare drawings, instrument data sheets, calculation sheets and other related documents for Submission.
- Allotment & follow up of jobs for draughtsman to meet the engineering schedule.
- Review drawings and submit all necessary documents to customer for approval.
- Study comments received from customer and resubmit with comments resolution sheet.
- Review of loop drawings, component part drawings and release Bill of Material (BoM) to production shop on approval of documents.
- Attend cross functional team daily meetings.
- Monitoring & controlling engineering activities to keep it in the track of overall project schedule & updating engineering status to head of department.

3. Aqua Therm Systems**Company Profile:**

Aqua Therm Systems is a design, manufacturing and service provider company specializing in Heat pump. This heat pump is used for heating water with 60-70% of electricity saved. In this mainly **vapor to liquid** and **liquid to air** heat exchanger used.

Designation: Sr. Design Engineer

Department: Design & development

Working duration: 03rd November 2014 to 31st July 2015 & 15th January 2016 to November 2016

Tools: Solid edge, AutoCAD 2010, familiar with Acusolve

Role & Responsibilities:

- Telephonic discussions with client and handling team of draftsmen.
- Review Customers enquiries, as per enquiry preparation of P & I drawings.
- Calculate Hot water per day as per client requirement.
- Calculate Air source heat pump capacity required to meet hot water load.
- As per capacity selection of compressor, Select the other equipment like Evaporator coil, Condensing PHE and expansion valve in line with compressor capacity
- Refrigerant piping as per system capacity, Decide the HP/LP cut out as per site condition
- Pre dispatch testing of system, Post dispatches, erection & commissioning of system
- Analyzed the system performance, Generate detailed reports and technical specifications
- Design of Shell and Tube heat exchanger for vapor to liquid heat transfer.
- Optimization of data analysis in CFD compared with practical test results.
- Preparations of General Arrangement (GA) drawings for system panels and submit it to customer.
- Prepare P&ID with instrument tag numbers and other related documents.
- Consultation with client for updating drawing as per comments received from customer and preparation of detail fabrication drawings.

4. Bectochem Consultant & Engineers Pvt. Ltd.

Company Profile:

Bectochem Consultant & Engineers Pvt. Ltd. is working in the field of design and manufacturing of process equipment Indian Sub-continent for Pharmaceuticals, Cosmetics & allied industries.

Designation: Sr. Design Engineer

Department: Design & development

Working duration: 03rd August 2015 to 11th January 2016

Tools: Solidworks, AutoCAD 2010

Role & Responsibilities:

- Assistance to seniors for managing design and drawing related activities.
- Consultation with customers for technical clarifications and requirements.
- Responsible for obtaining approval of design & drawing from client etc.
- Monitoring & controlling engineering activities to keep it in the track of overall project schedule & reporting the engineering status to seniors.
- Selection of materials, types of pipe and tube fittings, valves, instruments & its ranges and other related process parameters as per project requirements and catalogues.
- Prepare P&I diagram with instrument tag numbers, instrument data sheets, and heat load calculation sheets and other related documents for Submission.
- Finalizing skid ensuring nozzle orientations as per project requirements.
- Checking of fabrication drawing for design and GA requirement before releasing for fabrication.
- Provide advance action to purchase department particularly for long lead items.
- Coordinating with production & QC departments on any technical issues for smooth running of the project.
- Finally prepare as built drawings for any deviation as per consultation with Production and Quality Control departments

5. Srujann Fenco Food Engineering Pvt. Ltd.

Company Profile:

Srujann Fenco Food Engineering Pvt. Ltd. is working in the field of design and manufacturing of process equipment, Food, Storage tank, dairy equipment, CIP etc.

Designation: Design Engineer

Department: Design & development

Working duration: 05th July 2012 to 22nd October 2014

Tools: Solidworks, AutoCAD 2010

Role & Responsibilities:

- Prepared the 3D plant layout consisting of different systems and their interconnecting piping loops, gratings, staircase, supports for piping and other heavy instruments and structures.
- Preparation of Plant layout in AutoCAD and P&ID's based upon calculations from Process Engineering. (Basically for Mango juice plant, Tomato ketchup line, Multi Fruit line, dairy plant)
- Prepare GA drawings & calculation sheets
- Consultation with client for updating drawing as per comments received from customer and preparation of detail fabrication drawings.
- Design of pressure vessels such as Milk storage tanks, as per ASME section VIII Vol.1, and other standards.
- Study of design inputs received and applicable project specifications.
- To prepare design calculations for approval to Client/Consultant as applicable.

- Preparation of P&I diagram, Bill of Material (BOM), General Arrangement (GA) & layout for projects by referring offer or purchase order.
- Determination of conveyor belt, base frame, pasteuriser, agitator shaft diameter etc.
- Preparation of programs in EXCEL to facilitate repetitive calculations.

6. Jankai Engineering Works

Company Profile:

Jankai engineering works is working in the field of design and manufacturing of trolley, material handling trolley, storage pallet, rack, work table & customization.

Designation: Sr. Design Engineer

Department: Design & development

Working duration: 08th April 2008 to 29th May 2009

Tools: AutoCAD 2010

Role & Responsibilities:

- Design of different sizes of trolley, material handling trolley, storage pallet, rack and work table
- Preparations of General Arrangement (GA) drawings and submit it to customer.
- Prepared detail drawing for fabrication/manufacturing.
- Controlling all quality related activities such as raw material inspection, stage inspection & final inspection
- Preparation of BOM

Extra-Curricular Activities:

- Participated in **DIPEX (2004)** State Level Project Competitions at Nanded
- Training: - "HVAC Design and Drafting"
Work on VRF system design and familiar with VAV System design.

Personal Details:

Date of Birth: 2nd July 1986

Gender: Male

Marital Status: Single

Nationality: Indian

Languages: Marathi- mother tongue

English: Fluent

Hindi: Fluent

Interest: Music, travelling, reading.

Declaration:

I consider myself familiar with Mechanical Engineering aspects. I am also confident of my ability to work in a team.

I hereby declare that the information furnished above is true to the best of my knowledge.

Date:

Place: Pune

Mr. Avinash B. Jadhav