Knowledge Summary

* 6+ years of experience as a Piping Design Engineer in detailed engineering for brownfield and greenfield projects across Oil & Gas, Petroleum, Carbon Black, and Refinery sectors.
* Proficient in SP3D/PDS/PDMS for equipment, piping, and structural modeling; skilled in producing isometrics, layouts, and MTOs from intelligent 3D models.
* Strong background in piping layout design, material specification, and pipe stress analysis
* Completed ASME B31.3 Process Piping Design training in 2024; well-versed in industry codes including ASME B31.1, SEC VIII, API 5L, API 600, and BS standards.
* 7+ years of additional experience in Project Management, Vendor Management, Billing, Contract Administration, and Procurement.
* Familiar with international design standards: ASME, ASTM, API, MSS, NACE, AWS, AWWA, and OISD.
* Demonstrates strong analytical and statistical skills, including data mining, pattern recognition, data validation, and predictive analysis.
* Certified in Scrum (CSM, CSPO) and Azure Fundamentals; experienced in using Power BI, Tableau, and Excel for data visualization and reporting.
* Known for strong communication, adaptability, a collaborative mindset, and a consistent "can-do" attitude toward complex engineering challenges.

**General Experience Summary**:

6 years of experience on Design of piping and pipeline systems for oil & gas and petrochemical industries with the following field of experience:

1. **Piping design experience:**

* Complete design of piping general arrangement layouts, Piping isometrics, support details, Material take-off, Equipment location plan, orientation drawing, Tie-in index & Tie in packages
* Provide piping input to process piping and instrumentation diagrams (P&ID), Line designation table (LDT), Instrument specification sheets (ISS)
* Preparing material take-off requirements and isometric drawings for construction using 3d modeling software like-PDS (Plant Design System), PDMS (Plant Design Management System)
* Preparing and checking equipment orientation drawings for all types of equipment, considering equipment spacing, accessibility, operation and maintenance requirements
* Review all vendor documentations to assure compliance with the design and technical requirements

1. **Piping Material Experience**:

* Preparing and reviewing piping specifications in accordance with the company standard and general codes (ASME, ASTM, MSS, AWWA, AWA, MSS, OISD)
* Preparing and reviewing Piping material specifications (PMS), Valve material specifications (VMS)
* Preparing and reviewing valve datasheets, vendor technical specifications and bidder’s quotations.
* Provide piping technical input to P&IDs including piping classes, valve types and special items.
* Preparing piping safety instruction sheets with the required calculations for pipe wall thickness, Maximum allowable operating pressure (MAOP) and test pressure, external pressure
* Preparing RFQ for all piping bulks, valves and SP items
* Reviews offer against RFQs for all piping materials and preparing Bid Tabulation.
* Good knowledge of piping bulks Indian Industry current practices
* Assist all interfacing, engineering and construction groups in piping materials

1. **SP3D/PDS/PDMS Experience**:

* Experienced in using SP3D/PDS activities and modules including Equipment Modeling, Piping Designer, Isometric Extraction, and Drawing Manager.
* Experienced in using SP3D/PDMS activities and modules including Equipment Modeling, Pipe work, Structure, Iso draft, Isometric extraction, Hangers and supports.
* Experienced in Column piping, Pump piping, Heat exchanger piping, Vessel piping, Tank piping, Rack piping.
* Experienced in SP3D Structure Module, including Beams, Columns, Platform, staircase, panel, Bracing, Floor, Ladder, Walls, etc.

1. **Stress Analysis Experience:**

* In depth knowledge of design code and standards applicable for pipe stress analysis design work like Caesar II.
* Perform piping flexibility analysis (static & dynamic) for critical piping systems during preliminary and detailed design phase of project.
* Perform analysis for sustained, thermal and multiple operating cases, occasional (e.g.-wind, seismic, relief, hammer, ocean)
* Experienced in static equipment design such as pressure vessels, storage tanks, Heat exchangers, columns
* Perform pipe stress analysis for different equipment like steam turbines, compressors, centrifugal pumps, tanks, exchangers, heaters, columns, etc.
* Resolve high pipe loads on equipment nozzles
* Resolve high secondary stresses in piping
* Provide pipe loading information to civil/structure department
* Selection of spring hangers, struts for pipe supports
* Locate and identify pipe supports on isometrics along with types of supports
* Evaluation of local stresses via code cases like N318, N392 and WRC107/297
* Review and sign-off piping isometrics considering flexibility and supporting
* Prepare complete documentation of stress analysis and support design
* Participates in reviewing and checking designs, drawings and data from suppliers

**Skill Summary**

* **3D Modeling Software**: SP3D 2016, PDS 8.0, PDMS-12.0, AutoCAD 2018, AutoCAD Plant 3D 2022
* **Stress Analysis software:** CAESAR-II 5.1,5.2
* **Operating Systems:** MS-DOS, Windows XP, Windows 95, Windows NT, UNIX, Linux
* **Data Visualization:** Tableau, Power BI, Microsoft Excel
* **Project Management**: Waterfall, Scrum, KANBAN, XP, Lean, SAFe
* **Project Management Tools**: Microsoft Project Plan (MPP), JIRA, TFS, SharePoint

Professional Qualification

* Master of Science | Grand Canyon University, Arizona, USA |Business Analytics | 2023
* Bachelor of Engineering | Orissa Engineering College, Biju Patnaik Technical University, Odisha, India | Mechanical Engineering |2003
* Diploma in Engineering | Rourkela Institute of Technology, State Council of Technical Education, Odisha, India | Mechanical Engineering| 1999

Certifications: (Please refer to Accomplishment of my LinkedIn profile)

* ASME B31.3 Process Piping Design: July 22, 2024 – July 26, 2024
* Certified Scrum Master (CSM) – Scrum Alliance: (March 2024 – March 2026)
* Certified Product Owner (CSPO) – Scrum Alliance – (Dec 2023 – Dec 2025)
* Microsoft Azure fundamental (AZ-900) certification. – Jan 2021
* Master of CAD/CAM (Duration: 5 Months) - Year (2003-2004)

Central Tool Room & Training Centre (CTTC), Bhubaneswar

**Technical Training Projects:**

SP3D Training Project: Equipment & Piping Modeling (ASME B31.3)

* Modeled centrifugal pumps, vertical vessels, and shell & tube heat exchangers using SP3D Equipment module
* Created piping layouts, supports, and isometrics compliant with ASME B31.3
* Generated GA drawings, MTOs, and BOMs; ensured tie-in accuracy and vendor alignment

SP3D Training Project: Structural & Rack Piping – Brownfield Modifications (ASME B31.3)

* Modeled platforms, racks, and ladders using SP3D Structural module
* Rerouted piping in congested brownfield environment; ensured clash-free routing
* Produced spool drawings, support layouts, and GA drawings for construction

**Work Experience:**

Piping Engineering Experiences

* GS E&C CORPORATION | Piping Engineer |Feb2011 to September2011| Gurgaon, India
* Co-ordination between Piping and other Engineering departments.
* Extraction of Isometrics by PDS
* Stress Report generation from CAESAR II
* Locate and identify pipe supports on isometrics along with types of supports
* Review and sign-off piping isometrics considering flexibility and supporting
* Prepare complete documentation of stress analysis and support design
* Magnasoft Consulting India Pvt Limited | Piping Engineer |June 2008 to October 2008 | Bangalore, India
* Perform static equipment design such as pressure vessels, storage tanks, Heat exchangers, columns,
* Perform pipe stress analysis for different equipment like steam turbines, Compressor, Centrifugal Pumps, Tanks, Heat Exchangers, Heaters, Columns, etc.
* Pipe thickness calculation
* Preparation of Piping Material Specification
* Preparation of General Bill of material
* Preparing Valve Material Specification for Gate Valve, Ball Valve & Blow down Valve
* Chemtex Consulting India Limited | Associate Piping Engineer| December 2007 to June 2008 | Bangalore, India
* Pipe thickness calculation and branch reinforcement calculations
* Preparing Piping Material Specification
* Preparing Valve material specification
* Calculation of Test pressure
* Preparation of Technical specifications for pipes, flanges, fittings, valves, fasteners, gaskets & special items {e.g., Strainers (T, Y, Temporary type)
* Technip KT India Limited | Piping Engineer| October 2006 to November 2007 | NOIDA, India
* Pipe thickness calculation
* Preparation of Piping Material Specification
* Preparation of General Bill of material
* Preparing Valve Material Specification for Gate Valve, Ball Valve & Blow down Valve
* Requisitions to different vendors for all the piping items & Valves
* Evaluation of offers from different vendors & giving the Technical Bid Tabulation report
* Preparing the Purchase Order Summary & Issue them to respective Vendors
* Preparing specifications for Color coding, Valves, Gasket, Fasteners
* Lurgi India Pvt. Ltd | Piping Engineer |March 2005 to September 2006 | New Delhi, India
* Model static equipment design such as pressure vessels, storage tanks, Heat exchangers, columns
* Perform pipe stress analysis for different equipment like steam turbines, compressor, centrifugal pumps, tanks, exchangers, heaters, columns, etc.
* Using PDS, performed Equipment Modeling, Piping Designer, Isometric Extraction, and Drawing Manager.
* Preparation of General Bill of material
* Preparing Valve Material Specification for Gate Valve, Ball Valve & Blow down Valve
* Requisitions to different vendors for all the piping items & Valves
* Evaluation of offers from different vendors & giving the Technical Bid Tabulation report
* Preparing the Purchase Order Summary & Issue them to respective Vendors
* Shankalpa Consultancy & Marketing Pvt. Ltd. | Mechanical Engineer |Feb 2004 to Feb 2005 | Sambalpur, India

* Preparing Technical Specifications & calculations as per client’s requirements
* Incorporating the client’s requirements in the requisite documents
* Understanding various types of 2D GA drawings, piping schematic layouts & equipment drawings

Project Management/Finance Work Experiences

* Head Cash/ Cashier| The Home Depot | Retail / Finance | IL, USA | Aug 2024 to Onwards
* Create and maintain a positive work environment for all cashiers
* Communicate with customers and address any problems they may have
* Serve as the primary point of contact for customer service associates
* Operate registers and perform general checkout functions
* Generate reliable and accurate till reports from every register
* Resolve cash tills when opening/closing, ensuring the money matches the report and is stored safely
* Assist cashiers with requests such as price checks, rain checks
* Maintain a clean working environment by wiping down registers during downtime
* Account Receivable Specialist | Artech LLC/ Wheels, Inc. | Finance | IL, USA | Dec 2023 to May 2024
* Developed and maintained strong client relationships, ensuring excellent customer service and seamless operations with internal departments.
* Created and distributed weekly and monthly reports, managing daily collection activities and client payments.
* Conducted detailed analyses for Sales and Account Management, addressing client payment history and issues.
* Managed vendor relationships and handled ERP system updates to maintain data integrity and process efficiency.
* Initiated client contact for past due receivables, billing issues, and ensured compliance with client-specific requirements for EDI billing.
* Project Manager / Vendor Billing Analyst | Vinakom Communications | Telecom/Finance | Schaumburg, USA | July 2021 – Nov 2021
* Balanced multiple projects using Waterfall methodology and Microsoft Project for the telecom service providers AT&T, Lumen, Verizon, Comcast.
* Created interactive reports and dashboards using Tableau, Power BI, and MS Excel.
* Led team tasks and facilitated Scrum ceremonies to achieve sprint goals.
* Managed sales contracts, ensuring all financial transactions were recorded correctly for the clients/customers.
* Created ad hoc reports on sales goals and customer visit metrics using pivot tables in MS Excel.
* Prepared disconnection status reports and updated management on progress and issues.
* Ensuring all assigned project tasks were processed, organized, and progressing as per deadlines and deliverable dates.
* Monitored and managed new orders, upgrades, and disconnect orders to ensure they ran within scope and deadlines.
* Created work orders and assigned them to the field technician team to do the set up.
* Ensured all service orders, including new, upgrade, and disconnect orders, were completed within defined deadlines.
* Project Manager | InSigma Inc / TCS/Walgreens | Digital E-commerce |Chicago, IL | Jan 2020 – Sep 2020
* Coordinated offshore development and managed 12+ resources for Walgreens digital operation center.
* Facilitated Agile ceremonies, including sprint planning, daily standups, reviews, and retrospectives.
* Enhanced team performance by resolving impediments and ensuring adherence to Agile practices.
* Developed project goals and timelines, ensuring on-time delivery within budget.
* Utilized JIRA and ServiceNow for tracking project progress and managing tickets.
* Data Analyst /PM| Camel Marketing Pvt. Ltd | E-commerce |New Delhi, India | Jan 2016 – Feb 2019
* Managed projects using Microsoft Project Management, facilitated sprint planning, daily scrums, retrospectives, and stakeholder meetings.
* Developed complex data models and interactive reports using Power BI.
* Automated sales reports, improving sales conversion rates by 20%.
* Coordinated with vendors for procurement management and created purchase orders.