

CURRICULUM VITAE

Name : **PRATAP SHANTARAM RANE**

Position : **Lead / Senior Piping Designer
Piping Checker and Reviewer**

Qualifications : **P.G. Diploma In Piping Technology
Diploma In Mechanical Engineering**

Email : **raneps@gmail.com**

Contact No. : **Mob. +91 9657711661**

CAREER SUMMARY

24 years of professional experience in Industrial Plant Engineering - Piping Design and Detailed engineering For various industries, Chemical plant, Process plant, Power plant (Air Quality Control Systems), water treatment, speciality chemical plant, Brewery, Alcohol, Steel reheating furnaces, Food processing and Fuel ethanol, LNG storage from jetty, third party reviewer and end client mediator for deliverables accuracy, model reviewer, multi vendor co-ordinator on turnkey basis. Major contribution to engineering services business unit.

DESIGN ENGINEERING

The major design activities carried out includes piping layout and plant engineering deliverables checking, 3D model review, various discipline co-ordination including vendors and client, Site visits for green field / revamping projects, Understanding the scope as per contract, Preparation of site plot plan & layout planning for project General Arrangement drawings, planning to suit project needs, Lead the team in detail design rollout as per layouts and the planning, Reviewing and verifying all type of design deliverables to meet contract and standard requirements, Process flow diagram, Piping and instrumentation diagram, Equipment layout, Bulk Material take off (MTO), Equipment Nozzle orientation, Critical Lines study for piping, Piping study layout mainly for pipe rack, headers, critical pipe lines, headers, major equipments and scope, Piping routing using 3D software's, 3D equipment Modeling, Interference checking, 2D piping layout, Piping Isometric Checking, Vendor drawings review, Pipe support sketches & Piping Standard Drawings.

Familiar with Codes and Standards: B31.1, B31.3, ASME, ANSI, ASTM, API, DIN, IS & ISO.

For detail job activity performed description refer attached Job Description – Lead Designer Piping sheet.

SOFTWARE EXPERIENCE

Plant Design and Management System

Plant Vision (3D Software for Plant Design and Management)

**Cadison and Naviswork Review and Manage,
Pro-Pipe (3D Piping Software), Solid works, Revit, Autodesk plant 3D,
AutoCAD , Micro station (2D Drafting), Microsoft Office Tools**

Countries Worked / Visited : India, USA, Europe, Qatar

EMPLOYMENT HISTORY

September 2010 – till date

Lead Engineer Piping Design – Neilsoft LTD.

Company involved in providing Total Engineering services for Industrial Projects for various sector like LNG, Speciality Chemical, Water treatment, Power plant, Glass industries, Marine engineering, MEP services etc...

Responsibilities

Managing team of piping designers, organized and manage all aspects of workload of a team of piping discipline, reports and technical documentations. Ensure that the relevant design rules and procedures are complied with. Identification of applicable engineering procedures and related best practices. Interface with other disciplines, communication to vendors to ensure packages are fit for purpose with adequate design interface defined. Checking of inputs and all deliverables, 3D Model Review and resolution, Generation of piping bulk materials, Site visits for green field / revamping projects, Preparation Site location plan, Equipment layout, Bulk Material take off (MTO), Equipment Nozzle orientation, Critical Lines study for piping, Piping study layout mainly for pipe rack, headers, critical pipe lines, headers, major equipments and scope. Piping routing using 3D software's, 3D equipment Modeling, Interference checking, 2D piping layout, Piping Isometric Checking, Vendor drawings review

March 2008 to Sept. 2010

Senior Piping Designer – KBK Chem Engineering Pvt. Ltd.

Company involved in undertaking turnkey projects for Distilleries, Chemical Industries & Pharmacy.

Responsibilities

Managing team of piping designers, organized and manage all aspects of workload of a team of piping discipline, reports and technical documentations. Ensure that the relevant design rules and procedures are complied with. Identification of applicable engineering procedures and related best practices. Interface with other disciplines, communication to vendors to ensure packages are fit for purpose with adequate design interface defined. Generation of piping bulk materials, Site visits for green field / revamping projects, Preparation Site location plan, Process flow diagram, Piping and instrumentation diagram, Equipment layout, Bulk Material take off (MTO), Equipment Nozzle orientation, Critical Lines study for piping, Piping study layout mainly for pipe rack, headers, critical pipe lines, headers, major equipments and scope. Piping routing using 3D software's, 3D equipment Modeling, Interference checking, 2D piping layout, Piping Isometric Checking, Vendor drawings review

September 2006 - March 2008

Senior Piping Designer – Black and Veatch India Pvt. Ltd.

Established in 2003 as a wholly owned subsidiary of Black & Veatch Inc. USA
Since inception BV India has been offering Engineering, Procurement and Construction enabled services to B.V.Inc. USA for Power, Oil and Gas, Water Projects.

Responsibilities

Team Leading & Project Coordination, Member of Planning team, Cross checking. (3d Equipment models & Routing), 3D Piping routing using **Plant Vision Software**, Isometric Piping drawings preparation and checking., Interference checking and solving., Visited to USA for six months on job assignment for Air Quality Control System Project.

March 1999 - September 2006

Senior Designer - Bricmont India Private Limited, Pune, India

Established in 1998 as a wholly owned subsidiary of Bricmont Inc. USA
Since inception Bricmont India has been offering Engineering, Software Development & other IT enabled services to Bricmont USA & other Inductotherm group companies.

Responsibilities

Preparation of following drawings for Bricmont Rehating furnaces & Galvanizing line (both in American & Metric Systems), Piping layouts, Bulk MTO, Detail piping drawings along with Bill of Material on the basis of General Arrangement drawings & Schematics. Cross checking., Isometric Piping drawings., General Arrangement drawings from conceptual sketches., Detailed structural/fabrication drawings along with Bill of Materials., Bill of Materials for Refractory drawings., Visited to USA for six months on job assignment for Study of new piping job for various furnaces, Drafting standard document & reference job collection, Special tricks for Combustion, Gas, Impulse, Cooling water, Hydraulic, Nitrogen piping

March 1993 - March 1999

Assistant Designer - Praj Industries Ltd, Pune

Company involved in undertaking turnkey projects for Food processing, Dairy, Pharmacy, Brewery, Distilleries & Chemical Industries.

Responsibilities

Detailed Engineering for Turnkey Projects of Distilleries, Breweries, Dairy, Chemical Plants, Detailed fabrication drawings for stainless steel & carbon steel equipments (e.g. Pressure Vessels, Storage tanks, Distillation Columns, Heat exchangers, Reactors, Dryers, Headers, Vent stacks, Equipment transportation skids, Insulation & claddings.), Process flow diagram from conceptual diagram, Conceptual / Final layouts and Elevation drawings, General Arrangement drawings for fabricated equipments, Detail fabrication drawings for shop and site fabricated equipments, Bill of material & Material requirements reports, Involvement in standardization of equipment engineering, Isometric Piping drawings.

Course	Duration	Subjects
Post Graduation Diploma in Piping Technology	Autonomus course By Vishwakarma Institute of Technology, Pune	Autonomous course designed by the premier organizations eg. Udhe, Praj, Toyo etc. and there representatives share there experience in a formatted learning syllabus Design engineering, Construction & Testing of piping systems for Chemical process plants, power stations, Refineries, Petrochemicals and fertilizer plants, food and pharmacy industries, including cross country piping for oil and gas sector
Diploma in Mechanical Engineering	Correspondence course	QC & metrology, Theory of Machines, Auto cad 2000, Machine Design. Passed with Distinction 2 nd top scorer in group
ITI Draftsman Mechanical	2 Years full time course	2d and 3d drafting, Engineering Drawing Machine Drawing Machine Design (Basic) Allied Trades. Passed with 65 %
Apprenticeship	One year sandwich course	One day training at institute and Other training in company. Passed with 70 %
Schooling	10 Years full time	English, Mathematics, Physics, Chemistry, Biology, History & Geography. Passed with 65 %

PDMS	3D piping design and drafting Software
Cadison (3d piping software)	3D piping design and drafting Software
Pro Pipe (3d piping software)	3D piping design and drafting software like PDMS
Plant Vision (3D piping software)	3D piping design and drafting software like PDS
Auto CAD 14, 2000	Fundamentals & Advanced techniques for 3D use
Solid Works 2000 (3D modeling)	Special Training
Isometric Piping Software	User level Training
Microstation 95	Fundamentals & Advanced techniques
Microsoft word, Excel	Acquaintance
Revit MEP	User level Training
Communication skills & etiquettes	Special training to deal with Foreign clients

Marital Status	Married + 2 Kids
Date of Birth	3 rd July 1975
Sex	Male
Languages known	English, Hindi & Marathi
Passport no.	N 2836317
Date of Expiry	08/09/2025
Communication skills & etiquettes	Special training to deal with Foreign clients
Microsoft word, Excel, Power Point,	Acquaintance
Current salary and benefits	14 Lacks / p.a.
Expected salary and benefits	Negoitable
Period of notice required to join	Two month notice period

Contact Address

Plot No. - 30, Survey No. - 71,
Sector - 1/2, On Krishna Chowk Dapodi Rd,
Krishna Nagar, New Sangavi,
Pune - 411 027, Maharashtra, INDIA

Detail Job Description - Lead Engineer Piping and layout Engineering

Reporting Line :

Reporting to Group Head – Piping Layout & Stress Engineering, for performance of all duties listed below.

Width of Responsibility

Functional Responsibility for Piping personnel working in project team and group activities includes the Piping design skill center and involves piping detail engineering, procurement and coordination with other disciplines (namely client end project key person and interdiscipline Process, Static, Civil & Structure, Instrumentation, Electrical) during proposal preparation and project execution.

Management Responsibility

Human Resource Management

Maintain and develop resource, document quality and performance by monitoring, counselling, training and discipline if necessary to cater project needs.
Manage allocated resource costs / rewards within office norms.

Engineering Tools Management

Acquire and develop tools needed for an effective, competitive and cost-efficient service to cater project needs.

General Management

Manage individuals in Piping Team working on Project.

Provide support to marketing and proposals.

Align Piping Engineering activities and personnel working in project team to overall objectives of the Project, Business Unit and Group, including support of marketing, proposals, and company image.

Technical Responsibilities

Engineering & Co-ordination work –

During Proposal Preparation –

- a) Understand overall scope of the proposal
- b) Understand nature & requirements of client
- c) Suggest better ways of meeting client requirements
- d) Concluding the final scope of work
- e) Review & understanding technical specifications given by client
- f) Prepare a deviation list (if any)
- g) Get approval from client for deviation list
- h) Estimate MH required for Proposal Execution
- i) Planning & organizing piping activities to assign resources for proposal cycle
- j) Organize briefing session to assigned resource for Overall scope of Proposal work & requirements of client
- k) Prepare Piping Design Basis

- l) Organize, Monitor & control following -
 1. Preliminary equipment layout & elevation drawing from conceptual layout given by Basic Engineering.
 2. Structural Load Data (If required)
 3. iii)Coordination with other Piping functional groups like Specification, BOMMS & 3D Modeling Admin groups to get done Specifications, BOMMS & 3D Modeling tool package readiness
 4. Piping study
 5. Preliminary Stress Analysis for critical lines if required by stress engr.
 6. Estimate Bill of Material
 7. vii)Costing of Bill of Material (From Database)
 8. viii)Estimate MH required for project execution
 9. m) Coordination with other disciplines (namely Project Manager, Process, Static, Civil & Structure, Instrumentation, Electrical, construction) during proposal
 - 10.n) Organize & coordinate various joint reviews with other disciplines
 - 11.o) Identify vendor packages & co-ordination required
 - 12.p) Identify any new vendor packages with no past experience
 - 13.q) Risk analysis for project execution
 - 14.r) Involve into techno commercial discussions with client (if required)
 - 15.s) Recommend optimized solutions
 - 16.t) Prepare closure report & storage of data / documents

During Execution of Project –

- a) Contract Review - Understanding overall scope of the project & clients requirements.
- b) Estimate MH required for Project Execution
- c) Review & Comments on the project schedule
- d) Planning & organizing piping activities to assign resources (Area Engineer, Modelers, Checkers) for Project cycle
- e) Organize briefing session to assigned resource for Overall scope of Project work & requirements from client
- f) Prepare Piping Design Basis for Project Scope.
- g) Coordination with other disciplines (namely Project Manager, Process, Static, Civil & Structure, Instrumentation, Electrical, Construction) during project execution.
- h) Organize, Monitor & control following -
 1. Preliminary equipment layout & elevation drawing from conceptual layout given by Basic Engineering.
 2. Finalize & mark Battery Limits on Plot Plan
 3. Structural & Rack Load Data (If required)
 4. Coordination with other Piping functional groups like Specification, BOMMS & 3D Admin groups to get done Specifications, BOMMS & 3D Modeling tool package readiness
 5. Detailed Piping study with supports

6. Preliminary Bill of Material for procurement estimation & planning
7. Coordination with Stress Engineer for Stress
8. Nozzle Orientation for equipments & organize joint review of it with Process & Static
9. 3D modeling of Equipment, Building / Rack Structure & Piping
10. Conduct periodic Model review's (30%, 60%, 90%) with concern disciplines
11. Review & commenting of Bought-out vendor drawings
12. Civil Load Data for Bought-out equipments
13. Final Piping Bill of Material by uploading it to BOMMS & database BOM for procurement
14. Release documents & drawings for Construction

- i) Identify risk areas or bottlenecks
- j) Involve into various meetings as & when required during entire project cycle
- k) Coordination with sub-contracting vendor for Project work.
- l) Conduct Periodic Work Progress Review
- m) Address & report important technical / procedural / execution matters to Piping engineering head
- n) Coordinate various interdisciplinary activities & ensure smooth execution of project.

Quality of Engineering Work

Ensure that engineering work is carried out appropriately for the purpose, by direct supervision
Ensure that the requirements of the Discipline Management System are observed, as a minimum.

Development of Capability

Plan and implement improvements to the scope, quality and cost-effectiveness of engineering work.

Administrative Responsibilities

Comply with the administrative requirements of Layout & Stress Engineering Discipline.

Key Performance Areas

- ~ Meeting Business Unit service needs.
- ~ Compliance of accuracy & timely delivery for all documents as well as requirement of Piping function.
- ~ Compliance with safety and legal requirements.
- ~ Optimizing Piping Engineering outputs to meet Project success factors
- ~ Promoting Discipline interests.
- ~ Dedicated checker and reviewer.