

SATHISH KUMAR BASKAR

Piping Layout Engineer

Professional Summary

Having around 11 years of experience in the Oil and gas industry in Offshore FPSO, Onshore LNG, refineries & Petrochemical plants at **FEED** and **EPC** stages of projects. Having experience in Greenfield, Brownfield, and plant modification projects.


Currently working with **JGC Yokohama**, Japan as Piping Engineer involved in FEED & Detailed Engineering projects. worked with operating company standards like **PETRONAS, MODEC, SHELL, IOCL, TOTAL, and WOODSIDE**.

Roles and Responsibilities

- Familiar with international codes and standard (especially **ASME B31.3, API, PTS** etc.)
- Good knowledge in preparation of engineering specifications and Job instructions for piping designs, materials, insulation, painting etc.
- Good knowledge in Plant Layout Planning and Detailed Piping Design in view of Construction, Process Flow Scheme, Machinery Operation etc.
- Good working experience in **Compressors, Columns, Exchangers, Pumps, Reactors, Tanks and Vendor packages** etc.
- Ability to Conceptualize **Plot plan, Equipment layout, Utility station** layouts etc.
- Review & commenting of Plot plan, Equipment **GA**, valve **datasheets**, instruments, piping speciality & Isometrics.
- Preparation of preliminary and intermediate **MTO** at different stages of project.
- Preparing **Piping Assembly STD, Utility station** layout, Instrument air layout etc...
- Preparation of vessel trims, LG/LT & nozzle orientation drawings.
- Presenting 3D model at different stages (30%,60% and 90%) in Internal and **client Model Reviews**.
- Design and modelling of **Firewater Deluge system** as per the process safety requirements.
- Preparation of **Equipment Layout**, support drawings, Piping **GAD** etc.
- Modelling of piping, equipment's and structures using **PDMS/E3D/SP3D**.
- Pipe Support tagging & **MDS** modelling for both stress critical and non-Critical lines.
- Other responsibilities include inter-discipline coordination and **Manpower** Scheduling.
- Preparation of Equipment list, line list, Valves list etc.
- Piping **Isometrics** and piping **GAD** checking and Issuance.
- **2D** support drawing preparation and extraction from E3D Draw.
- Preparing the handling study sketches for maintenance of valves and motors etc.

- **PDMS/E3D PML** development, C# **Addins** & **PMLNet** customization.
- Building **Cats** and **Specs** for piping components, specialities and instrument valves.
- **MDS** supports customization as per project requirements.
- **E3D Draw** Library setup and administration.
- Generating **Navis** model and data consistency error reports.
- Hands on experience in MS office Apps and PowerBI.

Work Experience

 **JGC – Yokohama, JAPAN** – From Nov2022 to Current (Deputed from HCL Tech Chennai)

Project: ZLNG

Role: Piping Engineer

- Worked in Hot water Pumps & Heater Skids, N2 Holder & Compressors Packages and Chemical Injection skids.
- Preparation of 3D model at FEED and EPC at 60%, 90% stages for project.
- Piping Assembly STD and utility station layout preparation.
- Reviewing and providing comments to equipment Vendor drawings.
- Designing platform for vessels and proving input to Mechanical team.
- Plotplan study, development and Equipment Vendor drawing commenting.
- Preparation of technical reports/instructions in project.
- Isometrics checking as per the checklist.

 **KBR - Chennai, INDIA** – From May2020 to Oct2022

Projects: Plaquemines-LNG | Sangomar-FPSO | Marlim 1-MV33

Role: Senior Piping Designer

- Worked in LNG **Liquefaction** Train system (LTS modules).
- Area Designer for **Flare** and **KO drum** unit and process Piperack's.
- Area designer in **GTG** module for developing the fire water network.
- Presented 60% & 90% Model review with client.
- MDS Support modelling and Isometric Issuance.
- Support modelling coordination, guidance, Isometrics back-drafting and issuance.
- MDS Support Coordinator.
- Piping Support drawing extraction in E3D Draw.



TechnipFMC – Chennai, INDIA – From July2013 to Apr2020

Projects: Coral FLNG | ZAPSIB-2 –PE-Plant | Sasol LCCP Ethane Cracker | Baltic Urea | JBF

Role: Senior Piping Designer

- FW deluge lines modelling for process equipment's.
- 3D Modelling of columns, pumps, Reactors and Exchangers as per the Vendor GA.
- Preparation of Nozzle orientation drawing of columns and Tanks.
- Preparation of Manual MTO in Baltic Urea Project.
- Co-ordination with Subcontractor for Tie-in Schedule Preparation and follow-ups.
- Site Query coordination and resolution.
- Isometric and Construction DMS coordination.
- 3D model clash check and resolution
- IDC drawing checking from Safety, Inst, electrical, handling, structural teams.
- MDS Support modelling Coordinator
- GAD Preparation and extraction from E3D Draw.
- Instrument (ON/OFF) valves Review & Commenting.
- Co-ordination with Subcontractor to have clash free Model & resolution.
- Close out of Internal & Client model review comments.
- Piping Isometrics coordination and weekly report sending to projects using POWER BI tool.

Achievements

- Developed the piping dead load program in E3D for calculating the Dead weight of piping system and providing input to the structural team. (For ZLNG project)
- Developed Copy Utility in E3D for LTS Modules Copy functions. (For PLNG project)
- Developed loading info tool in E3D using stress summary (For PLNG project)
- Developed SPS utility for project special SPS supports. (For Coral FLNG project)

Software Skills

- E3D/PDMS, S3D/ SP3D
- PML coding for E3D/PDMS
- AutoCAD, MicroStation, SmartsSketch
- Navisworks, Smartpant Review.
- Visual Studio C# dotnet, Python, Cmd & PowerShell scripts, Git.
- Office 365 Apps, PowerBI

Overseas Experience

- Yokohama, Japan (Nov2022 to Till Date)

Educational Qualifications

- **Bachelors in Mechanical Engineering** (2016 to 2019) CGPA 8.3
Sathyabama Institute of Science and Technology, Chennai, India.
- **Diploma in Mechanical Engineering** (2010 to 2013) CGPA 9.1
CPCL Polytechnic College, Chennai, India.

Languages Known

English & Tamil (Native)

Personal Details

Name : Sathish Kumar
DOB : 25-Aug-1994
Mobile : +91 8682930853
Email : basathishkumar@outlook.com
Address : No 60A, Sivapatham 3rd street KK Thazhai MMC,
Chennai – 600051, Tamil Nadu, India.