

IYAPPAN SUBRAMANIYAN

Senior Project Engineer

Coimbatore, India
+91-8838914181

iyappansubramaniyan29@gmail.com

Summary

Experienced Project Engineer with 10 years of expertise in process design, technical documentation, and data management, specializing in complete engineering lifecycle for operational efficiency. Proficient in furnace systems erection and installation, STP equipment installation and commissioning, and handling critical components for Oil & Gas, EPC, and OEM projects. Skilled in developing and implementing Process Flow Diagrams (PFDs) and Piping & Instrumentation Diagrams (P&IDs) to ensure compliance and optimize equipment specifications. Demonstrated ability in project management, QA/QC documentation, and cross-functional coordination to deliver innovative solutions and achieve project milestones. Seeking a Senior Project Engineer role to leverage technical expertise and leadership in driving operational excellence and engineering innovation.

Experience

Senior Project Engineer

Mold-Masters DME India Private Limited, Coimbatore

May 2024 — Current

- Designed and issued **Process Flow Diagrams (PFDs)** and detailed **Piping & Instrumentation Diagrams (P&IDs)** to define process control and ensure design compliance, enabling accurate equipment specification.
- Compiled and maintained **plant equipment, valve, instrument, and line listings**, extracting key data for CAE system entry and creating accurate digital representations in **Siemens COMOS**.
- Supported project team with **COMOS data management**, handling bulk input/output of process parameters, equipment properties, and piping/instrumentation objects for engineering lifecycle consistency.
- Prepared comprehensive **technical datasheets** for compressors, blowers, heat exchangers, special machinery, and safety valves, documenting operating conditions, performance metrics, materials, and vendor data for procurement and design verification.
- Prepared and maintained **datasheets for critical components** including silos, pressure relief valves, breather valves, rotary valves, transmitters, gearboxes, and motors—capturing specifications and vendor details to support procurement and compliance.
- Documented **engineering scope in sales orders**, integrating technical equipment specifications, datasheets, and P&ID excerpts to define deliverables and support customer proposals.
- Formulated **technical documentation packages** including engineering drawings, compliance certificates, and BOMs, streamlining production handover and ensuring traceability throughout manufacturing.
- Directed weekly **P&ID review sessions** over 12 months using Siemens COMOS, identifying and resolving 25+ design discrepancies per project to achieve a **100% first-issue approval rate**.
- Executed **PFD preparation, MTO updates, and BOM preparation** based on sales requirements to ensure accurate material planning and project execution.

Working Project List:

Technimont – Saudi Aramco & Total Energies (Saudi Arabia) - HDPE Extrusion and Material Handling
Alujain National Industrial Co. (Saudi Arabia) - Pelletizing Unit and Pellets Transport System
Ras Laffan Petrochemicals (Qatar) - PE Powder & PE Pellet Extrusion and Transport System

Project Engineer

Dongwoo Surfactech India Private Limited, Chennai

Feb 2023 — Apr 2024

- Prepared **General Technical Parameter (GTP)** documents and developed **PERT charts** to define project scope, timelines, and critical milestones.
- Coordinated **work package planning and execution** in alignment with project agreements under the Project Manager's guidance.
- Reviewed **customer specifications** to guide technical planning and solution development.
- Drafted detailed **machinery and equipment specifications** (e.g., carburizing furnaces, gas handling systems) for inquiry and procurement.
- Evaluated and compared **supplier bids**, managed technical vendor selection, and conducted negotiations.
- Executed **design and scope changes** within assigned tasks, ensuring compliance with project requirements.
- Contributed to **order-specific quality assurance** and compliance activities throughout the project lifecycle.
- Delivered **daily project status updates** and hosted regular project review meetings.
- Facilitated **cross-functional communication** by compiling actionable insights and presenting key progress indicators during stakeholder briefings.
- Integrated **client feedback** into technical documentation cycles, adapting engineering deliverables to evolving requirements while maintaining schedule adherence.
- Monitored project progress using **MS Project** for effective timeline control and resource allocation.
- Conducted **Site Acceptance Tests (SAT)** and **Functional Acceptance Tests (FAT)** post-installation to validate system performance and compliance.

Working Projects List:

Rolex Rings - Isothermal Annealing Furnace - Installation & Commissioning

Hi-tech Gears Limited - Sealed Quenching Furnace - Installation & Commissioning

Operation Engineer

Shivpad Engineers Private Limited, Chennai

Mar 2020 — Feb 2023

- Analyzed **production workflows** to identify inefficiencies, implement improvements, and reduce waste across operations.
- Collaborated with **cross-functional teams** to ensure seamless project execution and on-time delivery of deliverables.
- Maintained **project timelines**, proactively addressing potential delays to meet deadlines and client expectations.
- Developed and maintained **QA/QC documentation**, ensuring audit readiness and compliance with industry standards.
- Implemented **Lean manufacturing principles and 5S practices**, improving workplace organization, safety, and operational efficiency.
- Coordinated **shop-floor activities**, managing materials, equipment, and technical support to optimize team performance.
- Conducted **fabrication stage inspections**, verifying compliance with welding procedures and quality specifications.
- Streamlined **procurement and inventory management processes**, ensuring uninterrupted workflow and efficient material utilization.
- Coordinated with **third-party and client inspectors**, preparing inspection documentation for approval and clearance to proceed with delivery as per purchase order requirements.
- Negotiated with **vendors and transport providers** to optimize cost, ensure timely material delivery, and maintain project schedules.

Work Project List:

Ion Exchange (I) Pvt Ltd, Kenya- STP Equipment - Clarifier & Classifier Mechanism

Suez (I) Ltd, India - STP Equipment - Classifiers & Primary Clarifiers

Khilari Infracture (I) Pvt Ltd, India - STP Equipment - Classifier Mechanism & Agitator Mechanism

P&C Projects Ltd, India - STP Equipment - Primary Clarifier and Classifier Mechanism

Project Engineer

Benco Thermal Technologies Private Limited, Chennai

Feb 2016 — Jun 2019

- **Team Leadership:** Trained and supervised a team of **15 production staff**, improving productivity and adherence to operational procedures.

- **Documentation & Reporting:** Created **standardized operating procedures (SOPs)** and detailed reports, ensuring consistency and facilitating audits.
- Managed **outsourcing of furnace equipment works**, including vendor coordination, purchase negotiations, and ISO documentation for compliance.
- Prepared and maintained **ISO-compliant production and procurement documentation**, supporting audits and quality assurance processes.
- Negotiated with **purchase vendors and transport providers** to optimize cost and ensure timely material delivery aligned with project schedules.

Work Project Lists:

- Metal & Steel Factor, India** - Pit Type Furnace with Quenching Tank - Installation & Commissioning.
- Gun & Shell Factory, India** - Carburizing Furnace - Installation & Commissioning
- Everyday Battery plant, India** - Zinc Melting Furnace - Installation & Commissioning
- Sundaram Fasters Ltd, India** - Normalizing Furnace - Revamp work to improve the efficiency and increase the Capacity.

Graduate Apprentice Trainee

Neyveli Lignite Corporation Limited, Neyveli
Feb 2015 — Feb 2016

- Assisted in **daily site operations**, including equipment handling and material transportation to support mining activities.
- Provided **maintenance support** for mining equipment, minimizing operational disruptions and ensuring reliability.
- Adhered to **safety protocols** and participated in drills to maintain a safe working environment and compliance with standards.
- Recorded **operational data** and prepared detailed reports for senior management review, ensuring accuracy and timely updates.
- Consolidated **technical drawings and documentation** for ongoing projects, enabling seamless coordination between engineering and operations teams.

Education

Bachelor of Engineering in Mechanical, Krishnagiri, 2010 — 2014
P.S.V College of Engineering & Technology

- Graduated with **First Class with Distinction**, CGPA: **8.57/10**

Skills

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| • Diploma in Product Design | ❖❖❖❖❖ |
| • Microsoft Office Suite, MS Project & Office 365 | ❖❖❖❖❖ |
| • COMOS cDB(Version-10.1/iDB (Version-10.5.1) | ❖❖❖❖❖ |
| • Electrical Panel Wiring and Testing | ❖❖❖❖❖ |
| • AutoCAD | ❖❖❖❖❖ |

Languages

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|------------------|-------|
| • English | ❖❖❖❖❖ |
| • Tamil | ❖❖❖❖❖ |
| • Hindi | ❖❖❖❖❖ |

References

Reference available upon request