

CURRICULUM VITAE

Of

ANIL R. THOMBARE

Contact No. +91-9619589191

E-mail: morochikar@gmail.com

Residential Address:

A1408, Aaditya Vivaaz, SB Patil
School Road, Ravet,
Chinchwad, Pune – 412101,
Maharashtra, India.



OBJECTIVE:

To work as a **Leader** of Design and Engineering function in a reputed Engineering Industry.

ENGINEERING MANAGER OVER 19 YEARS OF EXPERIENCE, LEADING TEAM OF LEAD ENGINEERS, ENGINEERS, LEAD DESIGNERS AND DESIGNERS:

- Versed with International codes and standards like ASME, AISC, Euro Codes and IS:800, API, EN13445, GOST R 53630, DEP, SP, WRC Bulletin No.107 & 297 used for designing and analysing Thermal Oxidizers package, Waste Heat Boilers, Direct Fired Air Heaters, Regenerative Thermal Oxidizers, Cyclones, Dust Collectors, Filters and Separators, Decomposition Furnace, Vapor Recovery and Vapor Combustion Equipment, Elevated and Enclosed Ground Flares, Lattice Derrick Structures and Modularized Skid structure.
- Insightful experience in fabrication process and practices pertaining to elevated steel structures including derrick structures, stair tower, access platforms, stacks, vessels and piping.
- Proficient in softwares like Compress, NozzlePro, PVElite, Codecalc (used for pressure vessel design & component analysis), CAESER (used for piping flexibility analysis) and ANSYS (used for finite element analysis of non-standard shapes with complex geometry), STAAD.Pro, Limcon, RAM Connection (used for steel structural analysis and connection design), MecaStack (for design of steel stack).

SKILLS CO-ORDINATION/SCHEDULING AND MANAGING:

- Coordination & liaising with client representatives, project management team, global colleagues, execution team, inhouse manufacturing team and vendors.
- Understanding client requirements and specifications.
- Develop overall engineering execution strategy and coordinate and review the engineering effort- hour estimates, budgets and schedules with On Time Performance (OTP). Resource management to support design/detailing activities to USA, Europe, Korea etc.
- Scheduling analysis and design of facilities / structures as per client specification and project schedule.
- Managing a team of Assistant Managers, Structural Engineers, Lead Designers and Designers to deliver structural packages with defined design basis and design sketches.
- Technical evaluation of vendors/suppliers.
- Providing cost effective technical solutions and rectifications for site and shop issues.
- Motivation and encouragement of team member to take up challenges and to ensure healthy work environment.
- Creative thinking of defining new protocols and processes to optimize design and engineering efforts without compromising Quality and on time delivery.
- Learning new techniques, sharing those within team and promote creative thinking.
- Assessment/Evaluation of team member's performance.

ANALYSIS:

- Review and approval of design basis for analyzing the forces (Equipment and environmental loads) and stress expected on facility being designed.
- Analysis & 3D modeling in STAAD PRO, Compress, NozzlePro, PVElite, Codecalc, MecaStack, CAESER and ANSYS.
- Monitoring of critical points related to Layout Engineering and design with concerned Design team.
- Use of finite element tool for non-standard shape to deliver precise output with optimized material requirement.

DESIGNING:

- Designing and layout engineering of Structural facilities and components in scope of supply.
- Designing & components of the facility to withstand analyzed & expected forces / stresses.
- Checking the designed components & subjecting the failed components to design reiteration.
- Evaluation of foundation load data based on equipment support (e.g., skirt, saddle, Lug and leg support etc.) and other auxiliary supports.
- Promote a least cost solution mindset and to drive towards the lowest Total Installed Cost (TIC) consistent with the contract and Scope of Work.
- Support to sale and marketing team during preorder/proposal order stage.

DETAILING & FABRICATION ENGINEERING:

- Approval of General arrangement, Layout, foundation data and detailed fabrication drawing with reference to requirements of codes, standards and customer specifications.
- Approval and review of material requisition of structural components under scope of supply.
- Approval of technical delivery conditions of material with reference to Code, Specification and Client requirements.

PROFESSIONAL EXPERIENCE

16th MAY 2022 TO TILL DATE

ADOR WELDING LIMITED

ROLE: ENGINEERING MANAGER (FPED Division)

CURRENT RESPONSIBILITIES:

- Manage team of Lead engineers (Static, rotary, piping and structure) through scheduling, coordination, technical guidance & training, assessment of performance, motivation during critical phase of project execution. Promote culture of Integrity amongst team in compliance with company culture.
- Develop overall engineering execution strategy and coordinate and review the engineering effort- hour estimates, budgets and schedules.
- Design and analysis review of Flare packages and Process Equipments.
- To arrange necessary inputs to lead engineers and lead designer for delivering outputs
- Provide training to design and engineering staff to ensure the quality of output and on time performance.
- Develop tools and techniques for the cost and effort optimization.
- To keep motivate concern designer and engineer during too critical phases of project execution.
- To ensure proper integration of design and engineering team to promote a least cost solution mindset and to drive towards the lowest Total Installed Cost (TIC) consistent with the contract and Scope of Work.

11th APR 2022 TO 11th MAY 2023

CECO ENVIRONMENTAL

ROLE: ENGG GROUP HEAD (Industrial Solutions & Emission Control Division)

BRIEF ON COMPANY: Offers a broad range of technologies and solutions for air pollution control and product recovery with Regenerative Thermal Oxidizers, FCC cyclones, Scrubbers, dust collectors, separators, De-Nox (SCR & SNCR) and Fluid handling and filtration products and solutions.

1st APR 2019 TO 4th APR 2022 ZEECO

INDIA PVT LTD.

BRIEF ON COMPANY: Provides total solutions for process heater burners, flares, flare gas recovery systems, thermal oxidizers and Vapor combustion & recovery systems.

PROJECTS UNDERTAKEN:

Successfully delivered more than 40 Incinerator packages for ZEECO'S global offices by efficiently managing engineering activities as a Lead/ Team manager. Got excellent opportunities to work for all ZEECO'S varieties of Incinerator packages by proactively interacting with colleagues in global offices. Proper allocation of engineering resources by identifying strength and understanding needs of the customer helped engineering team to meet the commitments promptly and within budget (hours and material). Following are the few projects in which I have tried my best as a Lead Manager to prove engineering capabilities with remarkable contribution:

- Incinerator system for IOCL Bongaigaon: This Incinerator package comprises Horizontal incinerator chamber, Waste Heat Boiler (WHB), Vent Stack (80m tall), Fuel rack, Combustion air piping with blowers and piping (70Nos. lines) with support structure & pipe rack. Critical thinking towards optimization of layout engineering and resources without compromising safety and quality aspect helped to deliver this package with enhanced gross margin.
- Incinerator system in VCM Plant for RIL Dahej and Hazira: These Incinerator packages comprises Horizontal incinerator chamber, Waste Heat Boiler (WHB), FRP Quencher, FRP Scrubber, Graphite Heat Exchanger, FRP Vent Stack (65m tall), Fuel rack, Combustion air piping with blowers and piping (120Nos. lines each package) with support structure & pipe rack. Considering metallurgy of FRP equipment and piping it was challenging to meet/capture manufacturing and erection requirements in design and engineering deliverable. Lesson learnt from old projects implemented to deliver the task successfully by collaborating with colleagues in global offices.
- Vertical Thermal Oxidizer for JGC LNG Canada: This Incinerator system comprises Vertical Thermal oxidizer, Fuel rack and Combustion air ducting with blowers. This was the biggest vertical thermal oxidizer with combination of basing with leg supports designed and supplied in ZEECO's history. Finite element analysis methodology used to evaluate stresses and deformation of customized support arrangement which has helped to justify the design to JGC.
- Thermal Oxidizer for Linde, Singapore: This Incinerator system comprises Horizontal Thermal oxidizer, vent stack, Fuel rack, Combustion air ducting with blowers.
- Incinerator system for CPCL Chennai: This Incinerator package comprises Horizontal incinerator chamber, Waste Heat Boiler (WHB), Vent Stack (70m tall), Fuel rack, Combustion air piping with blowers and piping (85Nos. lines) with support structure & pipe rack. Critical thinking towards optimization of layout engineering and resources without compromising safety and quality aspect helped to deliver this package with enhanced gross margin.

23rd SEP 2013 TO 29th MAR 2019

KOCH CHEMICAL TECHNOLOGY INDIA PVT LTD., JOHNSON HAMWORTHY COMBUSTION DIVISION

BRIEF ON COMPANY: Provides total solutions for process heater burners, flares, flare gas recovery systems, thermal oxidizers and Vapor combustion & recovery systems.

PROJECTS UNDERTAKEN:

Got opportunity to work and support for more than 100 packages (TO, RTO, VRU, VCU & Self Supported Flares) from structural engineering front successfully and efficiently by accepting few challenges. Got excellent opportunities to work for all JZHC's product varieties by proactively interacting with colleagues in global offices. Proper allocation of engineering resources by identifying strength and understanding needs of the customer helped engineering team to meet the commitments promptly and within budget (hours and material). Following are the key projects:

- RTO system for TAUATGAZ: This was Regenerative Thermal Oxidizer (RTO) with three vertical regeneration chambers (Dia.4.65m x 8m tall) supporting horizontal combustion chamber at the top. It was with two burners. 50m tall vent stack was also part of scope.
- TO System for CB & I: This was 35' tall VTO with integrated stack. Got approval in the first issue itself despite of several customer specifications and review of Texas P.E. Optimized the efforts for the vertical TO by making standard calculation templates.
- TO system for ICL-EBD process: This was downfired thermal oxidizer system supported laterally by steel structure. Involved in developing vendors for steel structure design, piping stress analysis as well as drafting

services along with thorough review of the documents. The project is handled not only for technical but also for commercial aspects with close cooperation with KEU office. Optimized the steel structure weight by about 20 percent by suggesting appropriate design solutions to vendor and shared my experience with vendor to make him aware of the customer expectations and complying the Israeli standards.

- DFAH, Air Preheater and Incinerator packages for Dangote, Nigeria: These packages include Direct Fired Air Heater, combustion chamber, air heat exchange, Decomposition furnace, Waste heat boiler, super heater, Economizer, Incinerator chambers, waste heat boiler, super heater, 60m tall air preheater and vent stack.
- Incinerator chamber, mixing chamber, reaction furnace, Process gas cooler, Waste heat exchanger for JSC Gazprom Neft- omsk Oil refinery, Russia: This equipment were made out LTCS material due to low temp service and were designed by considering lethal service. Successfully performed design calculations and reviewed various equipment such as reaction furnace, Incinerator chamber, mixing chamber, waste heat boiler and process gas cooler and burners. For equipment such as reaction furnace and mixing chamber, optimized the design by suggesting modifications on process markups. This helped to reduce steel requirement (15% for precious material) and eased fabrication and testing.
- Modularized TO package for Formosa, Taiwan: It is the first project for which we performed engineering activities of modular skid supported TO package from India.

**30th APR 2012 TO TILL SEP 2013 UOP
CALLIDUS BY HONEYWELL BRIEF
ON COMPANY:**

UOP Callidus provides total solutions for process heater burners, flares, flare gas recovery systems, thermal oxidizers and selective catalytic reduction units (SCR's).

RESPONSIBILITIES HELD:

- Design of pressure vessels such as Thermal oxidizers, Liquid Seal Drum and Knock Out drum.
- Analysis of flare stacks (self-supported, Guy wired, and derrick supported).
- Evaluation of foundation load data on the basis of Structural analysis.
- To provide technical inputs to draughtsman for preparation of drawings/documents.
- Local stress analysis using software such as NozzlePro and guidelines given in applicable standards.
- Weight estimate of pressure and non-pressure parts for proposal.

PROJECTS UNDERTAKEN:

- 15m tall Enclosed ground flare stack for Jacobs / NALCO, Singapore.
- 27m tall Self Supported Vent Stack for WillBros Engg Inc. USA

10th OCT 2010 TO 19th APR 2012

THYSSENKRUPP INDUSTRIES INDIA LIMITED, PUNE

SR. EXECUTIVE ENGINEER- BOILER & POWERPLANT DIVISION

RESPONSIBILITIES HELD:

- Pressure parts thickness calculations as per ASME, IBR & BS Codes. Analysis of non-pressure parts such as supports for equipment, piping, air and gas duct. Flue gas duct layout engineering from ESP to ID Fan to Chimney.
- Evaluation of foundation load data based on Structural analysis.
- To provide technical inputs to draughtsman for preparation of drawings/documents.

PROJECTS UNDERTAKEN:

- 42TPH Waste Heat Recovery boilers for Gulf Cement, U.A.E
- 35 TPH & 10 TPH WHR Boilers for Concast Steel, Orissa.
- 390TPH CFBC boilers for Bhushan Power & Steel

01st NOV 2008 TO 6th MAY 2010

ARABIAN INDUSTRIES LLC, MUSCAT, OMAN

DESIGN ENGINEER- VESSEL DESIGN

BRIEF ON COMPANY: An ISO 9001 certified and holding ASME U, U2, S & R Stamps. Having international reputation in design and manufacturing of Pressure Vessels, Tanks, Columns & skids etc. Interaction with internationally reputed clients like PDO & its Consultants, British Petroleum, Axsia Howmar Ltd, Sulzer, BHEL, Petrofac etc.

RESPONSIBILITIES HELD:

- To prepare design calculations and drawings for review of AI/client.
- To prepare estimation for the tender submission purpose.
- Review and comment on as built drawings.

- To provide technical inputs to draughtsman for preparation of drawings/documents.
- To make shop/site visit for obtaining the technical data for resolving the product non- conformances.

PROJECT UNDERTAKEN:

- Two Phase Separators for Petroleum Development Oman (PDO)
- Drain Vessel for British Petroleum
- Fuel Separator Drain collection vessel for Petroleum Development Oman (PDO)
- Scraper Launchers and Receivers with Quick Actuating opening for British Petroleum
- Methanol Base Storage Tank for Integrated Engineering & Constructing Company
- Oil & Gas manifold for Petroleum Development Oman (PDO)

19th JULY 2007 TO 06th OCT 2008

L&T MODULAR FABRICATION YARD, SOHAR, OMAN

LEAD STRUCTURAL DESIGNER- OFFSHORE (OIL & GAS)

Design/Engineering and fabrication of offshore structural modules like Deck, Jacket, Bridge, Flare & General engineering products for chemical plants (Process equipments and Heat exchanger).

RESPONSIBILITIES HELD:

- Checking of detailed fabrication drawing with reference to requirements of codes, standards and customer requirements.
- Preparation of technical delivery conditions of material with reference to Code, Specification and Client requirements. Preparing & checking of profile sheets for structural tubular members.

PROJECTS UNDERTAKEN:

- BLOCK 14 PROJECT: MOQ (MEARSK Oil Qatar) offshore structural modules like Jacket, Deck, Bridge & Flare.
- BCP-B2 PILES for BCP-B2 project, ONGC.

19th SEPT. 2004 TO 10th JUNE 2007.

Walchandnagar Industries Limited (WIL), Walchandnagar.

DESIGN ENGINEER-PROCESS EQUIPMENTS (CHEMICAL AND NUCLEAR PLANTS)

RESPONSIBILITIES HELD:

- Design Verification for following components of INCELL PROCESS VESSEL for B.A.R.C. at Design and Hydro test pressure:
 - Pressure components such as shell, Head, Nozzle neck as per ASME Sec.VIII Div.1
 - Non-pressure components such as Lifting lug, reinforcement Pad and its welding
- Design Calculation of structure of rolling in arrangement for nuclear component which involves components such as beam, fasteners and pin and its approval from B.A.R.C.
- Design calculation for structural components used for lifting and transportation arrangement of nuclear heat exchanger and its approval from BHAVINI, Kalpakkam Project team.

PROFESSIONAL QUALIFICATION:

Master's in Mechanical (***Design Engineering***) with Distinction from Pune University

Bachelor's in Engineering (***MECHANICAL***) with Distinction from Shivaji University

AWARDS AND ACHIEVEMENT:

- Awarded with Maharashtra State Talent Search Examination (MTS).
- Participation in zonal level volleyball matches & Winner of college volleyball championship.

PERSONAL PROFILE:

Date of Birth : 09th Apr 1982.

Marital status : Married

Gender : Male

Passport details: Indian

Passport No.: R1549326

Date of Expiry: 12-6-2027

Current valid Visa: USA-B1/B2
