CURRICULUM VITAE

Name: Utkarsh Dinkar Kulkarni

Designation: Process Discipline Head

Nationality: Indian

Education: B.E. (Chemical Engineer), D.B.M,

Mumbai University, Mumbai, India

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SUMMARY:

26+Years of Process Design experience in the field of Upstream Oil & gas Projects, Gas Processing, Refineries, Petrochemicals, Experience includes Feasibility Studies, Conceptual design, Basic Engineering, Review of Licensor Packages, Detail engineering etc. Main activities include HMB, Simulation, PFD & P&ID development, Basis of Design, HAZOP, Hydraulics, Equipment Sizing and datasheet, Instrument Datasheets, Relief System Design, Study Reports, and Design Philosophies etc. Knowledge of API, ASME codes, Shell DEP, Exxon Mobil & various standards.

PMC Experience-: Minimum 8+ yrs.

- 1) Worked on GASCO, Ruwais NGL 4th train EPC project as PMC Process Lead from Petrofac for JV between Petrofac & GS Engg.& Construction South Korea(2.4 Billion USD project).
- 2) Process Lead PMC role for Turkmengas Project FEED plus EPC project units work allotted to Aker Solutions, Mumbai.
- 3) Process Lead PMC role for FEED for Bin Umar Crude oil Depot project from Cpecc.
- 4) Process PMC role for EPC Refinery project of IOCL, Haldia at Toyo Engineering India Ltd.
- 5) Worked on Process PMC role for Adnoc PMC Ruwais NGL Trains Capacity Enhancement Project.

Gas Processing Experience: In most of all oil & gas projects the gas processing facilities worked on NGL Fractionation unit including Ethane, Propane, Butane & paraffinic Naphtha, AGRU(Acid gas removal unit), Dehydration unit(molecular sieves unit as well as TEG units), Dew pointing unit(Forane refrigeration or turbo expander re-compressor unit), Mercury removal unit, SRU, compression unit, vapour recovery unit, flash gas compression, pipeline etc.

NGL Experience-: Worked as Lead Engineer on 4th NGL train of GASCO for proposal & detail engineering project. This involved NGL Fractionation includes Ethane, Propane, Butane unit, Paraffinic Naphtha, De-Heptanizer, Liquefaction, refrigeration with propane refrigeration, Ethane treating unit, Propane treating unit, Butane treating unit with Shell Global licensing, SRU licensed by Worley parsons, Sour water stripper unit, molecular sieve unit licensed by UOP, Naphtha stabilization, Ethane, Propane, Butane & Naphtha storage & transfer unit, Utility systems such as Sea water cooling water system, DM, BFW, steam system, Instrument air, Nitrogen, plant air, fuel gas, drain system, AP,LP & HP flare.

LNG Experience-: Review of LNG PFD, P&ID's, Datasheets and all other Process Documents, perform residual engineering work needed for Proposal. LNG Detail Engineering experience involved preparing & review of Process documents for LNG Project.

Process parameters & Utility consumption requirement was with guarantees & Liquidated damages with penalties.

Oil Process Experience-: In most of the oil & gas projects worked on the oil processing including separators, desalters, electrostatic precipitators, coalscers, condensate stabilizer, hydrocyclone packages, condensate storage tank, export & metering system, LPG production & export, Loading unloading facilities etc.

Offshore Experience-: Knowledge of offshore codes and standards, Worked on offshore oil & gas projects & proposals. Worked on Upper Zakum field development project during proposal & initial stage of Project for ZADCO Abudhabi(ADNOC).

Worked on offshore FEED development projects at multiple locations & proposals for EPC. Knowledge of Offshore process design codes & standards.

Refinery Projects Units worked on: NHT(Naphtha Hydrotreatment), Reforming, Isomerisation, CDU, VDU, Merox Unit, Hydrocracking unit, FCCU, Lube oil unit with Licensor packages of Axens, UOP, Chevron Lummus Global(CLG) etc.

Nature of Work Done in Oil & Gas Projects & Proposals-:

Conceptual Design, Feasibility studies, FEED, Detail Engineering, Optimization studies & options, Evaluation, Value Engineering Design, performance guarantee parameters review, Development of philosophies, HAZOP, HAZID, SIL studies attended & close out of the HAZOP actions, Vendor interaction, site survey, Meetings with client, progress monitoring, critical issues, peer review, manpower loading, unloading in the team of oil & gas facilities etc.

Trainings Attended (Apart from Software training)-:

- 1) Lead Engineer Development programme arranged by Petrofac
- 2) Root cause analysis training arranged by Petrofac
- 3) HSE Training by National Training Institute of Oman from Woodgroup CCC Ltd.

Trainings Given-:

1) Training given on oil &gas systems to Engineers from GASCO during 4th NGL train project Detail engineering.

2) Training given on refinery unit to client persons during working in GS Engineering & construction.

SOFTWARE SKILLS: HYSIS, PRO-II, HTRI, NET FLARE, UNISIM, PROMAX & IN HOUSE DEVELOPED SPREAD SHEETS

KBR International Inc., UAE [Jun.2023- Till Date]

Lead Process Engineer

Ar Ratawi FEED Project for 300 MMSCFD Gas Plant for TOTAL Energies

This project is for 300 MMSCFD Gas plant at Basra Iraq with facilities as indicated below-: Upstream Gas pipelines from Ratawi, Majnoon & West qurna facility, slugcatcher, HP Compression unit, Mercury Removal unit, Acid Gas Removal unit(AGRU) Licensed by UOP, Molecular sieve Gas Dehydration unit, NGL Recovery unit, NGL Fractionation unit, Sales gas(Methane rich) export through pipeline to existing network, Ethane gas export, LPG storage & export, De pentanizer, Condensate stabilizer, Condensate storage & export. Sulphur Recovery Unit(SRU) by Licensor Worley(Comprimo), Acid Gas injection unit, Associated utilities, storage, Power plant.

AGEU(Acid Gas Enrichment Unit) unit is with BASF Licensing technology with OASE yellow solvent technology.

Working on all process activities & deliverables of FEED along with Licensor package & meetings with Licensor. Handling team of 40 Process Engineer with few Engineers at Abudhabi office & major process engineers at Chennai office.

Penspen International Ltd., UAE [Jul.2022- Jun.2022]

Sr. Process Adnoc PMC

Worked on Adnoc gas processing EPC project "NGL Capacity Enhancement for Train 1,2,3 & 4". Working with Adnoc Gas Processing Team as Process PMC. This project involves modifications required in the existing NGL trains to enhance their capacities. Engineering sub Contractor-Worley, Abudhabi, EPC Contractor- L&T.

Global Process System LLC, Dubai [Aug.2021- Jun.2022]

Process Consultant

Worked on Concept, FEED & Proposal for 2 BCMA Gas Plant with 19.5 wt% H2S (Highly sour gas). Facility involves Inlet pipeline, slug catcher, Mercury removal unit, 2 AGRU trains, Molecular Sieve unit for

Dehydration, 4 SRU Trains, LPG Unit including Turbo expander-Recompressor, Chiller Unit, De-Methaniser, De-Ethaniser, De-Propaniser, De-Butaniser, Condensate Stabiliser Unit, Condensate storage tanks and other cryogenic storage tanks, All associated utilities, Water treatment systems and storages, Flares including steam system with steam generation and distribution. Activities involved developing Concept/FEED Documents, Vendor document review, Interaction with Licensors, Client comments and clarifications response etc.

China Petroleum Pipeline Engineering Corporation Abudhabi

[Nov.2020 - Aug.2021]

Process Lead (Adnoc Approved Lead) (Offshore Project)

Working on LTDP FEED project for ADNOC offshore facilities. This project is with replacement of existing external floating roof storage tanks. Hydraulics from upstream facilities to storage tanks and from storage tanks to Sea tanker Berths, Witness study, CFD analysis.

[Apr.2017 - Nov. 2020]

Woodgroup PSN, Dubai

Process Lead/Process Manager (Process Team Head)

Handled team of Process engineers & Process designers

- Worked on FEED & Concept oil & gas projects for Exxon Mobil under PMC3 Major Project's contract. The projects are from West Qurna1 facility of Exxon Mobil in Basra, Iraq.
- Worked on FEED for 210 kbwpd Produced water Treatment unit which consists of PWT unit with Hydro cyclone package, Nitrogen package, Close Drain drum, Produced water tank, transfer pumps, associated tie-ins, Chemical injection packages & utilities.
 Optimization schemes developed.
- Worked on Concept study of 200 MW X 2 Power plant project.
- Worked on Water Injection expansion Project & Central water injection FEED project for DS6, 7&8(Degassing station) facility. The

Water injection expansion is up gradation of existing water injection facility from 300 kbwpd to 500 kbwpd. The central water injection FEED project is Greenfield new water injection facility of 500 kbwpd for DS6 & DS8 which includes Water injection storage tank, Booster pumps, High pressure Water injection pumps, OSBL pipelines & well head piping, Nitrogen package, Chemical injection package etc.

- Completed single handed Concept study project for oil train which includes Desalter, Dehydration up gradation for DS6 Train B.
 This is complete oil train Concept study.
- Worked ond FEED project for Second and third oil train with 106 kbpd capacity.
- Completed FWKO FEED project for Free water knockout FWKO skid & associated Brownfield modifications for 8 trains in DS6, DS7 & DS8 Degassing stations. This involved process simulation,HMB,PFD,P&ID's, Philosophies, Design Basis, vendor document review, Discussions with vendors and all other FEED Documents. FWKO Design was for 60% Water cut.
- Worked on 200 MW Power plant FEED which includes entire fuel gas system equivalent to gas plant such as fuel gas compression, Dehydration, Chiller unit, pipeline & GTG. The extended scope included fuel gas supply to Solar titan's GTG.
- Worked on Concept study of BTEX Emmission from TEG Still column of TEG unit at 8 stations for Shell BGC at Iraq facility. This study included various options to evaluate as well as process flow scheme required for each option. Interaction with Incinerator package vendor's. Identifying the requirements as option.
- Worked on detail engineering EPC projects under FOD development of West Qurna field. These involved Oil Train Capacity Enhancement project, Well head & pipeline upgradation project with transient analysis, Balance vessel Pumps replacement project, Desalter modification project. PSV

upgradation/ Replacement Project, Wellhead piping modification project etc.

Fosterwheeler Kentz, Dubai [Nov.2016 – Apr.2017]

Lead Engineer

- Worked on Shell Majnoon Iraq field projects at FWK office in Dubai.
- The EPC Projects involved in developing new ASP3 well head facilities, existing facility brown field work, Gathering station & Manifold.
- EPC Gas treatment facility, GTG fuel gas system projects
- EPC Water treatment system projects.

China Petroleum Engg. Construction Corp. Dubai

[Feb.2015 – Oct.2016] Lead Process Design Engineer (Process Discipline Head)

- Worked on Proposal for Upstream Oil & gas system. Client- Petro energy E&P Sudan Facilities involved are produced water treatment & Gas recovery.
- Worked on Proposal for Qusahwira Phase 2 facilities. Client- ADCO(ADNOC). Facilities involved are well pads, gathering stations, water injection, gas injection, CDS, Gas lift & MOL pump transfer.
- Worked on FEED job as PMC Process Lead for Bin Umar Crude oil Depot project, Iraq. Reviewed the FEED Documents, FEED P&ID's, Datasheets & other Process documents, Model reviews, Design Reviews etc.
- Worked on SP1 Algeria Crude oil pumping station & pipeline EPC project. Scope includes Conceptual design, Basic Engineering & Detail Engineering. All the process documents are being developed from scratch. Currently this project is under pre award stage. This project was for SONATRACH Algeria.

Wood Group-CCC Ltd. [July, 2012 – Jan.2015]

Lead Process Engineer (Technical Authority)

Worked as Lead for projects of PDO, Oman.
 Multiple projects of up gradation & modification
 of Oil & gas facilities. Handling multiple projects
 currently for RIMA, NIMR, AL NOOR, BIRBA
 station Oil & Gas processing facilities.

Current projects involved new modification jobs, addition of new plant as part of up gradation of facilities, HAZOP studies, HAZOP close out, EPC jobs, Design reviews, Conceptual & Feasibility studies, Evaluation Basic engineering FEED, Detail Design & implementation. Following Shell DEP & PDO standard procedures as a design standard.

Projects worked on-:

- 1) EPC Project Zauliah AP Flare recovery Project-: Vapor recovery from dehydration tanks & routing back to production header.
- 2) EPC Zauliah Gas Compression Project-: Upgradation of existing compressor system
- 3) EPC Sayala Separator bypass Project:
 Existing separators are bypassed from the production header & connected to Degassing boot inlet. New degassing boot, adequacy of existing flare, control valves etc. FEED & Detail design.

Petrofac International Ltd. [June, 2008 - 12th July, 2012]

Principal Process Engineer

- Worked on Conceptual & FEED design of Taherir Petrochemical proposal at Egypt. The scope includes all utilities & process storage system.
 - Worked on proposal for SRDC-2 SaiNihayda Depletion Compressor Phase 2).
 Client- PDO Scope-:

This proposal involved tie-in with existing compressor system, new compressor units because of the reduction in upstream pressure & modifications required in the gas system so as to maintain the delivery pressure, condensate collection system & transfer, produced water collection & transfer to existing system etc.

Activities included Verification of Feed documents such as Design basis, Simulation, P&ID, Shell DEP requirements, Datasheets, Dynamic simulation requirements. Hydraulics etc. with a team of 5-6 engineers. Preparation of Feed verification report.

Vendor documents check. Preparation of Tenderer's queries, Update the documents based on Client's response etc. Optimization options worked out & presented to client. Worked on Sai Nihayda Condensate stabilization Plant, PDO Oman Proposal. Upstream oil & gas system.

Scope-: This involves Inlet separation, condensate stabilization & export system, produced water transfer, Flash gas compression. EPC Proposal.

Proposal activities involved Feed verification such as adequacy check, Equipments, piping, flare design requirements check, process performance parameters & process specifications required. Additional requirements as per addendum. Preparation of Feed verification report, sizing basis, consistency, P&ID updating & design basis considered. Vendor document check etc. Giving technical documents to other disciplines for their work & getting quotation from vendor. Working out different optimum options with their benefits. Presentation & meeting with client.

• Worked also on Proposal for Ethane dryer system for Saudi Aramco.

Scope-: Upgradation of Existing Molecuar sieve unit. EPC Proposal

This involves molecular sieves unit, regeneration & regeneration compression system, Utilities tie-in. The replacement of existing molecular sieve unit. This involved new suitable molecular sieve unit, molecular sieve type, regeneration requirements, Dryer outlet quality, overall performance of dryer & requirements, revised scheme with different options, Requirements of Utilities.

FEED Preparation, Design Basis, Evaluation & detail study of the unit with vendor interaction & preparation of proposal documents.

The similar activities as specified in the above proposal.

- Worked on Upper Zakum offshore project ZADCO(ADNOC) during proposal stage as well as initial design phase of the project during EPC.
- Worked on multiple proposals for offshore FEED & EPC for Nigeria & North sea based sites.

 Worked on Turkmengas Concept, FEED Plus EPC Project for Turkmengas Company, Turkmenistan Russia

[3.5-4 Billion USD]

Scope-: Conceptual Design, FEED & EPC project for the Entire oil & gas facility from well head to final oil & gas product storage & transfer & all associated systems such as utilities etc. This includes 4 trains of 2.5 BCMA each. Well head systems, common Pipelines etc. The train consists of Separation, Condensate stabilization, condensate storage & export as well as AGRU, TEG, SRU, Gas compression & export system. The H2S content in the Gas was 3.5%(Sourgas).

Worked as Lead Engineer & Lead PMC role for the Process units awarded to Aker solutions as well as units designed within the Petrofac Process Engineering team. PMC role involved review of process documents prepared by Aker solutions for EPC. Design reviews, model reviews, vendor selections & any additional reviews. Utilities section for this project. Utility system includes Amine storage & drain system, TEG storage & drain system, Fuel gas system, Raw water & treatment system, Oily water system, Close drain system, DM Water system, Boiler Feed water & Steam system, Instrument air, plant air, Nitrogen system, Diesel storage & transfer etc.

This involved work from Conceptual design, FEED development, Basis of Design & Detail engineering with full EPC scope. Involved in all phase of the project.

- Worked on Zirco island(ZADCO) offshore project as well as proposals.
- Worked on Ruwais 4th NGL Train EPC
 Project GASCO Abu Dhabi Gas Industries
 Ltd.(ADNOC)
 [2.4 Billion USD]

Worked as Lead Engineer- PMC role from Petrofac on this project. This project is executed at Seoul with Petrofac & GS JV. The process engineering documents developed by the GS Engineering team were reviewed, Discussions with client on various issues, various design reviews, vendor

selection reviews, meetings etc. Scope included NGL Recovery Unit with NGL Fractionation, DEO (Deethaniser Overhead) Treating unit, Propane Treating C2/C3/C4 Dehydration units, Sulphur recovery Unit (SRU), Sour water Stripper unit, Utilities and Offsites, Product export up to tie-in with tankfarm. Worked on Licensed package of Shell Global solutions for DEO treating unit & Propane treating unit. Licensed package of UOP for molsieve unit, Worleyparsons for SRU. Work involved review of simulation report, Equipment list, Process Design Philosophies, hydraulic calculation, performance guarantees, Development of PFD, P&ID, Process Datasheets, Flare & blow down depressurization study report and detail engineering follow-up activities. Also involved review of utility systems like Air water compression, MP Steam boilers, treatment, Demin water package, Condensate polishing unit, Sea water intake and outfall. Work also included Incorporation of final client comment in Process documents & Detail engineering design.

 Worked on Proposal for ADCO-1.8MMBOPD Bab Thamama G & Habshan 2 Development [ADCO, Abu Dhabi](ADNOC)

Worked as **Technical Authority** for this proposal. This proposal included 4 new Remote Degassing Stations and a Central Degassing Station and integration with existing facilities. Activities included

- Review of FEED documents, Tender Bulletins, Tender clarifications
- ✓ Equipment sizing and adequacy check
- ✓ Hydraulic Checks
- ✓ Preparation of chemicals & catalyst requirement
- ✔ Review of Vendor Proposals
- ✔ Performance guarantees check
- Worked on PROPOSAL for Ruwais 4th NGL Train project (ADNOC) GASCO Abu Dhabi Gas Industries Ltd.

Worked as **Lead Engineer** from Petrofac for this proposal. This proposal was done as joint venture with GS Engg.& Const. Korea. Scope included NGL Fractionation unit, DEO (Deethaniser Overhead) Treating unit, Propane Treating unit, Sulphur recovery Unit SRU, Sour water Stripper unit, Molecular sieve unit, Utilities and Offsites, Product export up to tie-in with tankfarm. The FEED was developed by Fluor. The DEO & Propane Treating unit are licensed by SHELL. The Sulphur recovery unit is licensed by Worley Parsons. The proposal work involved review of FEED documents, Tender Bulletins, clarifications, Additional design requirements, performance guarantee check, Vendor proposal review, Chemicals & Catalyst summary preparation.

Given training to the client (GASCO) Engineers.

Worked on PROPOSAL for KHARYAGA PHASE III - PACKAGE 4 [TOTAL E&P RUSSIE]

Worked as **Lead Engineer** for this proposal. Scope included Oil stabilisation & treatment; Gas Sweetening, Dehydration, Dew point control, Sulphur recovery, Water treatment & injection system, Hot oil system, Stripping, Oil storage & export, Gas export facilities. Activities included verification of FEED vendor proposal package, review Checking Sizing, of Line Hydraulics, Equipment sizing, Instruments, P&ID, Flare & blow down sizing etc. for consistency and adequacy.

Worked on SYRIA -PETRO CANADA PALMYRA BV- EBLA GAS EPC PROJECT, SURFACE FACILITIES

PETRO-CANADA Ltd. [700 Milion USD]

Main activities included-: Checking of control valve calculations & datasheet, P&ID updation, Cause & effect, preparation of Alarm & set point list, participation in HAZOP & SIL reviews and Vendor documents Review for Reciprocating, centrifugal compressors, Turbo

expander, TEG package, LPG production unit, Condensate stabilizer, Metering Skids.

- Worked on ABUDHABI ADCO SAS proposal at project Pre award stage
 [ADCO, UAE.](ADNOC)
 [2.5 Billion USD]
 Worked on CDS (central degassing station).
 Activities included checking all tender bulletins & updating the same in P&ID for related issues, preparation of control & other philosophies, reviewing P&ID's for RDS, CDS & utilities, Queries preparation, Review of design basis, Equipment datasheets, Feed documents etc.
- LNG Proposal support for process. Review & update of process documents, vendor documents review, Tender Bulletins, Tender clarifications etc. Pre-order stage process engineering design work, preparation of PFD's, simulation, HMB, P&ID markups according to scope & tender bulletins, process calculations etc.

GS Engg. & Construction at South Korea [Nov., 2005 - June, 2008]

[Principal Process Engineer]

 Worked on GS Caltex Corporation, Yosu Refinery EPC project at Korea. Licensor- Chevron Lummus Global (CLG) for VDU/HCR/LUBE OIL TPA for SRU Unit TECHNIP for H2 Generation Plant Project Cost-: 1.4 Billion USD JOB ROLE-:

Worked on Detailed Engineering of Hydro cracking Unit. Job activites Involved review of Licensor Data, P&ID development, PFD modification change & updation based on client requirement & approval from Licensor, Pump hydraulics, Preparation & checking of Process documents such as Equipment Datasheets, Instrument Datasheets, Control valves & Safety valves, Relief Load Calculation, Line list, control logic, Heater P&ID's, Vendor documents review, Relief load summary, Flare header sizing, Knock out Drum sizing, Participation in HAZOP.

 Worked on Methanol Plant EPC Project Client -: Salalah Methanol Company, Oman Licensor- Jacobs UK

Project Cost-: 750 Million USD.

JOB ROLE-:

Involved process design activities such as PFD, P&ID Development, Preparation of equipment, Instruments datasheets, Cause & effect diagrams, Hydraulics check, Safety valve calculations, HAZOP, clarifications with client, licensor etc. Process Simulation using PRO-II, Flare net & HYSIS

 Worked on ERC Refinery EPC Project Client-: Egypt Refinery Company, Egypt. Licensor-: Axens, ConocoPhillips Project cost-: 2.5 Billion USD Major Units- VDU, DHT, NHT, CCR, HCU, DEU, DCU

JOB ROLE-:

Mainly worked on Axen's Pacakge Units such as HCU(Hydrocracking Unit). Activities included Checking of Licensor data, Design basis, Client requirements, Hydraulics, Pumps, compressor calculation & equipment datasheets, Cause & effect chart, Flare load analysis & summary, PSV datasheet. Work also included P&ID Development according to design basis & client requirement.

TOYO ENGG. I. LTD. [Aug., 2002 – Nov., 2005]

[Sr. Engineer (Process Design Dept.)]

- Worked on Petrochemical EPC Project of Petroleo Brazil (REFAB)
 Activities related to last stage of the project i.e piping plan check, P&ID check, Isometrics etc.
- Worked on Petrochemical Project of Ethylene Glycol for JUBAIL PETROCHEMICAL CO. SAUDI ARABIA

Process Licensor-: Scientific Co. USA Worked on checking P&ID, Isometrics, piping plan & activities related to process design.

 Worked on Refinery EPC Project of "Numaligarh Refinery Ltd." India Process Licensor -: Axens (France) Project for Motor Spirit. Worked on Naphtha Hydrotreater & Reforming as well as Offsites & Utilities. Involved in AFC stage P&ID, DCS Graphics, Heater P&ID, Isometric checks, Preparation of operating manual for Offsites & Utilities. Performed Hydraulic calculation check for all units, Resolution of Hazop study recommendation, Incorporation of various tie-in points and 3-D Model Review.

DEPUTATION TO JAPAN -: TOYO ENGINEERING CORPORAION

Duration - : Since Nov. 2004 to 1st January, 2005

a) Worked on KR2 DBN EPC Project,
Malaysia for Preparation of Operating
Instructions. Operating instructions for
Condensate Fractionation and Stabiliser Unit,
Naphtha Splitter and LPG Recovery, Naphtha
Hydrotreatment, Reaction section transplus
Unit.

b) Worked on Naphtha Hydrotreatment EPC Project for IDEMITSU KOBAN LTD. CHIBA, JAPAN

Prepared Safety process data sheet, Equipment Process data sheet for Compressor, heater, Pumps, Exchangers etc., Line List and Utility Summary.

Performed Safety Valve calculation using PRO-II Simulation Software, Flare load Summary and flare header sizing.

Worked on DEEPAK CHEMICALS AND FERTILISERS LTD. EPC Project for ISO-PROPYL ALCOHOL.

Worked on Utilities and Offsites ares.
Developed PFD, P&ID's including hydraulics,
Prepared Equipment datasheets for, Boiler,
Cooling tower, DM Plant, Condensate Polishing
Unit, Storage Tanks and Pump etc.

Worked on Mini Refinery-II proposal for ONGC India.

Scope included CDU and Naphtha Stabiliser Unit. Generated Prepared Process datasheet for Boiler, Cooling tower, DM water, Chemical Package, Instrumentation, Pumps, Compressor, Vessels, Storage tanks etc.

Reviewed Licensor Package for consistency and compliance with Tender/client requirements.

- Worked as Process PMC role for IOCL Haldia project for Refinery project on Naphtha Hydrotreating & Reforming unit from Toyo Engg. I Ltd. with Contractor Engineers India Ltd. Review of process documents developed by EIL for above refinery units for EPC Project.
- Worked on KNPC ATK MEROX UNIT Project KUWAIT.

Prepared Instrument datasheets, Control valve calculations, RO calculations, Hydraulics etc.

• **DEPUTATION TO JAPAN-:** June 2005

Worked on HAZOP Studies for National Petroleum Co. complex Iran.

This was integrated HAZOP between different plants for process as well as utility lines. Preparation of Interface list of all lines which has interface with other unit in the complex. Review of the data available from the client.

- Worked at India on SRU Proposal for HPCL plant at Visakhapattnam India. Licensor- Technip Also worked for Flushing plans for Numaligarh Refinery Ltd.
- Worked on LNG project Detail Engineering work for a Project at Qatar. Detail Engineering work involved Development & Review of Process Documents such as PFD, P&ID, Simulation, Process Datasheets, process engineering calculations & other process documents. Review of vendor documents, Licensor unit documents etc.

KIMPLAS PIPING SYSTEMS LTD.

[Oct., 2001 – Aug., 2002]

Sr. Engineer-Projects

Worked on following Projects. Responsibilities included Detailed Piping & Process Design, Flow Analysis, Vendor Qualification, Inspection, Erection & Commissioning etc.

- 1) EPC Project for 12.5 KM HDPE Pipeline for water Supply for Shree Cement Industries Ltd. Rajasthan.
- 2) EPC Project for Oil transportation System for Indian Army.
- 3) Many projects in water distribution for Government organisation

Enviro Care Labs Pvt.Ltd. [June, 1999 – Sept., 2001]

Design & Project Engineer

- EPC Project for Water & Effluent Treatment Plant from Process Design, Basic, Detailed Engg. & Project Execution for BLUE CROSS LABORATORIES LTD. Nashik.
- EPC Project for Upgrade & Modification of Effluent Treatment Plant for SAYAN SUGAR FACTORY Sayan, Gujarat.
- Design & Project Estimation of NIZARNESHWAR DAIRY Pravaranagar, Loni.
- Design of Scrubbing System for Gas Conc. Analysis & detailed study work for Glaxo I Ltd. Thane.
- Moisture separator & flame arrestor design & estimation for MAHANANDA DAIRY Mumbai.
- Design & Project estimation (Process & equipment) of Effluent Treatment Plant for OLEO OIL CHEMICAL INDUSTRIES MALAYSIA. Also mixing systems, Dissolved Air flotation Sys. Aerators, Pumps etc.
- Worked on Many existing water treatment projects basic, detail design & associated activities.

INDO AMINES LTD

[Nov., 1993 – Nov., 1996]

Shift Supervisor

Handled Production activities for Distillation process, Hydrogenation & Nitration process of Amines. Involved in Trouble shooting and management of workers in unit.