

SEPENI RAMESH KUMAR (10 YEARS OF EXP.)
LEAD MECHANICAL ENGINEER - STATIC & PACKAGES

Mr Ramesh Kumar
Senior Mechanical Engineer
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OBJECTIVE:

To be a part of a highly-motivated team and render service by maximum utilization of knowledge and skills, to step forward in the field of DESIGN, to accept the challenges of the industry & do the creative & innovative work.

SPECILIZATION:

I am specialized in Static Equipment Design, Engineering, and Inspection activities and have the following experiences:

- Experience with Static Equipment's (Vessel, Tanks, Rectangular tanks, heavy reactors, Manifolds, Double wall tanks/vessels, GRP water separators, Strainers, Resonators, Heat Exchanger's & high pressure vessels) using latest codes & regulations.
- Specialized in developing an excel calculations. Responsible for maintain and create a standard library for design formats in a global level at LEWA GmbH and position held as a head of standardization.
- Developed a design format for rectangular tank design using Roark's & Young formula and format approved by ADNOC companies.
- Analysis performed for Bolt torque values determination for fasteners with a joint team of LEWA Germany.
- Handled audit for U, S & R Stamp conducted for the certificate renewal of the year 2013 & 2016 (U, R & S – stamp).
- Participated in ISO audit & documentation practices as per ISO procedures.
- Expert in **AutoCAD 3D** modelling using ACAD
- Working experience with Marine Equipment's (Loading Arms, Mooring Hooks & Capstan Winches).
- Partly worked & co-ordination experience on **Rotating Equipment's** (Pumps & Steam Turbine).
- Working experience with Marine Equipment's (Loading Arms, Mooring Hooks & Capstan Winches)
- Hands on experience for Estimation of static equipment's as per design suitability and supporting proposal team with BOQ.

Conversant with Shell DEP, KOC, KNPC, EIL, ADNOC DGS specification practices.

TYPE OF PROJECTS WORKED:

- Feasibility & Study Projects
- FEED (Front End Engineering Design)
- EPC (Engineering Procurement Construction)
- Fabrication and Construction of Static Equipment's
- Site monitoring & Inspection activity's performed at VENDOR facility's

CURRENT EMPLOYER:

Company : Bilfinger Tebodin Middle East LTD, Abu Dhabi, UAE.



Designation : Senior Mechanical Engineer - Static & Packages

Duration : March 2019 to Till Date.

Nature of Work: Engineering consultancy for Refinery, Oil & Gas sector. Solution oriented for Refinery (Brown field & Green field), Onshore & Offshore.

Professional Summary & Responsibilities:

- **As An Engineer (Mechanical), the following activities executed for both Onshore & Offshore (Brown & Green field)**
- Feasibility Studies – Concept studies review and making feasibility reports
- FEED – Based on Feasibility reports, prepare FEED reports and associated documents such as Specification, Datasheet and Interaction with VENDOR's.
- EPC projects- Preparation of Datasheet, Project Specification, Material Requisition, TQ, TBE and Vendor Document Review (VDR).
- Evaluating the VENDOR documents to maintain the project requirements.
- Co-ordination with Clients, EPC & VENDOR's during the Pre & Post order execution. Interacting with clients for collect the project data by visiting the plant /client office.
- Preparation and verification of vessel strength calculations using PV Elite, Nozzle PRO FEA.
- Involved in inspection of fabrication and construction activities.
- Selection of inspection requirements using internal codes (impact test, Radiography test & PWHT).
- Involvement/participation of the site inspection activity's and accept the stage wise inspection & procedures.

THIRD EMPLOYER:

Company : LEWA NIKKISO Middle East, UAE.



Designation : Senior Mechanical Design Engineer

Duration : July 2015 to March 2019.

Nature of Work: Manufacturer of the positive displacement pumps and supplying to the global market. The facility has capability to assembly unit of a chemical injection packages and in-house facility of tank, vessel. In addition, structural fabrication resources. Facility is having a U, R stamp certifications for pressure equipment's, the facility serving to the global pump business and Manufacturing the Chemical Injection Packages to the Refiners (Onshore & Offshore). Leader in global pump business and manufacturing the Chemical Injection Packages to the refiners (Onshore Offshore) in-house capability for manufacture skid assemblies and construction of heavy pressure vessels, tanks and structure for chemical injection packages.

Professional Summary & Responsibilities:

- Completeness of chemical injection packages with help of engineering & project team.
- Design of Pressure vessels, Tanks as per ASME Sec VIII-Div.1, Div.2 & API12F & API 650.
- Listing all the package deliverables (Valve list, line list and equipment list)
- Prepare a design formats for a standard pressure parts. Solution oriented design practice with the fabrication shop.
- Maintained a standard library for design formats in Global server.
- Local load analysis as per WRC-107 & WRC-297 with PV Elite software.
- Design of Saddle supports for Horizontal vessels with PV Elite software.
- Design of Non-Circular vessels (Rectangular Vessels) Design as per Appendix-13.
- Flange Design as Per Appendix-2.
- Design of Skirt supports, Leg & Lug supports for Vertical vessels with PV Elite software/Spreadsheets.
- Design of Wind & Seismic load on vessels based on International standard.
- Selection of Radiography & PWHT requirement as per ASME & Clients.
- Impact requirement of plate as per give MDMT, ASME & Client Data Sheet.
- Checking of drawings prepared by draftsmen and guiding draftsmen for preparation of drawings and Bill of material.
- Review the P&ID drawings for SKID package.
- Reviewing the vendor offers according to the respective codes.
- Preparation of Technical delivery condition for the raw material.

SECOND EMPLOYER:

Company : Quality International LLC, Chennai, India



Designation : Design Engineer

Duration : March 2015 to July 2015

Nature of Work: Quality international is one of the leading PROCESS EQUIPMENT manufactures in SHARJA, FUJARIYA, and UNITED URAB EMIRATES. It's accredited with ISO 14001:2004, ISO 9001:2008, BS OHSAS 18001:2007 & ASME "U", "U2" & "S" and NB Certifications. And also Design equipment based on ASME, PD5500, TEMA, and API 650 & 620. A company involved in Oil & Gas Projects, Petrochemical & Refinery, Chemical and food processing industries. Heavy manufacturing facility serving for all oil & gas sector equipment's

Professional Summary & Responsibilities:

- Design of Pressure vessels, Columns, Reactors, Cladded Vessels as per ASME Sec VIII-Div.1.
- Local load analysis as per WRC-107 & WRC-297 with PV Elite software.
- Design of Saddle supports for Horizontal vessels with PV Elite software.
- Design of Skirt supports, Leg & Lug supports for Vertical vessels with PV Elite software/Spreadsheets.
- Design of Wind & Seismic load on vessels based on International standard.
- Nozzle external loading calculations of Existed Vessel using Nozzle PRO.
- Selection of Radiography & PWHT requirement as per ASME & Clients.
- Impact requirement of plate as per given MDMT, ASME & Client Data Sheet.
- Checking of drawings prepared by draftsmen and guiding draftsmen for preparation of drawings and Bill of material.
- Calculation of weight of dished end and vessel components using 3D modeling in Auto CAD.

FIRST EMPLOYER:

Company : The K.C.P. Limited, Chennai, India



Designation : Design Engineer

Duration : Aug 2012 to March 2015.

Nature of Work: Heavy engineering and manufacturing unit. Facilitated with Foundry, Fabrication & Machine shop As internal facility. Equipment suppling to the sugar, cement, power, oil and gas & refinery.

Professional Summary & Responsibilities:

- Engineering calculation for Shells, Dished Ends & Nozzles as per ASME Sec. VIII Div.1 PVELITE and obtaining approval from Authorized inspector.
- Site visits made for collecting the existing equipment dimensions. Preparation of site drawing experience as per AS BUILT equipment's.
- Review vendor design calculations & drawings.
- Preparation of RFQ for vessel components.
- Preparation of Bill of materials based on the layout & design requirement and indent the material to Purchase department.
- Selecting the requirement of impact test, Radiography test as per ASME Sec VIII Div.1.
- Calculation of weight of dished end and vessel components using 3D modeling in Auto CAD & Inventor, PV Elite.
- Checking of interference for assembly using 3D modeling.

- Checking of manufacture drawings for cement plant equipment like Rotary Kiln shells, Mill shells with manholes, Mill heads.
- Checking of drawings prepared by draftsmen and guiding draftsmen for preparation of drawings and Bill of material.
- Preparing machine layout drawings and detailing as per the assembly.
- Preparation of proposal drawings as per customer requirement.
- Interacting with client for Collect the project data from the client by visiting the plant.
- Preparation of manufacturing drawings for space application.

Preparation of List of raw materials for the pressure vessel.

CURRENT PROJECTS & EXICUTED:

PMC Projects

▪ **Hail Oil Field Water Injection Project (Offshore)**

Client: ADOC (ADNOC Group of COMPANY)

EPC Contractor: TARGET ENGINEERING CONSTRUCTION CO. (L.L.C)

ENG. Consultant: Equilibrium Engineering Consultancy

Designation: Lead Mechanical Engineer (Static Equipment's)

EPCm Projects

▪ **REDII Green Pre-treatment Unit (PTU Unit_ Netherland)**

Client: MGC Specialty Chemicals Netherlands B.V.

EPCm Contractor: Bilfinger Tebodin Netherlands B.V.

Engg. Sub-Contractor: Bilfinger Tebodin Middle East Limited.

Designation: Senior Mechanical Engineer (Static Equipment's)

MGC Specialty Chemicals Netherlands B.V. (hereinafter MSCN) Company has the intention to build a MXDA plant in Rotterdam, the Netherlands. This new MXDA plant will be located at the Huntsman Holland B.V. location (Merseyweg 10, Rotterdam)

Project had all kind of static equipment's (Vessels, Columns, Tanks, Rectangular tanks, Static Mixers & tanks with Agitators)

▪ **Project XA-1 (Mitsubishi Gas Plant_ Netherland)**

Client: Shell Netherlands B.V.

EPCm Contractor: Bilfinger Tebodin Netherlands B.V.

Process Licensor: Alfa Laval A/S

Engg. Sub-Contractor: Bilfinger Tebodin Middle East Limited.

Designation: Senior Mechanical Engineer (Static Equipment's)

Shell has recognized that to consider future biofuel assets a world-class investment, they must have a Total Installed Cost (TIC) lower than conventional TICs found in downstream oil & gas assets. The TIC for new biofuel assets must be cost-effective to make them competitive with similar facilities constructed by Shell's competitors in the biofuels and ethanol industries.

Project had all kind of static equipment's (Vessels, Towers, Columns, Heat Exchangers and Tanks)

EPC Projects

▪ **ADNOC JEBEL ALI PILOT PHASE PROJECT**

Client: Al Mansoori Production Services Company LLC

EPC Contractor: Jereh Group

ENG. Consultant: Bilfinger Tebodin Middle East Ltd

Designation: Senior Mechanical Engineer (Static & Package's)

Abu Dhabi National Oil Company (ADNOC) is planning to assess subsurface potential of gas accumulations in the North-Eastern part of Abu Dhabi. For this purpose, ADNOC intends to install a Pilot Production Facility (PPF) to

export gas which will be routed to a nearby pipeline facility. Project involves the following static equipment's and Packages.

2-Phase Inlet Production Separator, Hydrocarbon Dew Point Control Package (Ethylene Glycol dehydration), Condensate Vessels with Electric Heaters, HP/LP Flare Package, Chemical Injection Skids (Corrosion inhibitor), Export and Lift Gas Compressor after Filters, Produced Water Separation (2-Phase) and filtration package and Knock Out Drum

Nature of work: Complete pre-order engineering for equipment's (Datasheets, material requisition, specification and technical evaluation of suppliers) and Post order Vendor document review.

- **Greenfield Liquid Terminal At Khalifa Port In Abu Dhabi (Phase- 1a/B)**

Client: Arabian Chemical Terminals Company LLC (ACTAD)

EPC Contractor: AMISTAD Oilfield Engineering Services L.L.C

ENG. Consultant: Bilfinger Tebodin Middle East Ltd

Designation: Mechanical Engineer (Package)

The Project includes the following for Engineering, Procurement and Construction of 40 No's of storage tanks, truck loading station in KIZAD facility.

Nature of work: Complete pre-order engineering for 40 No's of tanks & truck loading arms (Datasheets, material requisition, specification and technical evaluation of suppliers) and Vendor document evaluation. Tanks are constructed using API 650, Dia.23m x 12.5 Ht (20 Nos).

- **Procurement and Construction of Flow lines and Wellhead Installations at Asab And Sahil (Package-1, Part-1)**

Client: ADNOC Onshore **EPC CONTRACTOR:** Galfar Engineering and Contracting W.L.L. Emirates (GALFAR)

ENGINEERING CONSULTANT: Bilfinger Tebodin Middle East Ltd

Designation: Lead Mechanical Engineer (Packages)

The Project includes the following for Engineering, Procurement and Construction in ASAB and SAHIL Fields

Two fields are having a Chemical injection packages (23 Nos) at well head area.

Consultant to evaluate technically VENDOR offers and select the VENDORS as per project requirement. VENDOR document review during the execution of project and also SITE visits to the ADNOC facility and VENDOR area for inspection, if required.

- **Petroleum Regeneration and Processing Facility – Phase II Works:**

Client: ECOMAR, Fujairah, UAE **EPC CONTRACTOR:** Cylingas **Engineering Partner:** BTME

Consultancy services, Operations, PMC Service, Inspection and approvals.

Project scope includes the five storage tanks with associated piping, E&I, firefighting, civil, structural, testing and commissioning.

Designation: Mechanical Engineer

Scope includes the inspection, monitoring of the equipment's and acceptance of stage wise inspection and raw material.

- **Hamad International Airport Expansion Project_ Western Fuel Farm & Midfield Fuel Farm Expansion Works:**

Client: Hamad International Airport, Qatar **EPC CONTRACTOR:** CCC **Engineering Partner:** BTME

Designation: Lead Mechanical Engineer

Project scope includes the installation of additional equipment's to increase the fueling capacity at the airport expansion for FIFA 2022 football world cup. In order to increase the fuel capacity, the COMPANY desires to expand the existing and construct a new facility.

Following Static equipment's in scope of this project: surge tanks, filter water, Separator, micro filter, bucket strainers, sampler vessels, surge tanks, underground metallic tanks, underground GRP tanks (oil water separators), foam tanks, floating suctions, emergency man way, PVV Valves on the tanks and loading arms.

Worked for the equipment documentation (datasheet, MR, technical bid evaluation & VDR) and selecting the suitable VENDOR to meet the project requirements.

- **ADNOC Ruwais Refinery**

Client: ADNOC Ruwais Refinery, UAE **EPC CONTRACTOR:** Al Nasar **Engineering Partner:** BTME

Designation: Mechanical Engineer

Replacement of metallurgical up gradation of pretreated reactor and kerosene reactor susceptible to high temperature. Brown filed project with replacement for existing reactors (MoC – C-0.5M) with new equipment (MoC – SA387 Gr.11 + SS347 Clad/weld overlay).

Review and approval of vessel design documents & TBE for the internal trays supplied from vendors.

Responsible for vendor document review & approval with respect to ADNOC DGS.

- **TES tank replacement for EMPOWER facility**

Client: Empower, UAE **Engineering Partner:** BTME

Designation: Lead Mechanical Engineer

Tank (1 No) replacement with dia.38m x 34m length as per AWWA D100 practices.

Responsible for review and approve the vendor document and approval according to EMPOWER specification & in align with Code compliance.

- **Facility extension project for Flowserve.**

Client: Flowserve, UAE **EPC CONTRACTOR:** HIAP SUNG **Engineering Partner:** BTME

Designation: Lead Mechanical Engineer

2 Nos of cone roof tanks installation for the existing facility.

Complete vendor document review, attending client/vendor meetings and VENDOR facility inspection are added in scope of work. Worked as a sole responsible for tank installations from the project beginning stage.

- **EMDAD aviation fuel supply improving of flow rate from 620m3/hr to 730m3/hr using with 4th pump**

Client: EMDAD, UAE **EPC CONTRACTOR:** _ **Engineering Partner:** BTME

Designation: Mechanical Engineer

New pump installation along with associated equipment's (Vessels & Piping),

Commission handled for the new Pump supplied by Flowserve.

Feasibility & FEED projects

- **Feasibility & FEED study project for existing motor of 3.8MW replaced with a backpressure steam turbine (ADNOC Ruwais Refinery).**

Verify the feasibility of available steam to utilize with using a steam turbine for water cooling circulation for the refinery.

Study the feasibility and verify with the vendor for the key steam parameters & auxiliary system utilization.

Preparation of feasibility report & Turbine specification.

Under progress of FEED stage along with data sheets (turbine, lube oil system).

- **Feasibility & FEED project for MAB Sea facility-74 replacement. (Offshore)**

Preparation of site visit report & feasibility report for the existing Loading arms, mooring hooks & capstan winches, tanks & pumps (Including all mechanical equipment's).

Vendor validation for the latest proven technology's and implement in the feasibility report as the option is feasible to replacement.

Constructability report with the proper execution strategy along with the FEED deliverables (Data sheets, MR & Specification). FEED was completed successfully.

Projects related to Equipment & Packages

- Executed “Air Receiver” for “The KCP Limited-Mechanical Maintenance Dept.”
- EIL – Columns(2nos) for CPCL
Blow Down Tower and Debutanizer both are having individual weight of 110 Tons
- CEMENT & SUGAR INDUSTRY:
Multi number of projects executed under the mill & kiln gears, pinion, cement mills & kiln shells, support roller, shafts and bearings.
- CLEAN FUEL GAS 2020” - FDH JV”
Design of huge quantum of vessel (including pressure vessel, clad vessel, reactors and Columns). Project contains a total number of 147 vessels including U-Stamp applicability.
- SAMSUNG TAKREER
Project contains total 43 no of skid packages out of 3 are U-stamp applicable. Project was successfully completed within time.
- GS E&C NSRP - Lubricity Improver
Project contains 1 no of skid package delivery. Which having a single vertical tank design. Design was made and submit to the client for comments. Approval was received with no comments.
- NCC – QASSIM_SEC
Total 6 skid packages system with 3 tanks of MoC -SS Material and other 3 are GRP tanks.
- AL-TOUKHI_SEC
Total 10 No's of skid packages system with 5 tanks of MoC - SS material and 5 are GRP tanks. Design of vessel completed with zero comments. And also, approved.
- MIES_QAFAC:
Project contains a single skid package system out of which is a rectangular tank. Which is designed based on by using Code Cal software (PV Elite). Design submitted for review the clients. Design documents are approved without comments.
- KOC_GS E&C
11 skid packaged with including equal number of vertical tanks
- KNPC_ TechnicasRunidas
5 No of skid packages along with U stamped vessel.
- KOC_ Petrofac E&C
Total 73 No of skid packages including all are rectangular tank construction.

CODE, STANDARDS & REGULATIONS:

BPVC ASME Sec VIII Division 1 & 2,

BPVC ASME Sec II, Flange and pipe & Pipefittings

GOST 52630

API 650, API 620 & API 12F, API610, API 612 & API 614.

UL 58 & UL 142

AWWA D100

PED 2014/EU/68 (European Union), DOSH Regulations (Malaysia) & Russian Passport's.

Experienced with the stamp Markings like CE, EAC, S, R & U for pressure components

SOFTWARE KNOWLEDGE:

- Software (Design) : **PV Elite, Code Cal, Nozzle PRO (FEA Analysis).**
- Software (Drafting) : **Auto CAD & INVENTOR.**

EXTRA RESPONSIBILITIES:

The KCP Limited

- Maintaining documents as per ISO 9001-2008 and preparation of charts for man hours spent for various jobs on a monthly basis.
- Department Leader in 5'S activities.

LEWA Nikkiso Middle East

- Team leader for mechanical standardization team.
- Focal Point for Department global enquiry's for pressure equipment with global regulations.
- Design & Engineering Lead for U & R stamp audits.

Bilfinger Tebodin Middle East Ltd

- Focal point for the vendor co-ordination.
- Active member in the design study projects.

EDUCATIONAL SUMMARY: (70+ aggregate throw-out career)

- B-Tech in Mechanical Engineering from JNTU @ Kakinada. Year - 2012 (70%)
- Intermediate (+2) from Board of Intermediate @ Andhra Pradesh. Year - 2008 (74.4%).
- Tenth (X) from State Board, Z.P.H School @ Andhra Pradesh - 2006 (73%).

PERSONAL SKILLS:

- Positive attitude & willing to learn and adaptable modern technology in a short period of time.
- Can be able to work well as individual handling a Team.

SITE VISITS MADE TO:

- Orient cements, Devpur, Andhra Pradesh
- Tamilnadu cements, Alangulam, Tamilnadu
- Shrdlow India Ltd, Chennai
- EIL, New Delhi, India
- TECHNIP FMC, Abu Dhabi
- EMDAD Aviation Fuel Supply for Commissioning, Dubai
- DUSUP (Dubai Petroleum Company), Margam Plant, Dubai

PERSONAL PROFILE:

Name	: S. Ramesh Kumar
Father Name	: S. Srinivasa Rao
Languages known	: English, Telugu, Hindi, Tamil.
Marital status	: Married
Passport No	: K3772048
Nationality	: Indian
Skype ID	: rameshsrk349

I hereby certify that the above information's are true to the best of my knowledge.

PLACE: Abu Dhabi, UAE

DATE:

(SEPENI RAMESH KUMAR)