

DEV RATAN KUMAR

Mechanical Engineer



Profile: -

Seeking a Job in Power/Oil & Gas/Renewable Energy EPC sector {Engineering-Procurement-Construction} that provides exposure to new ideas and stimulates personal and professional growth along with the development of organization. Intends to work as Project-Site Planner/Project -Site Engineer and looking to grasp an opportunity in wind energy and waste to energy conversion area.

 Devratankmr98@gmail.com

 08788325028 ,7654501007

 Delhi,India

Permanent Address: -

House No 281, Vill-Mohanpur,
PO- Bariyarpur, Near
Hanuman Mandir,Dis-
Sitamarhi,Bihar-843302

Language Known: -

Hindi ★★★★★
English ★★★★★

Software Known: -

MS Project ★★★★★
Primavera P6 ★★★★★
MS Excel ★★★★★
MS Word ★★★★★
MS Power Point ★★★★★

Work Experience: -

Started Carrier as a Power Projects trainee engineer from 2011 Onwards in M/s Thermax Ltd and have 7 years of work experience in EPC Projects. In 2018 started Pursuing B. Tech in Mechanical Engineering and this year 2021 going to complete it. Further Looking for Job in Energy Sector. During this period I have gain experience both in thermal and Gasification Projects.

Projects Completed: -

Project Executive (Mechanical Engineering)

M/s Thermax Ltd

AGARWAL SPONGE & ENERGY PVT. LTD. BELLARY, KARNATKA

EPC Project -Coal fired AFBC & WHR boiler used for steam generation to generate 12 MW power.

Project Executive (Mechanical Engineer)

M/s Thermax Ltd

APPLE INDUSTRIES LTD, D. HIREHAL, ANDHRA PRADESH

EPC Project-Coal fired AFBC & WHR boiler used for steam generation to generate 25 MW power.

Project Executive (Mechanical Engineer)

M/s Thermax Ltd

1st commercial Biomass Based Indirect Gasification Technology Power Plant, RSIL Site, Washim

Maharashtra. Demonstrated with technology partner RSIL,ECN,MNRE,DAHLMAN & THERMAX.

Project Executive (Mechanical Engineer)

M/s Thermax Ltd

R& D Pilot Project-Coal to liquid gasification plant to provide substitute for LPG,CNG.

Technology demonstrated by technical partners TL,EIL,BPCL.

Responsibility Handled in Span of 7 years of Project Work (CIVIL-MEI):-

Regular Process Responsibility: -

- Referring the standard GCC {General condition of Contract} for the EPC project and the mentioned description is implemented in project work through Sub Contractor.
- On the Other Hand, Contractor Document is referred and the requirement of the project is made fulfilled based on these files.
- Co-ordinating with the EPC team to understand the details of the Project initiation, execution and closure on schedule time.
- Regular follow up with the project team through weekly meeting for all execution related activity to prepare a cumulative project progress Report.
- Preparation of minutes of meeting with the client/Contractor for the meeting held related to Project activity.
- Understanding the concepts of GA drawings, Detail Drawings, Isometric drawings, P&ID drawings to begin the actual execution of work.
- Implementing Standard Operating Procedure for conventional & FOAK activity to eliminate Problems and maximize efficiency.
- Regular follow up taken with contractor regarding major document updating of labour liscense, ESIC & WC Policy, Medical examination of labour, submission of labour wage sheet, Quality documents along with protocols to get billing clearance.
- Preparation of Project learnings i.e., compiling all learned Points and the same copy is submitted to Project manager at the completion of Project.
- Attending Minutes with client/Contractor & Preparing MOM(Minutes of Meeting) of it.

HO Communication: -

1. Documentation with MS Office
2. Data sharing via telephonic conversation, g-mail, outlook, weekly web conference meeting
3. Web Surfing To collect Important Technical documents.

Qualification: -

- B.Tech Mechanical Engineering from WIT college, Gurugram Haryana.
- Diploma In Mechanical Engineering from MVJ college of Polytechnic, Bangalore, Karnataka.
- 10th from DAV public School , Runnisaipur Bihar

Certification: -

Diploma In Health Safety & Environment from NIFS , Annamalai University, Tamilnadu

Certification in Oracle Primavera P6 18.8 from Design Master New Delhi.

Hobbies: -












-  Exploring Distant Lands
-  Playing Outdoor games
-  Listening Music
-  Internet surfing
-  Reading Books
-  Driving

Strengths: -




-  Leadership
-  Decision Making
-  Coordinating
-  Team Working
-  Motivating
-  Ability to prioritized
-  Flexible/Adaptable
-  Goal Oriented
-  Strong Work Ethics

Responsibility Handled in Span of 7 years of Project Work (CIVIL-ME1):

Project Planning & Progress Monitoring: -

-  Referring to the estimated qty/BOQ the detailed Estimation is done and the major calculation done as:-
 - Man hours required for Project Calculation
 - Man Power Required for Project Calculation
 - Work duration for Individual Work Package
 - Billing Value against the Estimated Qty
 - Material Required
 - Machinery Required during Execution
 - Miscellaneous Items Required
-  Preparation of Front availability status sheet describing the exact date of front availability, delay in getting the work front, Constrain in getting the work front, Execution status and handover actual status.
-  Maintaining the record of drawing received from HO and details of handover drawing to contractor. Urgently Required drawing is asked by communication to HO.
-  Preparation of Master Plan-Progress sheet describing Monthly planned qty, Monthly actual qty, Monthly back log qty, Drawing availability for the Specific work as well as front availability for specific work.
-  Preparation of Daily Progress report sheet describing day to day forecasted plan and the day-to-day actual work is monitored here. Cummulative Project plan vs actual achievement is reflected over here ,Percentage completion against plan as well as against estimated qty is reflected in this sheet.
-  Preparation of weekly Progress Report describing each 7 days plan and actual work execution status along with the percentage completion.
-  Project Progress in Nos is even monitored in separate sheet where the completion is reflected by Nos and the Nos are even being reflected in GA drawing i.e., pictorial representation (Pictorial Progress Reporting).
-  Preparation of Manpower requirement with detail description of crew members, their allocation in specific work package and the time period of their allocation.
-  Preparation of Forecast plan for the machinery required during work execution, their allocation, even prior information of the documents is described in this sheet including the details of insurance paper, make, Model No, stand by operator availability & spare details.
-  Preparation of forecast plan for T&P required during the work execution and their engagement plan in day to day execution.
-  Preparation of Forecast plan for the safety permits/Safety requirements against the continuation of daily work ,also during commencing of new work. The sheet prepared described the safety requirements area wise and location wise for specific task.

Billing Plan & Progress Monitoring: -

-  Preparation of Billing Schedule both in terms of percentage as well in terms of executed qty. Monthly billing projection is forecasted in this sheet and the same is monitored by comparing with the actual billing value. Monthly Billing projection is handed over to contractor and the detailed measurement sheet is prepared by contractor for final approval .
-  Preparation of Invoice copy and summary sheet after approving the measurement sheet submitted by contractor. The billing copy is sent to HO for further billing credit process.
-  Preparation of billing Re-conciliation sheet to get the actual status of billing for all sub-contractors/Client.

Documentation: -

- Site Planning & Progress Monitoring
- Man-Machinery Planning & Monitoring
- Daily/Weekly/Monthly Progress Report
- Structural /Pressure Parts/Non-Pressure Parts/Piping erection & alignment Record
- Rotary & Static Equipment Erection & Alignment Record
- Receipt Inspection report
- Material Discrepancy Report
- Maintaining DBR record through Store In charge
- Site Action Request & Commissioning Action Request
- Erection/Commissioning Forecast Plan & Progress Monitoring
- Material Supply Plan & Progress
- Material Rigging & Lifting Plan
- Protocol Preparation for different phase of erection, commissioning and approval signature taken from client.
- IBR boiler documentation to get Clearance for next phase of erection
- Maintaining Issue register/Hindrance Register
- Welding Log book/Piping Progress report
- Tool Box Talk Record
- Near Miss Record
- HIRA updating & Preparation for FOAK Project (Gasification)
- OCP {Operational Control Procedure} for individual Package

Responsibility Handled in Span of 7 years of Project Work (CIVIL-MEI):-

Material Supply Plan & Progress Monitoring: -

- ✚ Quantity of Material Required as per execution Plan is Projected in separate sheet, Monthly Material required for specific package is described over here with description of back log qty Required. Progress monitored by comparison of planned qty vs supply qty.
- ✚ Received Material is cross checked and any damaged found or short supply found then reported instantly to HO through mail. Receipt inspection Report and MDR is being generated through Store In charge and one again it is reported to vendor as well as HO.

Project Scheduling & Progress Monitoring: -

- ✚ Preparation of Project L4 schedule by referring the handed over L3 schedule from HO.
- ✚ For Site Monitoring Micro schedule for different package is Prepared base on L3 schedule.

Project Execution & Progress Monitoring: -

- ✚ Project Resource Mobilization, Execution & closing by handing over system project to client.
- ✚ Handling Responsibility of Erection of ,Installation & commissioning of thermal/Gasification Power project.

Project Presentation & HO Reporting: -

- ✚ Daily Project Progress/Weekly Project Progress and Monthly Project Progress report is presented to concern Project Manager describing the Present status, forecast and actual status of the project.
- ✚ Infographics presentation of the planned qty vs actual qty on Monthly base. S-curve Representation for the progress indication.
- ✚ Preparation of Project learnings and compiling all learned records of the project and submitting to project Manager at the completion of the project.

Commissioning Progress Monitoring: -

- ✚ Preparation of Master Commissioning Sheet explaining details as:-
 - Pipe Flushing Schedule
 - Hydrotest schedule
 - Pneumatic test schedule
 - Commissioning design data vs field reading record sheet
 - No load trials record of rotary equipment's
 - Lubrication Schedule
 - Instruments design data vs field reading record sheet
- ✚ Preparation of punch points and follow up with contractors for its completion.
- ✚ Co-ordinating with vendor engineers for commissioning Process.

IBR Documentation: -

- ✚ Offering letter to IBR for site visit regarding the inspection to get the clearance of the erection activity.
- ✚ Preparation of excel sheet of material to be under inspection with its details as TC no, IBR stamp, Mark No, Area Boiler Inspector name, Material Grade, Class, etc.
- ✚ Compiling the record of TC for all fittings, pipe material and fabricated material along with the RT film copy .IBR folder preparation for Inspection Process.
- ✚ IBR fee submission for inspection as well as for renewable process.

Client Monthly Progress Report: -

- ✚ Preparation of client monthly progress representing the below mentioned:-
 - Project Introduction
 - Overview of the Contractual Agreement
 - Chronology of day-to-day work execution
 - Chronology of Asset Movement
 - Status of Manpower Involved in the Work
 - T&P mobilization status
 - Material Received Status
 - Billing Status
 - Constrain of the Month
 - Pictorial Reporting of progress

Welding Inspection: -

- ✚ Referring the Provided WTS {welding Technology Sheet} guidance is provided to welder with respect to root gap, root face gap, filler material to be used and no of run required.
- ✚ Maintaining Weld log book indicating all details of work package, type of joints, preheat details, post heat details, RT, inch dia weld and type of inspection details for different types of weld joints.
- ✚ Weld Inch dia calculation and progress monitoring along with the piping Progress.
- ✚ Time hour calculation and weld consumables calculation for each type of joint .
- ✚ Physical verification with DPT (penetrant test) is done and acceptance criteria sheet is followed during Physical verification.

Rigging & Lifting Plan: -

- ✚ Physical verification of the location where lifting and rigging to be done
- ✚ Ensuring that all lifting and rigging accessories must be in the safety factor of 1.5.
- ✚ Preparation of rigging and lifting plan for the specific material to ne lifted.

Additional Project Scope Execution Monitoring: -

- ✚ A sperate sheet for the Extra work is prepared representing the scope of work, concern department raising request for extra work & responsible department/Person taking authority for the payment of extra work done.

Miscellenous Work: -

- ✚ Maintaining the record of Machinery breakdown status, representing cause of breakdown, work hour disturbance, spare required, standard time for recovery & maintenance. Regular follow up with contractor for getting ready of machinery.
- ✚ Maintaining MDR copy describing the cause of incident, name of the witnesses, insurance terms, damage part cost and other description required to get the claimed amount.
- ✚ Maintaining issue Register for site day to day work and following up with the EPC team for its timely closure.
- ✚ Maintaining separate sheet for Project milestones and the same is updated and communicated to HO team.
- ✚ Maintaining Separate sheet for mobilization status for different assets of Projects
- ✚ Maintaining Hindrance Register to keep the record of project work deviation from planned status.
- ✚ Preparation of First-hand report for any incident happened at site.

Inspection/Supervision & Exposure to equipment's system and accessories: -

- ✚ **Structural Steel**- Structural Steel Erection, alignment and protocol Preparation and taking counter signature from client as a record of work completion.
- ✚ **Material**-Inspection of all specific Material delivered at site and any damaged/short supply is reported to HO.
- ✚ **Foundation Checking**-Inspection of civil Foundation against Mechanical GA provided for erection and approving the same for further erection work.
- ✚ **Pressure Parts**-Inspection of Pressure Parts assembly and alignment, Protocol Preparation and taking counter signature from client as a record for work completion.
- ✚ **Miscellaneous/Non-Pressure Parts**-Inspection of Non-Pressure parts/Insulation cladding work/Refractory application/Heat tracing/Accessories/ Protocol Preparation and taking counter signature from client as a record for work completion.
- ✚ **Piping**-Piping (BOP piping/Integral & Non integral piping) & Pipe supports alignment, routing/ Mitre bend fabrication, inspection & supervision done for further process of work i.e. welding work clearance.

Inspection/Supervision & Exposure to equipment's system and accessories: -

- # **Valves**-Installation of all type of in line valves like PCV, FCV, MV, Gate, Globe, Butterfly & Ball valve.
- # **Boiler**-Atmospheric Fluidized bed boiler Erection & alignment .Boiler Tube expansion And fixing. Water wall panel, headers, Riser, downcomer, superheater coil, in bed tube, evaporator coil, attemperator, economizer module, APH erection and alignment.
- # **Rotary Equipment's**-Boiler feed pump, Primary air fan, secondary air fan(ID & FD fan),shoot blowers, RAV, Moving Floor system, Power pack, Horizontal Screw, live bottom screw, air compressor, Hot Gas generator, Heat Exchanger(Shell & tube/Plate type),Blowers, Motor, Pump, Rotary coal feeder, bag filter, crusher, vibrator erection ,alignment ,inspection & approval for further installation process.
- # **Static Equipment**-Coal Bunker, Water storage tank, Inverted Bin, Ash Vessel, Hoppers, Boiler Bed compartments & its box up, APH, Interconnecting Duct and their support Structure.
- # **Fire Fighting System**-Fire Fighting System under ground piping, wrappy coating, Fire Cabinet & its Hose Installation, Jockey Pump installation and alignment.
- # **Gasifier**-Biomass Gasification (twin Bed Gasifier) and Coal gasification (Pressurized Bed Gasifier),erection ,alignment and inspection work. Gasifier Inter connecting duct installation, Syngas cooler, cyclone separator, Diesel fired burner, In bed diesel injection, Fluidized bed & accessories inspection alignment and approval.
- # **OLGA**-Tar removal vessel erection, OLGA absorber & Stripper erection and alignment. Filling up of random packings, Structured Packings, Corrugated support plate and their alignment.
- # **Ammonia Absorber/Stripper**-Absorber & Stripper column erection and alignment. Filling up of random packings, Structured Packings, Corrugated support plate and their alignment.
- # **Gas Flare**-Flare structural Tower Erection & Alignment, Flare Stack and pilot burner /flame monitoring guide installation and alignment.
- # **Moving Floor System**-Installation of Sweeping Frame, Power Pack Installation, Hydraulic cylinder Installation, Moving Floor wooden guide block installation and alignment.
- # **Biomass /Coal Handling**-Erection alignment of trestle column, gallery, technological structural, pulley ,frames, rotating equipment.
- # **WESP**-Installation of column (all three Section with embedded honey Comb internally),regitrode installation along with the dead weight, transformer oil filling ,sealing checking and approval for further process.
- # **WTP**-Installation of the Dual media filter, RO membrane casing, Skids, high pressure pump, De-gassifier, RO water Storage tank, Anion & cation vessel erection & alignment, Media charging, Resin Charging, DM storage tank installation ,alignment & inspection for further process.
Chlorine, SMBS, HCL , Na2So4 dosing system installation, MSRL piping, valve installation and pipe support work installation and alignment.
- # **ACT**-Installation & commissioning of the complete package of ACT.
- # **Pneumatic System**-Air system and nitrogen system Installation and commissioning.

Safety:-

- # Conducting Tool Box Talk (TBT) on daily basis and safety basic explanation made to all labours, staffs and supervisor.
- # Issuing Work permit for the specific work to have clearance for work continuation.
- # HIRA file updating as per the site condition. Prepared HIRA file for the FOAK project BIOMASS GASIFICATION.
- # Following the safety guidelines of standard EPC GCC as well as contractual agreement made between Employer and contractor, the same guidelines is implemented at site.
- # Preparation of operation control Procedure {OCP} for various work package.
- # Maintaining Monthly Safety MIS report and updating the same on monthly base.
- # Maintaining monthly violation reports, maintaining monthly record of safety training.
- # Infographics representation of Safety Reports.
- # Maintaining Near Miss Report & Safety Audit Reports.

Admin & Account: -

- # Maintaining Site Attendance of the site Employees.
- # Preparation of forecast plan of site expense of the Project to have comparison on planned expense vs actual expense.
- # Preparation and raising site fund request to HO.
- # Monthly Site Account expense sheet preparation and sending the soft copy as well as hard copy to HO.
- # Provisional Expense sheet preparation during March Closing.