

Mr. RAKESH NAYAK

B-TECH in Mechanical Engineering & HVAC-R Certification

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DOB-10 June 1993

Career Objective:

- Presently looking for position as a **Mechanical Engineer** specialized in **MEP** (DESIGN + Estimation& tendering (HVAC, PHE, FPS, BMS, Electrical, Elv, MGps) +EXECUTION + **Facility Management**) services(**HVAC , BMS PLUMBING, FIRE FIGHTING & FIRE ALARM SYSTEMS, MGPS ,PTS , ELECTRICAL ,CCTV ,ACCESS CONTROL**).
- Energetic and creative with excellent interpersonal communication, leadership, analytical and organizational skill able to function, execute individually or as a member of cohesion team.
- Background includes completing assignments in challenging environments of construction fields(**HOSPITAL, FIVE STAR HOTEL, HIGH RISE BUILDING ,COMMERCIAL BUILDING**) including the areas of design as per **ISHRAE,NFPA,IPC,UPC,NBC-INDIA,CPWD CODE & STANDARD** ,site supervision ,Quality assurance& Quality control, Through my sincerely dedication and smart work to raise the graph of the organization in the market in fast track way.

Total Experience :

Sr. No	Company Name	Position	Experience
1	Tata Trusts (Chandrapur Cancer care Foundation)	ASSISTANT MANAGER – MEP Hospital infra division (Tendering & Estimation)	26 th Nov 2021 to Till now
2	AMS PROJECT CONSULTANTS PVT.LTD	PROJECT ENGINEER(MEP-HVAC,PHE,FPS,MGPS,PTS,BMS)	5 th April 2019 12 th Nov 2022
3	HOSMAC INDIA PVT LTD	MEP SITE COORDINATOR (HVAC, BMS,FF& Alarm ,Plumbing, MGPS)	1.7 months
4	S M CONSULTANTA BBSR	Asst. Manager Design & PMC (HVAC & PHE &FPS & BMS)	3 Year
Total Experience			8+ years

Professional Experience:

- Tata Trusts (Chandrapur Cancer care Foundation) 26th Nov 2022 to till now
Designation - ASSISTANT MANAGER – MEP Hospital infra division (Tendering & Estimation)

Project Title :Chandrapur Cancer Care foundation (200, BED CAPACITY WITH 2NOS LINAC+ NUCLEAR medicine PET CT +SPECT , MRI , CT)

- Client : Tata trusts & GOVT of Maharashtra
- PMC: **CBRE**
- Architects-Eddifice
- MEP Consultants: SNC
- Project cost -300 cr

Location : Chandrapur , Nagapur , INDIA

Professional Overview :(Tata Trusts)

- Mep design and GFC dwg review for project
- Mep boq preparation for budget approval from Govt of MPWD
- Mep material take up quantity preparation floor wise for budget verification
- Mep technical note sheet preparation for EXTRA item and NT item for approval
- MEP high side and low side equipment like -Transformer dg set , LT panel , chiller , pump etc , separate budget preparation by collecting 3 OEM market rate and rate analysis as per cpwd /mpwd format
- MEP -execution work , dwg approval , Tds approval , Jmr , quality , bill checking and coordination with consultant and contractor
- ALL type of civil & mep work coordination with contractor for execution at site
- Tender MEP NIQ preparation
- MEP boq rate approval to vendor as per rate analysis Mention in Tender GCC

Professional Experience:

- AMS PROJECT CONSULTANTS PVT.LTD **5th April 2019 to 12th Nov-2022**
Designation - PROJECT ENGINEER MEP (HVAC, BMS ,fire fighting & fire alarm ,Plumbing, MGPS ,PTS Coordination, Billing, Execution, Design review, Facility Management)

Project Title :COLUMBIA ASIA HOSPITAL ,BANER PUNE (350, BED CAPACITY WITH 2NOS LINAC)

- Client : COLUMBIA ASIA
- PMC: AMS PROJECT CONSULTANTS PVT.LTD
- Architects-KGD,BANGLORE
- MEP Consultants: LEED CONSULTANT
- HVAC +BMS CONTRACTOR: S.M AIR CONDITONER PVT LTD +SIEMENS INDIA PVT LTD
- FIRE FIGHTING CONTRACTOR: ABS PVT LTD
- PLUMBING CONTRACTOR- ABS PVT LTD
- Work type: Centralized chilled water HVAC system capacity 1050 TR(1nos water cooled +2 air cooled) with complete BMS SYSTEM +stand by VRF SYSTEM
- Cost :HVAC 14CR
- Work type :automatic sprinkler system with fire alarm control
- Cost :FIRE 4CR
- Cost :PLUMBING 6 CR
- **Location : BANER PUNE , INDIA**
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- **HOSMAC INDIA PVT LTD** **4th September 2017 to 31ST march 2019**
Designation - MEP SITE COORDINATOR (HVAC, BMS ,fire fighting & fire alarm ,Plumbing, MGPS ,PTS Coordination, Billing, Execution, Design review

Project Title :UIMS 450(150+150+150) BED MULTI SPECIALITY NULEAR HOSPITL,BBSR

- Client :UTKAL HEALTHCARE PVT LTD
- PMC:HOSMAC INDIA PVT LTD
- Architects-ICHINEN ARCHITECTS PVT LTD
- Structural & MEP Consultants: GSP DESIGN CONSULTANT
- HVAC CONTRACTOR: HARCOMP AIRFLEX PVT LTD
- FIRE FIGHTING CONTRACTOR: PM PROTEK
- PLUMBING CONTRACTOR- SASWAT ENGINEERING
- Work type: Centralized chilled water HVAC system capacity 930TR with BMS SYSTEM .
- Cost :HVAC 10CR
- Work type :automatic sprinkler system with fire alarm control
- Cost :FIRE 4CR
- Cost :PLUMBING 3CR
- **Location : BBSR ODISHA, INDIA**

- **IGKC HOSPITAL PVT LTD (ODISHA)**

Project Title : 250 BED IGKC SUPERSPECIALITY HOSPITL

- Client : IGKC HOSPITAL PVT LTD
- PMC:HOSMAC INDIA PVT LTD
- Main Consultants: Medica Synergic pvt ltd
- Architects-RJB Architects pvt ltd
- Structural & MEP Consultants: SEMAC CONSULTANTA PVT LTD
- HVAC CONTRACTOR: BLUE STAR INDIA PVT LTD
- FIRE FIGHTING CONTRACTOR: JHONSHON CONTROL INDIA
- PLUMBING CONTRACTOR- PLUMTECH INDIA
- Work type: Centralized chilled water HVAC system capacity 750TR with BMS SYSTEM.
- Cost :HVAC 8CR
- Work type :automatic sprinkler system with fire alarm control
- Cost :FIRE 4CR
- Cost :PLUMBING 3CR
- **Location : GHATIKIA ODISHA, INDIA**

Professional Overview:

Facility Management MEP Services

- Responsible for checking daily BMS (Building management system)alarm report generate for HVAC system (chiller operating status , ahu status , VFD pump status , FCU , VAV box , automatic tube cleaning , sbr for cooling tower and proper function of all field device related to HVAC system consider in BMS
- Responsible to prepare plan and guide and trained Hvac technician ,floor wise to check different HVAC equipment and its operation (HVAC chilled water manifold operation and maintenance, cooling tower)
- Responsible for daily kick start fire fighting pumps and prepare floor wise checklist to check each and every shaft
- Responsible for WTP plant and STP plant RO plant proper function and guide plumbing technician to check each floor shaft ,for leakage troubleshoot
- Responsible for proper function of FAPA system and check each detractor and device as per plan

- Responsible for all electrical side equipment checking (transformer , dg , lt panel , floor panel)
- Responsible for proper function of server room , ups room , CRAC area
- Responsible proper function solar system for emergency light and hot water application
- **HVAC**
- Job involves studying Tender/GFC drawing, project specification and contract general's terms and all MOM, condition of the project.
- Responsible for monitoring/supervising /coordinating with Structural Builder's provision of sleeve for MEP Works also in civil contractor wall cut out opening marking for ducting , chilled water piping as per shared MEP GFC drawing .
- Responsible for checking / sending/update tracker **MAR (MATERIAL APPROVAL REPORT)** along with TDS as per BOQ, tender specification and approved make by client to consultant for approval of material
- Responsible for preparation of **MIR (Material inspection report)** as per approved MAR by consultant along with required doc(ex-delivery copy, tax invoice, mtc matching with material cml no ,snap shot)
- Responsible for raise design related RFI to consultant on GFC drawing.
- Responsible for attend meetings with client and consultant, contractor .
- MEP co-ordination shop drawing reviewing accordingly to design/Tender/GFC drawing and specification in compliance with standards codes of respective disciplines(ASHRAE/ISHRAE , NFPA,CARRIER,SMACNA DW/144, IAPMO) for approval as per consultant comment.
- Specially focused on MEP & design services in **LINAC, CT SCAN ,MRI ,CATH LAB ,MEDICAL ICU, HDU ,DIALYSIS, LAB, LDR PET CT,CHEMO ,OT AREA WITH AIR LOCK PROVISION ,ISOLATION ROOM ,CABIN AREA IN SURGICAL/TRANSPLANT ICU** (positive/negative pressure area),exhaust system in **COLOSCOPY, ENDOSCOPY ,CSSD , STERILE STORE** etc . **LIFT LOBBY,STAIR CASE PRESSURIZATION** etc.
- HVAC shop drawing check with RCP drawing for location SAD/RAD location along with bottom LVL of each equipment .
- HVAC floor wise quantity list make for order approval for installation as per approved **AUTOCAD/REVIT** drawing.
- HVAC shaft civil clearance approved to contractor for CONDENSER /CHILLED WATER piping installation.
- Design reviewing and verification (DRV) HVAC systems& accordingly deciding to approve contractor's selection of equipment Installation of piping, ducting, cooling tower, Chiller , TFA , CSU, FCU,CASSETTE UNIT, CRAC Air Handling Units, fan filter unit(FFU),exhaust fan , jet fan, smoke and axial fan.
- Reviewing of TDS & GA drawing and make comparison with project specification
- Factory test for approval of CHILLER /PUMPS /AHU/CSU/FCU/CASSETTE/ UNIT before delivery to site.
- Responsible for monitoring/supervising /coordinating and inspecting the execution of building services, comprising HVAC, PLUMBING(water supply& drain systems) and fire fighting systems.
- Responsible for inspection of material delivered /third party inspection at site as per approved TDS.
- Responsible to witnessing all TAB (Testing, Adjusting, Balancing) works at site .
- Responsible for making protocol/check list for all HVAC equipment installation at site.
- Inspect welding quality i.e. &visual inspection and DPT, radiography & hydro testing of piping.

- Able to read / understand all sorts of HVAC drawing with foundations / civil / wall opening/partition marking/equipment installation civil clearance.
- Suitable selection of Air Terminal Devices for related Air Distribution System.
- Responsible for preparing measurement report from SHOP Drawing from Auto cad and checking with site installation JMR along with Quality checklist .
- Responsible for bill checking along with all doc .
- **BMS**
 - Responsible for checking GFC drawing with shared i/o summary .
 - Responsible for checking shop drawing accordingly to approved i/o summary.
 - Responsible for marking equipment starter panel location at site and equipment location for BMS cabling.
 - Responsible for checking cabling size, no of cable used for field device ,valve actuator, actuator, communication cable , energy meter , chiller, vfd pump etc
 - Responsible for marking DDC location and UPS power supply provision.
 - Responsible for correct installation of field device like-Differential pressure switch to monitor the filter status, Temperature Sensors, Immersion type water temperature Sensors, Room Temperature and RH sensor, PICV valve actuator, fire damper and motorized damper actuator
 - Review MEP drawings and identify HAVC equipment(AHU,CSU,FCU,VAV ALL TYPE OF FAN , PICV VALVE ,MOTORIZED FIRE DAMPER PANEL , cassette, chillier, pump , energy meter)
 - Review MEP drawing and send RFI to consultant
 - Review of I/O Summery as per requirement.
- **PLUMBING**
 - Responsible for supervising installation of INTERNAL SANITARY FIXTURES as per consultant approved drawing.
 - Responsible for supervising installation of INTERNAL DRAINAGE SYSTEM (SOIL,WASTE,VENT PIPE, HVAC UNIT DRAIN LINE) as per MEP coordination drawing with proper slope.
 - Responsible for supervising installation of INTERNAL WATER SUPPLY SYSTEM (DWS, FWS,HWS CWS RO WATER) with necessary valve package.
 - Responsible for supervising installation of TERRACE RAIN WATER DRAINAGE SYSTEM .
 - Responsible for supervising installation of BASEMENT WATER SUPPLY
 - Responsible for supervising installation of BASEMENT DRAINAGE SYSTEM
 - Responsible for ceiling drainage line installation (SP, WP,) as per above floor furniture layout , checking Proper slope provided in MEP co-ordination drawing.
 - inspection Core cutting marking with tile marking water proofing in toilet area
 - installation of PPR pipe with PRV ,DRV, GLOBE VALVE , BALL VALVE check as per drawing
 - Responsible for preparing measurement report from GFC/SHOP Drawing from Auto cad and checking with site installation JMR and material invoice checking for approval of contractor payment.
- **FIRE FIGHTING**
 - Fire fighting Sprinkler (Pendant/Upright) number check as per NFPA CODE from GFC/SHOP drawing
 - Sprinkler /smoke detector location matching with RCP .

- Fire shaft clearance for INSTALLATION of riser pipe with sprinkler pipe and installation of FHC with landing valve ,RRL pipe, hose reel as per local FIRE NOC requirement.
- FF floor wise quantity list make for order approval for installation as per approved AUTOCAD drawing
- Responsible for preparing measurement report from GFC/SHOP Drawing from Auto cad and checking with site installation JMR and material invoice checking for approval of contractor payment.
- **POWER PLANNER LLC (DUBAI) (S.M CONSULTANT) 1 JUN 2017 TO 26th Aug**
Designation - HVAC ENGINEER (HVAC, PLUMBING (EXECUTION), labor rate estimation for villa project ,hotel project)

Project: ARENCO HOTEL

- Client : ABDULLAH AHMED ALMOOSA
- Design Consultant: ARENCO
- Work type : HVAC & PLUMBING EXECUTION WORKS
- MAIN CONTRACTOR : CHINA STATE CONSTRUCTION (MIDDLE EAST) LLC
- **Location : PLAM JUMEIRAH , DUBAI.**
- **S M CONSULTANTA BBSR (Odisha) 30th April 2014 to 20th may 2017**
Designation - Assistant Manager (HVAC & PHE& FIRE FIGHTING SYSEM DESIGN)

Project Title-1:

- Client :The World 5 star Hotel
- PMC- S.M consultant
- Design Consultant : Zamil Air Conditioners India
- Work type : Centralized chilled water HVAC system capacity 500TR
- Cost :HVAC LOW SIDE 6.5cr approx
- Cost :PLUMBING LOW SIDE 1.5cr approx
- **Location :Bhubaneswar, odisha.**

Project Title-2:

- Client : **Odisha Industrial Infrastructure Development Corporation (IDCO)**
- Design Consultant: S.M. Consultant. BBSR.
- Work type : Heat load design (**HAP 4.9**),manual method using **ISHRAE E-20** sheet ,duct design BOQ, Estimation .(*INCUBAATION CENTRE 1200 TR*)
- Cost :MEP 20cr approx
- **Location :Bhubaneswar, odisha**

Project Title-3:

- Client : **Odisha Industrial Infrastructure Development Corporation (IDCO)**
- Design Consultant: S.M. Consultant. Bbsr
- Work type : Heat load design ,duct design BOQ, Estimation (*office cum commercial building for JHARSUGUDA 600 TR*)
- Cost :MEP 13cr approx
- **Location :, JHARSUGUDA, Odisha**

Design Overview :

- Heat load calculation in accordance to the building survey following the ASHRAE /ISHRAE , **E-20** sheet & CARRIER HAP SOFTWARE (4.9)
- CARRIER PSYCHROMETRIC CHART/SOFTWARE FOR CALCULATION OF HUMIDITY RATIO
- Duct design by equal friction method using **MQUAY** duct size software.
- External Static Pressure (ESP) calculation of ducting using SMACNA standard.
- BOQ, tender specification preparation.
- Make list prepare
- Chilled water piping design as per ASHRAE/ISHRAE GPM flow chart, with using of MQUAY PIPE SIZER SOFTWARE schematic designing shaft wise unit check.
- Air distribution system design
- Fire fighting system design as per **NFPA ,NBC,CPWD CODE (HYDRAULIC CALCULATION USING ELITE SOFTWARE** , manual method)
- Plumbing system design as per **IPC,NBC-INDIA , UPC**
- MEP drafting using AUTOCAD.

Academic Credentials:

- **B.TECH in Mechanical Engineering** from NIT, Bhubaneswar under BPUT ODISHA in the year 2014 with CGPA 7.19.
- **Intermediate in science** from RCST, Puri under CHSE, ODISHA, in the year 2010 with **73%**.
- **Matriculation** from GHS, Konark under BSE ODISHA in the year 2008 with **71%**.

Professional Training Program-1:

- Program Name :MSD/MMP(Mechanical System Design/Mechanical Managers Program)
- Course :HVAC-R System Design & Drafting.
- Duration : 4 months
- Location :KIIT UNIVERSITY, BHUBANESWAR, ODISHA.
- Certification :Awarded by IAPMO

Designing software skills:

- REVIT MEP MODELING(intern)
- 2D drafting package: Excellent 3Years MEP drafting Knowledge in **AUTOCAD** (2010, 2016, 2017,2019).
- Heat load calculation using –**HAP SOFTWARE** 4.9
- Sprinkler system node calculation using **ELITE software**
- Proficient in MS Office (Word, Excel, Power Point), **MS Projects (intern)**
- HVAC drafting utility.

Passport /Visa Details :

- **Passport no-M0376249**
- Place of issue-Bhubaneswar
- Date of issue-22/072014
- Date of expiry-21/07/2024

Personal Information:

- Nationality: Indian

- Language known: Read ,write, speak (English, Odia , Hindi)
- Marital Status: Unmarried
- At: Raulapatana
- Po: Konark
- Pin: 752111
- Dist: Puri
- State: Odisha

Declaration

I consider myself familiar with **MEP site cum Facility engineer** aspects. I am also confident of my ability to work in a team. I hereby declare that the information furnished above is true to the best of my knowledge.

Place: **NAGPUR**

RAKESH NAYAK

Date:

Signature of the applicant