**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 ALARAM SYSTEMS, MGPS ,PTS , ELECTRICAL ,CCTV ,ACESS 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** ) | **26th Nov 2021 to Till now** |
| **2** | **AMS PROJECT CONSULTANTS PVT.LTD** | **PROJECT ENGINEER(MEP-HVAC,PHE,FPS,MGPS,PTS,BMS)** | **5th April 2019 12th 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
* HOSMAC INDIA PVT LTD 4th September 2017 to 31IST 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 26thAug

**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](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0ahUKEwjD_siK-bXMAhVBSo4KHcixCD8QFggrMAI&url=http%3A%2F%2Fwww.zamilacindia.com%2F&usg=AFQjCNE7fly5p1KrMrTG9tgdbaTIPa27Rw&sig2=iI04EEsVH7E7j9KvJMHfHA)
* 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. Workshop & Seminar

**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