

ABDUL AKRAM MOHAMMAD, (PMP)[®]

Senior Mechanical Engineer | MEP | TVS | FLS |

Saudi Council of Engineer – Member



CONTACT DETAILS



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PROFESSIONAL PROFILE

Senior Mechanical Engineer with 16+ years of experience in MEP systems across metro/rail, infrastructure, high-rise, hospitality, villa, and swimming pool projects in KSA, UAE, and India. Specialized in Tunnel Ventilation Systems (TVS) and Fire Life Safety (FLS) with extensive expertise in design coordination, system integration and execution of (USOG) MEP systems. Demonstrated ability in delivering complex projects through meticulous planning, technical excellence and effective stakeholder management. Recognized for strong analytical, leadership and communication skills, consistently driving the successful delivery of complex, large-scale infrastructure projects within challenging timelines. Adept at leading cross-functional teams, ensuring compliance with NFPA, ASHRAE and BS standards and optimizing project performance to reduce rework and ensure successful handover.

Core Competencies:

- MEP Execution – HVAC, Tunnel Ventilation, Fire Protection (Metro/Rail, Residential, Commercial)
- Tunnel Ventilation Systems (TVS) – Design, Review & Optimization
- Fire Life Safety (FLS) & Smoke Control Systems
- Systems Integration (TMCS, BMS, SCADA) & Control Logic Verification
- MEP Coordination & Interface Management with Civil, Electrical, Architectural and External Stakeholders
- Testing & Commissioning – Procedures, Documentation, and Client Acceptance Support
- Quality Assurance – Compliance with International Standards & Best Practices
- Risk Assessment & Mitigation Strategies
- Leadership – Cross-functional Team Management & Technical Guidance
- Budgeting, Resource Planning & Cost Optimization
- Stakeholder & Consultant Liaison
- Technical Submittals Review & Approval

KEY PROJECTS

- **Diriyah-KSA** Heritage and cultural landmark with integrated MEP, infrastructure and smart building systems preserving historic architecture.
- **Riyadh Metro- KSA** Major urban rail project delivering tunnel ventilation, fire life safety and comprehensive MEP systems across multiple lines
- **Cleveland Clinic-UAE** -Advanced healthcare facility with integrated MEP, HVAC and FLS systems ensuring efficiency, safety and operational excellence.

WORK EXPERIENCE 6

POSITION: Sr. Mechanical Project Engineer

Duration: June 2025 – Present

Company: Urbacon Saudi Company –UCC Holding (Diriyah)-KSA

- Oversee complete design and execution of USOG MEP systems and swimming pool piping installation ensuring compliance with project specifications and international standards.
- Review and finalize shop drawings, raise RFIs to address technical issues and liaise with consultants on material submittals and related matters to prevent rejections and ensure smooth approvals.
- Coordinate with clients in technical and progress meetings, providing updates and implementing solutions to drive project milestones.
- Monitor project progress, identify potential risks and implement corrective actions to maintain schedule, budget and technical quality.
- Managed subcontractors, optimizing workforce performance, ensuring quality control and achieving on-time project completion.

WORK EXPERIENCE 5

POSITION: Sr. Mechanical Engineer

Duration: March 2018 – May 2025

Company: FCC Construcción (Riyadh Metro)-KSA

- Mechanical Engineer responsible for overseeing the design, interface coordination and testing & commissioning of Tunnel Ventilation and Fire Life Safety Systems for underground metro stations and tunnels. resulting in a 100% compliance rate with international codes and client-specific requirements.
- Provided technical support for the seamless integration of Tunnel Ventilation System (TVS) and Fire Life Safety (FLS) systems with SCADA and Building Management System (BMS), ensuring reliable performance and centralized operational control.
- Led the testing and commissioning of mechanical systems for Tunnel ventilations fans, Dampers ,HVAC, water mist systems, Fire fighting system in coordination with OEMs and third-party vendors, achieving success rates.
- Streamlined material procurement and reduced delays by collaborating closely with logistics and procurement teams, ensuring all the materials met project specifications before deployment.
- Achieved seamless project startups by ensuring the timely completion of all critical deliverables, including as-built documentation, O&M manuals, T&C reports, and equipment handover packages.

WORK EXPERIENCE 4

POSITION: MEP Technical Coordinator

Duration: March 2015 – February 2018

Company: FAST Consortium (Riyadh Metro) -KSA

- Coordinated closely with architects, engineers, contractors, and key stakeholders to ensure seamless integration of MEP systems into overall project design.
- Reviewed and validated MEP design plans and specifications to ensure compliance with international codes, standards, and project-specific requirements.
- Actively participated in progress and coordination meetings with owners, consultants, and contractors, providing updates, clarifying technical issues, and aligning efforts with project milestones.
- Ensured timely identification and resolution of site-level challenges, contributing to improved workflow and stakeholder satisfaction.

WORK EXPERIENCE 3

POSITION: Construction Coordinator

Duration: March 2014 – Feb 2015

Company: SPC Constructions(KAFD)- KSA

- Liaised effectively with site engineers and construction professionals to ensure all project activities complied with approved design specifications and engineering standards.
- Maintained regular communication with clients, contractors, consultants, and government authorities to secure necessary permits, licenses, and regulatory approvals.
- Oversaw the testing and commissioning (T&C) process in coordination with Design & Build contractors, ensuring timely completion and smooth handover of assets.
- Ensured successful transition from construction to operational readiness through structured commissioning schedules and close collaboration with all project stakeholders.
- Collaborated with finance teams to manage and monitor project budgets, including cost forecasting, expense tracking, and financial reporting.

WORK EXPERIENCE 2

POSITION: Project Engineer

Duration: Dec 2010 – Feb 2014

Company: BESIX (CCAD)-UAE

- Developed and executed comprehensive project plans, clearly defining scope, timelines, budgets, and resource requirements to align with client objectives.
- Oversaw the design process to ensure full compliance with project specifications, industry codes, and regulatory standards.
- Managed project budgets meticulously, tracked expenditures, and implemented cost-control measures to ensure projects remained within financial targets.
- Directed procurement activities by sourcing and acquiring essential materials, equipment, and supplies in accordance with project timelines and budgets.
- Closely monitored on-site construction activities to ensure alignment with project plans, technical specifications, and established quality benchmarks.

WORK EXPERIENCE 1

POSITION: Mechanical Site Engineer

Duration: May 2010- Nov 2010

Company: SRP Enviro Systems Pvt. Ltd.- INDIA

- Supervised the execution and monitoring of mechanical systems—including HVAC, plumbing, and fire protection—ensuring compliance with approved drawings, method statements, and safety regulations.
- Estimated and allocated required project resources such as manpower, materials, consumables, tools, and equipment ahead of execution phases.
- Reviewed and approved technical submittals and shop drawings submitted by contractors and design consultants for mechanical and plumbing systems.
- Collaborated with cost control and planning departments to prepare accurate daily progress reports and support project tracking.
- Oversaw the complete lifecycle of mechanical system delivery, including testing, commissioning, training of end users, and formal handover to the client.

ACHIEVEMENTS

- Delivered 6 Riyadh Metro stations ahead of schedule with full T&C completed and zero NCRs.
- Reduced rework by 30% through early-stage clash detection and resolution across mechanical disciplines.
- Spearheaded technical coordination workshops, achieving 40% faster approvals for critical MEP submittals.
- Led the development of a preventive maintenance program that improved system uptime by 25%.
- Supported the development of as-built documentation, O&M manuals, and handover packages, ensuring smooth transitions to operations and maintenance teams post-project completion.
- Played a key role in the T&C (Testing & Commissioning) of vital MEP systems, including tunnel ventilation (TVF/TBF), water mist systems (WMS), and BMS/SCADA integrations across multiple metro stations.

COMPUTER SKILLS

Microsoft Office

- MS Word
- MS Excel
- MS Power Point
- MS Outlook (Email)

Engineering Software

- AutoCAD
- Sketchup
- Navisworks

TRAINING ATTENDED

- Project Management Professional (PMP) certification
- Risk Management training for construction project planning and execution
- Leadership training for managing project teams and leading organizational change.
- Construction Safety Training
- Railway Operations Training
- Railway Electrification Training
- LEED Certification Training
- Quality Control and Assurance Training

SOFT SKILLS

- Communication/ Interpersonal Skills
- Time Management
- Strategic thinking
- Teamwork
- Attention to detail
- Leadership, Team Building & Networking
- Training, Research and Analytical Skills
- Adaptability
- Problem solving
- Positive attitude

EDUCATION

- Bachelors of Technology in Mechanical Engineering – JNT University
- Diploma in in Mechanical Engineering -SBTET with first division.
- S.S.C board of Secondary Education with first division.
- Diploma in Heating Ventilation and Air Condition (HVAC)
- Diploma in Refrigeration and Air conditioning systems (R&A/C)
- Diploma in Hardware Engineering – Netcom Services
- Diploma in Auto Cad – Netcom Services
- Diploma in CNC programming –BHEL

STRENGTHS

- Proven experience in the construction industry with a strong focus on large-scale infrastructure projects, including metro and rail systems.
- Exceptional problem-solving skills with the ability to identify technical issues, develop innovative solutions, and effectively troubleshoot on-site challenges.
- Advanced project management capabilities, including expertise in planning, scheduling, budgeting, and efficient resource allocation.
- Strong interpersonal and communication skills for effective collaboration with multidisciplinary project teams, stakeholders, and clients.
- Resilient under pressure with a demonstrated ability to deliver high-quality results within tight deadlines and demanding environments.
- Solid technical foundation in mechanical engineering principles, with hands-on experience in system design, analysis, and performance optimization.
- High attention to detail, ensuring accuracy, compliance, and quality across all project phases.
- Effective leadership and team management skills, with the ability to guide and motivate diverse teams toward successful project outcomes.

PERSONAL DETAILS

Civil status : Married

Nationality : Indian

Language : English, Arabic, Hindi & Telugu

Iqama : Transferable

Driving license : KSA, INDIA

Nationality : Indian