



# ENGR. AALI ZAIB

## PROFESSIONAL SUMMARY

Experienced Mechanical Engineer with over 8 years of specialized expertise in MEP systems, including HVAC, firefighting, and plumbing. Skilled in design review, technical evaluations, site supervision, and project coordination, ensuring compliance with international standards and national regulations (SASO, MODON, Saudi Building Code & Civil Defense). Known for a detail-oriented, solution-driven approach, effectively managing project lifecycles, optimizing costs, and enhancing system reliability. Committed to delivering high-quality, sustainable, and compliant engineering solutions.

## AREA OF EXPERTIES

- MEP System Installation & Commissioning
- Regulatory Compliance & Standards Adherence
- Cost Optimization & Resource Management
- Project Management and Coordination
- Site Supervision & Quality Assurance
- Safety Protocol and Risk Management
- HVAC, Plumbing & Fire Protection System
- Technical Documentation and Specs. Reviews
- Collaboration with Cross-functional Teams
- Stakeholder Management & Communication

## PROFESSIONAL EXPERIENCE

### Mechanical Engineer

Nov 2024 – Current

**Al-Hussan Engineering Consultants** – Dammam, Eastern, Saudi Arabia

- Provide expert consultation on MEP system design, integration, and optimization for industrial, commercial, and seaport infrastructure, including HVAC, plumbing, fire protection, and electrical systems.
- Conduct detailed site inspections, feasibility assessments, and technical evaluations to ensure system performance aligns with project specifications, client expectations, and national regulations (MODON, Civil Defense, Saudi Seaports) as well as international standards (ASHRAE, NFPA, IEEE, ISO).
- Review and approve shop drawings, material submittals, and technical specifications, ensuring strict compliance with design intent, engineering best practices, and client requirements.
- Identify and resolve complex MEP issues through root cause analysis, recommending cost-effective, energy-efficient, and sustainable solutions while coordinating with multidisciplinary teams for seamless system integration.
- Support project teams in planning, scheduling, and resource allocation, optimizing project timelines and reducing costs through effective coordination and strategic decision-making.
- Oversee site supervision activities, ensuring adherence to safety protocols, quality standards, and regulatory requirements, contributing to successful project completion.

### Mechanical Engineer

Dec 2021 – Oct 2024

**Funoon Al Nader Factory For Industries** – Al Qassim, Saudi Arabia

- Oversaw the installation, commissioning, and optimization of HVAC systems (FCUs, VRFs, AHUs, packaged units) and firefighting systems (sprinklers, hose cabinets, FM-200), ensuring full compliance with design specifications and industry standards.
- Managed plumbing systems, including drainage, stormwater, and water supply, verifying contractor adherence to regulatory codes and project requirements.
- Led the installation and commissioning of production lines and specialized machinery for brake pad manufacturing, ensuring proper alignment, operational efficiency, and safety compliance.
- Developed and maintained detailed project schedules, coordinated with contractors for timely milestone achievement, and ensured effective resource allocation.
- Conducted rigorous site inspections, enforced stringent safety protocols, and supervised quality control processes to uphold project standards.
- Acted as the primary liaison between the project owner, contractors, and consultants, resolving technical challenges and ensuring seamless project execution.
- Provided leadership and technical guidance to site teams, fostering effective teamwork and high performance.
- Managed turnover processes, including documentation, testing, and final inspections, to ensure smooth project handover and operational readiness.

### MEP Mechanical Engineer

Oct 2017 – Aug 2021

**Abdullah Antifire Protection** – Lahore, Pakistan

- Coordinated teams, maintained schedules, and ensured material availability.
- Conducted compliance checks for health and safety, developed technical reports, and maintained project timelines.
- Resolved technical issues, liaised with clients, and led site inspections to meet specifications.
- Implemented accident prevention programs, held daily safety meetings, and conducted site inspections.

## CONTACT DETAILS

📍 Dammam, Saudi Arabia

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✉ aali.zaib1@yahoo.com

🚗 Saudi Driving License Holder

🏠 SCE: Registered (1097611)

🏠 PEC: Registered (02757)

🏠 Iqama Status: Transferable

## TECHNICAL SKILLS

- Understanding of engineering standards such as (ISA, IEEE, ASTM, ASME, NFPA, ASHRAE, ANSI, ISO, SMACNA).
- Installation, Testing & Commissioning
- Site Inspections
- Quality Control
- Site Acceptance Test (SAT)
- Factory Acceptance Test (FAT)
- Cost Management & Budget Control
- Project Planning & Management
- Risk Identification and Mitigation
- Contractor and Supplier Coordination
- System design Review
- Value Engineering
- BOQ Analysis
- Root Cause Analysis
- Corrective Action Planning
- Statistical Process Control
- Six Sigma (DMAIC)
- Conducting Training
- Technical Presentation
- Site Surveys and Analysis
- Feasibility Studies
- Trilingual: Fluent in English, Arabic & Urdu

## EDUCATION

**Bachelor of Science in Mechatronics Engineering** 2013 – 2017

University of Engineering and Technology, Taxila, Pakistan

## SOFT SKILLS

- Strong Analytical Thinking
- Effective Time Management
- Collaborative Leadership
- Clear Technical Communication
- Adaptability in Multicultural Teams
- Detail-Oriented & Results-Focused

## SOFTWARE SKILLS

- Programming Software:
  - TIA Portal & Simatic Manager
  - Simatic WinCC
  - WinCC RT & WinCC Flexible
- Project Management Software:
  - Oracle Primavera
  - Oracle Aconex
  - Microsoft Power Bi
- Designing Software:
  - AutoCAD
  - Revit
  - Elite Fire
  - HAP
  - CREO
- Enterprise Software
  - SAP
- Statistical Software:
  - Minitab
- Productivity Suite:
  - Microsoft Office
    - Word
    - Excel
    - Power Point

## REFERENCES

- References available upon request.

## KEY PROJECTS

### INDUSTRIAL PROJECTS:

1. **MIDAL ACS Wire Factory – 2nd Industrial City, MODON, Dammam, KSA**
2. **Saudi Paper Factory Expansion (Production Line 5) – 2nd Industrial City, MODON, Dammam, KSA Mechanical Engineer (Consultant)**
  - Scope: MEP design review, site supervision, and technical evaluations for industrial manufacturing facility infrastructure.
  - Key Systems: HVAC, firefighting, plumbing, and compressed air systems.
  - Responsibilities: Managed site inspections, design validation, shop drawing reviews, system testing, and ensured compliance with project specifications, MODON, Civil Defense, and international standards.
3. **SCHNEIDER Electric SPARK Industrial Facility – SPARK, Dammam, KSA Mechanical Engineer (Consultant)**
  - Scope: LEED-focused industrial facility construction with advanced energy management and sustainable design.
  - Key Systems: HVAC, plumbing, fire protection, and energy-efficient systems.
  - Responsibilities: Design review, technical assessments, site inspections, and compliance with sustainability standards.

### WAREHOUSE PROJECTS:

4. **Climate-Controlled Warehouse (KANOO Logistics) – Seaport, Dammam, KSA Mechanical Engineer (Consultant)**
  - Scope: Design and supervision of climate-controlled storage facility for temperature-sensitive goods.
  - Key Systems: HVAC, fire protection, insulation, and climate control systems.
  - Responsibilities: System design validation, site supervision, and performance testing for energy efficiency and safety compliance.

### ADDITIONAL PROJECT EXPERIENCE:

5. **Khobar Avenues District Cooling Plant – Khobar, Saudi Arabia**
  - Worked with contractor (ARANER) to prepare comprehensive technical documentation for the district cooling plant project, ensuring alignment with project specifications and regulatory standards.
6. **Al Nader Factory for Industries – Al Qassim, Saudi Arabia**
  - Represented project owner, overseeing MEP works, facility installation, and commissioning of factory equipment to ensure seamless operations and compliance with industrial standards.
7. **CCL Pharmaceutical Production Facility – Lahore, Pakistan**
  - Led cleanroom and HVAC system installation from start to end, ensuring optimal performance and regulatory compliance for pharmaceutical production environments.
8. **National Institute of Health – Islamabad, Pakistan**
  - Led cleanroom installation from start to end, ensuring strict compliance with healthcare and safety standards.
9. **Package Mall – Lahore, Pakistan**
  - Represented project owner, supervising MEP and BMS installation activities, ensuring efficient system integration and high operational reliability.

## KEY PROJECT CONTRIBUTIONS

- Implemented design coordination strategies and installation sequencing that reduced HVAC setup time by 15% and enhanced system performance by 10%, supporting early project delivery.
- Developed and enforced enhanced safety protocols aligned with Civil Defense and international standards, resulting in a 25% reduction in on-site incidents and full regulatory compliance.
- Implemented a tracking framework for long lead MEP items, enhancing visibility across procurement cycles, reducing material wastage by 10%, and improving coordination between site teams and suppliers for timely delivery and cost control.
- Supported LEED documentation and compliance efforts in coordination with the design team on Schneider Electric SPARK project, promoting energy-efficient system design and implementation.

## CERTIFICATIONS & TRAINING

- **Lean Six Sigma Green Belt (AIGPE, PMI)**
- **EPC Project Planning and Control with Primavera P6 (Oracle University)**
- **Corporate Sustainability Reporting Directive (CSRD) Training**
- **Electric Power Systems (University of Buffalo, New York, USA)**
- **Lead Auditor QMS (ISO 9001:2015) (CQI, IRCA)**
- **Energy Management System (ISO: 50001:2018) ((SEEC), Saudi Arabia)**
- **PLC Advance Training Including HMI and SCADA (Descon Technical Institute)**