

KAMAL RAM

Senior Mechanical Engineer MEP – Fire Protection & Plumbing, 15+ Years Gulf Exp, Design, Execution, AutoCAD, Hydraulic Calculations in HASS, NFPA/UFC/UPC/NSPC. E-mail: kamal.mech.engg@gmail.com
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EDUCATION

B. Tech – Mechanical Engineering | NIT Hamirpur, India | 1998–2002 | First Division

CERTIFICATIONS & MEMBERSHIPS

- **KSE** – Kuwait Society of Engineers (2014-2028)
- **KFF** – Kuwait Fire Force Approval (2015-2025)
- **NFPA** – Member of National Fire Protection Association

PROFESSIONAL SUMMARY

- Senior Plumbing & Fire Fighting Engineer with 15+ years of MEP experience across Kuwait and Gulf region.
- Specialized in Fire Fighting & Plumbing system design, execution, hydraulic calculations (HASS, Elite), NFPA, UFC, **IS 15105:2021 (Design, Installation and Maintenance of Fixed Automatic Sprinkler Systems)** compliance, and authority approvals (KFF, KNPC and KOC).
- Proven ability to deliver large-scale industrial, aviation, oil & gas substation and high-rise projects with cost savings, optimized designs, and successful consultant/authority approvals.
- Recognized for technical leadership, project execution, and cross-disciplinary coordination in the Gulf region. Consistently delivered projects on time and within budget while ensuring full compliance with NFPA, UFC, and local authority standards.

CORE COMPETENCIES

- Fire Protection & Plumbing System Design & Execution (Sprinklers, Hydrants, Hose Reels, Fire Pump)
- Hydraulic Calculations (HASS, Elite) | NFPA 13, 14, 20 | UFC 3-600-01
- Seismic Brace Design and Calculations
- Tendering, BOQ and Cost Optimization
- Shop drawings & Coordination Drawings (AutoCAD)
- KSE & KFF Approved | KOC/KNPC Standards
- Authority Liaison & Approvals | Site Supervision | Testing & Commissioning
- Multidisciplinary Coordination (Civil, HVAC, Electrical, Structural) | Composite drawings

KEY ACHIEVEMENTS

- Successfully obtained KSE (2014) and Kuwait Fire Force KFF (2015) credentials, enabling authority approvals
- Managed fire protection system designs for F-18 Super Hornet Hangars and APS 500 Warehouse (US Army/Navy), ensuring compliance with NFPA 13, UFC and KFF Requirements.
- Saved KD 65,000 (pipe optimization + seismic brace design) in APS 500 Warehouse project.
- Led design support for Jaber Air Base (USACE) → secured variation orders boosting project profitability.
- Prepared tender design and estimation for F-18 Super Hornet Hangar and 72 MW KOC Substation projects; contributed to NBTC successful project award.
- Multi-Discipline MEP Coordination: Resolved critical MEP coordination clashes during design and execution phases, preventing costly delays in fast-track projects
- International Collaboration: Worked with USACE Fire Protection Engineers, ensuring full compliance with UFC and DOD standards.
- Cost Optimization: Achieved KD 25,000 savings on the Al Jaber project by securing approval for utilizing company's in-store ex-stock materials, avoiding specific new purchase.

PROFESSIONAL EXPERIENCE

Design Head - Plumbing and Fire Fighting

NBTC – Naser Baddah Trading & Contracting Co., Kuwait. | Nov, 2019 – Sep, 2025 (Six Years)

- Led full design and execution of fire protection and plumbing systems for major projects like US Army hangars, APS-500 Warehouses, and F-18 Super Hornet.
- Managed tendering and estimation for F-18 Super Hornet and 72MW KOC Substation at Sabriya. Contributed to NBTC's successful project award.
- Performed hydraulic calculations (HASS, Elite), pipe optimization, and designed seismic bracing for APS 500 Warehouse and F-18 Super Hornet projects.
- Led design support for Jaber Air Base (USACE), resulting in key variation orders and increased profitability.
- Supervised fire and plumbing works for 72MW, 11kV substation.
- Liaised with KFF for approvals, ensuring full authority compliance.
- Promoted to Head of Design – Plumbing and Fire Fighting (Dec 2023) for technical leadership & cost-efficient engineering solutions.

Project Engineer - Plumbing and Fire Fighting

Gulf Engineering Co., Al-Rai, Kuwait. | Oct, 2013 – Oct, 2019 (Six Years)

- Delivered end-to-end execution of plumbing and firefighting systems for multiple large-scale projects.
- Reviewed BOQs, specifications, and design drawings for compliance.
- Prepared material submittals and secured timely consultant approvals.
- Generated shop drawings and managed site execution as per approved plans.
- Handled procurement through material take-offs and price evaluations.
- Led MEP works for the Fawsec Campus at Sabah Al-Salem (2016-2019).
- Contributed to KNPC C4i/Main Support Building at Ahmadi
- Coordinated testing, commissioning, and as-built drawings for Egaila and Ahmadi NHC projects.
- Oversaw design and layout for GEC's new workshop in Ahmadi.

Project Engineer - Plumbing and Fire Fighting

Contracting and Construction Enterprises , Riyadh, KSA. | Nov, 2009 – July, 2013 (Three years)

- Executed plumbing and firefighting works with strong focus on quality.
- Prepared BOQs, conducted material take-offs, and supported procurement planning.
- Developed shop drawings using AutoCAD in line with technical specs and coordination needs.
- Supervised site works for the Five-Star Hotel and Convention Center.
- Reviewed IFC drawings and resolved design conflicts through coordination.
- Managed timely material submittals and authority approvals.
- Raised RFIs and resolved technical queries (TQs) to clarify discrepancies in drawings and maintain uninterrupted site progress
- Produced builder works drawings (MEP openings) for integration with civil and structural works.

EARLIER CAREER EXPERIENCE

Mechanical Engineer - Plumbing & Fire Fighting, AMIN Construction Pvt. Ltd., Maldives (2005-2009)

Mechanical CAD Engineer, Smart Conveyor Design Solutions Pvt. Ltd. (Aerowerks Inc., Canada), India (2002-2005)

This early work built strong mechanical engineering foundations, but primary MEP specialization began in Saudi Arabia & Kuwait (2009 onwards).

ADDITIONAL TECHNICAL TRAINING

- HVAC System Design – Arabian Infotek, **Dubai (26-Oct-2025 to 14-Dec-2025)**
(Heat load calculations, FCU/AHU selection, ventilation & smoke management systems)