

# Imran Anjum

Mechanical Design Engineer



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## Career Objective

Contribute to make world a better place by sharing my experience & knowledge to facilitate my clients in the best way possible.

To reduce the Carbon Footprint in my design and optimize the energy consumption at best of my expertise.

To achieve Sustainable design after using the best methods of valuation and optimization without compromising the efficacy of the system.

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## Personal Information

**Birth Date:** 25 June 1979  
**Gender:** Male  
**Nationality:** Pakistan  
**Residence Location:** Islamabad, Pakistan  
**Marital Status:** Married  
**Number of Dependants:** 5  
**Driving License:** Saudi Arabia, Pakistan

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## Career Summary

- A total of 20 years' experience, mainly in Industrial and Power sector.
- Deep knowledge and understanding of Piping, HVAC and Fire systems.
- Focus of Services
  - Tendering
  - Estimation
  - FEED Design
  - Detailed Engineering
  - Optimization
  - Valuation
  - Review
- Type of Experience
  - Thermal Power Plants
  - Nuclear Power
  - Hydroelectric Power Plants
  - Declination & RO Plants
  - HealthCare Facilities
  - Office Buildings
  - Lab Buildings
  - Community Centers
  - Oil & Gas Facilities
  - Substations & Switchgears
  - Highrise Buildings
  - Cement Plant
  - Process Plant
  - Chemical Plant
  - Clean Rooms

## Professional Traits

- Accept Responsibility
- Communication Skills
- Professional Etiquettes
- Dedication
- Maintain ethic and integrity
- Ambitious
- Success-driven
- Enthusiast
- Persuasive
- Goal-oriented

## Personality Traits

- Flexible
  - Confident
  - Detail-oriented
  - Loyal
  - Problem solver
  - Honest
  - Poised
  - Ethical
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## Professional Experience

### Oct 2019 – Engineering Manager

**Present:** Seegapak,  
Office#2, 4<sup>th</sup> Floor, Icon Tower-II, New City Phase II, Wah Cantt, Pakistan

Seegapak is a newly established Engineering Consultancy.

- Provide Engineering Solution to clients
- Tender estimations, BOQ preparations, Valuations and Engineering Economy
- Problem Solving, Site Support, Correspondences.

### April 2017 Mechanical Design Engineer

– Oct 2019: DAR-Engineering,  
Office#2, Park Lane Tower, Lahore Cantt, Pakistan

DAR-Engineering, a Consultant Company, known for designing of Power Plants, Substations, Hospitals as well other projects from Misc. Commercial areas at KSA and Dubai as well as in Pakistan

My duties and Responsibilities were summarized as below,

- Design of HVAC, Plumbing and Fire Alarm Systems
- HVAC Space heat load calculations and duct design.
- U factor calculations, ventilation calculations static pressure calculations etc.
- HVAC Duct sizing and routing in the light of ASHRAE and SMACNA standards, space availability and construction hurdles.
- Plumbing Design Calculations, pipe sizing, routing, elevations, isometrics and miscellaneous details.
- Piping Head Calculations, Frictional Loss Calculations.
- Structural Supports calculations/sizing i.e. Stress calculations due to various factors.
- Tender estimations, BOQ preparations, Valuations and Engineering Economy
- Problem Solving, Site Support, Correspondences for local projects.
- Reply to the client comments, attending meeting for design review and comments

settlement

- Participated in innovation activities to create fresh procedures, systems & programs to achieve the desired quality standards, removing the bottle necks and meet deadlines.
- Created Visual Basic programs for common design activities to accelerate the works.

**May 2006 – Asst. Mechanical Design Engineer**

**Mar 2017:** Alfancar Co.,

P.O. Box 301, Riyadh 11411, Kingdom of Saudi Arabia (KSA)

Alfanr, an Electrical Company, mostly engaged in construction of Substations as well other projects from Misc. Commercial areas.

My duties and Responsibilities were summarized as below,

- Design of HVAC, Plumbing and Fire Alarm System
  - Concept of design considering stability, practicality, aesthetics, economy and local engineering practices.
  - HVAC Space heat load calculations and duct design.
  - U factor calculations, ventilation calculations static pressure calculations etc.
  - HVAC Duct sizing and routing in the light of ASHRAE and SMACNA standards, space availability and construction hurdles.
  - Plumbing Design Calculations, pipe sizing, routing, elevations, isometrics and miscellaneous details.
  - Piping Head Calculations, Frictional Loss Calculations.
  - Structural Supports calculations/sizing i.e. Stress calculations due to various factors.
  - Man Hours estimation for the prospected jobs.
  - Problem Solving, Site Support, Correspondences etc.
  - Managing work with off-shore offices (Egypt, India and Pakistan). Giving them input and perusing day to day design activities.
  - Review the Design from Off-shore Offices
  - Design Submittal to SEC/ARAMCO/KJO/Sipchem/Poyry etc.
  - Technical Correspondence with SEC and Contractor. Attending Design Review meetings.
  - Reply to the client comments, attending meeting for design review and comments
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- Supervision of junior staff in Mechanical Department, Translation of design from calculation to drawing language and work scheduling focusing on time frame.
  - Training of newcomers with standards, software and general practices to streamline their role.
  - Reviewing the drawings from general drafting errors and design aspect.
  - Maintaining directory structure of Mechanical Department and cross-referring with other departments.
  - Coordination of drawings for their overlapping, space availability, slab/wall openings, diffuser and lights arrangements at false ceiling, elevation of duct and pipes etc.
  - Maintaining log prescribing status of on-going projects.

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**January Tech-I**

**2003 - April** Pakistan Atomic Energy Commission

**2006:** Chashma, Distt. Mianwali, Pakistan

The Establishment is Research Laboratory cum fabrication factory, engaged in Manufacturing/Fabrication of classified fuel.

I served in Central Design and documentation Section. This section was developed as a support to Director Office, for an overall supervision of the establishment.

Duties and Responsibilities: -

- My duties at this premise were beyond the borders. I had to use my abilities to find solutions for complex technical and non-technical issues. This actually sharpened my knowledge and broadened my view to great extent. Major of my recurring responsibilities were as follows:

- Process Documentation/Handling of Critical Fuel Components
- Supervision of Eddy Current Testing, Hydrostatic testing and Hydrogen leak testing of Aluminum tubes.
- Working time to time with R&D Committees in Documentation, Designing, Flow Charting, making Comparison sheets, Static and Animated Presentation
- Drafting/Designing of Fuel components.
- Detailing for Shop Floor
- CNC Programming/Operation
- Tig Welding Programming
- Drafting/Designing of New Developments/Extension in Building etc.
- Re-evaluation/Technical auditing of foreign procurement of Machinery and Equipment
- Yearly Development Budget Appropriation and Re-appropriation. Keeping an eye on Budget position with on going developments through the year.
- Coordinating with PAEC Central Audit team on their yearly visit.

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**June 2002 - Asst. Mechanical Design Engineer**

**January** FCMC

**2003:** 62 Km, Multan Road, Lahore, Pakistan

FCMC is a chemical Marketing company having its premises for production of Sulfuric Acid, Aluminum Sulphate, Pharmic Acid, Double Salt Aluminum Hydro-Oxide/Potassium Hydro-Oxide, Sulfur Power, Sulfur Rolls, Different Combinations of Paraffin Wax.

I served on the Design and construction of a sulfuric acid plant.

- Designed Sulfuric Acid plant
- Had Design meetings for Design Improvements and Safety Factors.
- Finalized the Design for new plant.
- Supervised the complete fabrication of new plant.
- Had a successful plant run

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**August** **Promotion Engineer**

**2001 - May** ITC

**2002:** Blue Area, Islamabad, Pakistan

ITC was a small scale Contracting Company, involved in fabrication/ manufacturing of Steel Structures/Small Steel bridges/Communication Towers/Distribution Boards/Panels.

I had extended as Promotion Engineer: -

- Keep an eye on daily tender announcements, sorting out company's interest, and discussing with the Manager.
  - Designing/Drafting of all on going projects.
  - Making BOQs, Valuation.
  - Tender workout, Cost estimation and finalization of bid.
  - Project scheduling and maintaining resources.
  - Documentation/Follow-up/Correspondence.
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**April 2000 - Site Engineer**

**July 2001:** Saraf Hydro Asia  
KEL, Muzzafferabad, Pakistan

Saraf Hydro Asia was a contracting Company for construction/Maintenance of Small Hydro-power Projects in the remote areas of AJK.

I had served the company on its KEL, Changan and Kundal Shahi sites on 500KW, 200KW and 2MW Power plants respectively. Though very small in capacity, but remote sites, extreme weather conditions, low resources made the condition worst. I really enjoyed with those tough conditions.

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**August 1999 - October 1999:** **CAD Designer**  
UEE  
Lahore, Pakistan


UEE is a works on electrical portion of the constructions.

I worked on ABN Amro Bank's construction project to draw electrical Layouts. Since this was the first job I learned a lot from the experience.

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## Professional Registrations

**ASHRAE**  **American Society of Heating Refrigerating and Air-conditioning Engineers**  
Membership # 8177536  
Member Since 2012

**ASME**  **American Society of Mechanical Engineers**  
Membership # 100245547  
Member Since 2012

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## Education

**August 2011:** **Bachelor of Technology, Mechanical**  
Preston University, Islamabad, Pakistan

**May 2000:** **Diploma of Associate Engineer, Mechanical** (with specialization in Automobile and Diesel)

## Professional Certifications

- July 2012:**
- **ASHRAE Standards 62.1 and 90.1, and VAV Systems**
  - **ASHRAE Standard 62.1-2004: Ventilation Rate Procedure**
  - **ASHRAE Standard 90.1-2010**
  - **LEED 2009 Modeling and Energy Savings**
  - **Air Handling System, Energy and IAQ**
- TRANE, USA
- July 2012:**
- **Fan Fundamentals, Module-1.2**
  - **Fan Fundamentals, Module-1.2**
  - **Fan Coatings**
  - **Fan Construction Materials**
  - **Fan Accessories**
  - **Fan Bearings**
- GreenHeck, Schofield, Wisconsin, USA
- Feb 2012:**
- **Fan Fundamentals, Module-1.1**
- GreenHeck, Schofield, Wisconsin, USA
- Aug 2009:**
- **Professional Marketer**
- DXN, Malaysia
- July 2000:**
- **Mech-III**
- CMTI
- May 2000:**
- **Instrumented Tune-up Services Course**
- UNDP/NISTE
- March 1999**
- **AutoCAD**
- Multi-CAD Professional
- July 1995**
- **WordPrefect 5.1**
- ACC
- June 1993**
- **Fortran Programming**
- POF WCC
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## A Page on Key/Recent Projects Designed/Contributed

| S # | Project   | Client/Location          |
|-----|---|--------------------------|
| 1.  | Design of HVAC System for all the buildings of Shuqaiq-3 Independent Water Project, Shuqaiq, KSA          | ACCIONA/KSA              |
| 2.  | Design of HVAC System for all the buildings of Water Treatment Plant RO-1, Al-Khobar                      | SWCC/ACCIONA/KSA         |
| 3.  | Design of Kitchen Island Refrigerator with independent Control System                                     | Genconstrux GmbH/Germany |
| 4.  | Preparation of Series of Lectures, Presentations and Training Material for HVAC Design                    | Mr. Aslam Al Hindi/India |
| 5.  | Design of HVAC, Plumbing, Fire Alarm and Fire Extinguishing Systems for a Complex Building at Sanberial   | Mirza Imran/PAK          |
| 6.  | Design of Plumbing and Waste disposal system for a textile factory  | Ambition Apparel /PAK    |
| 7.  | Design of HVAC for Lab Building for Punjab Food and Drug Authority at Lahore, Pakistan                    | PAFDA/PAK                |
| 8.  | Design of HVAC and Plumbing for a Luxury Villa at Lahore  | Mr. Tahir/PAK            |
| 9.  | Design of HVAC and Plumbing for a 400kV Substation  | DEWA/Dubai               |
| 10. | Design of HVAC, Plumbing and irrigation systems for SEC office Building at Riyadh                         | SEC-COA/KSA              |
| 11. | Design of HVAC, Plumbing, Fire Alarm and Fire Suppression Systems for a University Power Supply Buildings | Rafha University/KSA     |
| 12. | Design of HVAC system for Control and Substation Buildings in Gas Field Area at Turaif                    | Saudi Aramco/KSA         |
| 13. | Design of HVAC System for multiple Warehouses at Dammam   | Saipem/KSA               |
| 14. | Design of HVAC and Plumbing System for Main Turbine Hall for PP-14, Riyadh, Saudi Arabia                  | SEC/SEPCO-III/KSA        |
| 15. | Design of HVAC and Plumbing System for Dammam North 380/115/13.8kV Substation                             | SEC/Alfanar/KSA          |
| 16. | Design of HVAC and Plumbing System for 11 Nos. 115/13.8kV Substations in Dammam Area                      | SEC/TAG/KSA              |
| 17. | Ras al Khair 2300MW Combined Cycle Thermal Power Plant  | SWCC/SEPCOIII/KSA        |
| 18. | Transfer Function of SWGH and its related Cables  | JGC/KJO/KSA              |
| 19. | Ras Al-Khair 380/230kV IPP Substation   | SWCC/SEPCOIII/KSA        |
| 20. | Substation-3 & 51B for IPC in JIC   | Sipchem/KSA              |
| 21. | EPCC 115/13.8kV Substation  | Saudi Cement/KSA         |
| 22. | Extension of Production-2, X-Lab  | PAEC/PAK                 |
| 23. | 70 Metric Tons Daily Capacity Sulfuric Acid Plant   | FCMC/PAK                 |
| 24. | Temporary Shelter for Earth Quake Victims   | ITC/PAK                  |
| 25. | 70 meters High Self Supporting Radio Frequency Towers at 14 Locations                                     | PBC/ITC/PAK              |
| 26. | Kundal Shahi 2MV Hydroelectric Power Plant  | HEB-AJK/PAK              |