# Shafqat Anjum Afridi, PE

Address: Al Khobar, KSA. Mob +966590206864 Email: shafqat.afridi@gmail.com

# Lead/ Senior Mechanical Engineer - (Packaged/Static Equipment)

# **Profile Summary**

18 years' experience of Packaged & Static Equipment Design, commendable knowledge of Mechanical design, client & vendor engagement, estimations & proposals, Time and resource management. strong engineering and technical skills and an inherent ability to execute multiple projects and lead diverse teams.

- Excellent knowledge of the fundamental requirements of the mechanical engineering, and the basic requirements of other engineering fields.
- Excellent knowledge of Engineering codes & standards and application of statutory and regulatory specifications/ requirements.

# **Skills & Strengths**

Static Equipment Design | Packaged Equipment | Mechanical Design | Documents Review | Technical & Commercial Bid Evaluation | Proposals & Estimation | Piping Design | Skid Design | Structural Design | Mentoring | Resource Management | Time management | Team Management | MS Office | Aconex | AutoCAD | Mathcad.

Pressure Vessels | Heat Exchangers | Steam Boiler | Hot water Boiler | API 650/620 Storage tanks | Power & Process Piping | Steam & Condensate Systems | LPG/SNG Systems | Surge Vessels | Air Receivers | Aux Boilers | Water Treatment Package | Demin Package | Condensate Polishing Package | Steam Accumulators | Deaerators | Flash Vessels | Coalescer | Economizers | Columns | Air/water Pre Heaters | KO Drums | Feed Water Heaters | Filter Vessels | Air cooled Heat Exchangers | Rectangular Tanks | Stacks/Chimney | Air & flu ducting | Piping Structures and Skids | Steel Structures | ASME/ANSI, EN/BS, API, UL, TEMA, NFPA, WRC, NACE, PIP, ARAMCO, SABIC, SEC Codes & Standards.

## **Career Snapshot**

Position	Organization	Tenure
Senior Mechanical	Worley, Saudi Arabia	2023-todate
<ul> <li>Lead Mechanical</li> </ul>	Abahsain Specialized Industrial Co. Ltd, Dammam, KSA	2021 - 2023
<ul> <li>Lead Mechanical</li> </ul>	Al Saghyir Boilers & Pressure Vessels Co. – Riyadh, KSA	2012 - 2018
Senior Mechanical	DESCON Engineering Ltd. Lahore, Pakistan	2010 - 2012
<ul> <li>Senior Mechanical</li> </ul>	Directorate of Nuclear Power Engg, PAEC - Islamabad	2005 - 2010

## **Experience & Responsibilities**

- Provide mechanical engineering services on medium, large and mega projects to organization and its customers', including
  Design specification, Datasheets, Technical Bid Evaluation, Clients & Bidders technical coordination, RFQ & RFP
  Documentation, Vendor Document Review, Technical assistance of Installation & Commissioning team.
- Ensuring that the mechanical engineering services meet organization, its customers' and applicable statutory and regulatory specifications.
- Participate in relevant meetings, prepare progress reports and comply with required checking procedures.
- Ensure the project scope is clear and that changes comply with project change management processes.
- Provide advice during procurement, construction and commissioning activities. For example, requisitions, technical bid evaluations, purchase order preparation and vendor documents review.
- Act as the mechanical engineering Lead on specific projects.

- Outline project requirements, assign tasks and supervise progress.
- Proactively resolve any discrepancies between organization and its customer's requirements.
- Keep up-to-date with the latest developments and technical innovations in mechanical engineering and inter discipline coordination.
- Mentor, assist and support junior personnel within the mechanical engineering team.
- Communicate effectively with the mechanical engineering team and project stakeholders, including the customer.
- Identify issues and problems, develop appropriate solutions, and ask for assistance when required.

## **Key Projects**

# Worley – KSA

- 1145 m³/hr. Water Treatment Package for Ma'aden Phosphate 3 Phase 1 Wad Al Shamal, KSA.
- 290 m<sup>3</sup>/hr. Demin Water Package for Ma'aden Phosphate 3 Phase 1 Wad Al Shamal, KSA.
- 110 m<sup>3</sup>/hr. Condensate Polishing Package for Ma'aden Phosphate 3 Phase 1 Wad Al Shamal, KSA.
- 50 TPH. Dual Diesel/Gas Fired Auxiliary Boiler Package for Ma'aden Phosphate 3 Phase 1 Wad Al Shamal, KSA.
- 88 m³/hr. Molten Sulphur Polishing Filters Package for Ma'aden Phosphate 3 Phase 1 Wad Al Shamal, KSA.
- 2 No. Condensate trim coolers (Plate Heat Exchangers)
- 2 No. Condensate Flash Coolers (Air Cooled Heat Exchangers)

#### Abahsain Specialized Industrial Co. Ltd - Dammam

- Successfully completed 12 Steam Condensers for Saudi Aramco Khurasaniya Plant and 10 No Tube Bundles for Saudi Aramco Abgaiq Plant.
- 35 compressor lube oil coolers (LOC) for Marjan project and 6 No LOC for Barri Project. 3 No Tube cells/ bundles for Abqaiq

#### Al Saghyir Boilers & Pressure Vessels Co., Riyadh

- 20 No. Boiler House turnkey projects in KSA.
- 350 No. Pressure Vessels and Storage Tanks.
- 26 NO. LPG/SNG Systems in KSA.

## **DESCON Engineering Ltd. Lahore**

- 80TPH, 22Barg WHRSG x 2 Nos., SADARA, ARAMCO, Saudi Arabia.
- 4TPH, 14Barg WHRSG, Pak Arab Refinery Ltd. Pakistan.
- 120TPH, 32Barg Bagasse Fired Boiler, Adam Sugar Mills Ltd. Pakistan.
- 20TPH, 18Barg, FTB, Nestle Pakistan Ltd.
- 55TPH, 80Barg, Coal Fired Boiler, Engro Foods Ltd. Pakistan.
- 15TPH, 10Barg, Traveling Grate Coal Fired Boiler, Younas Textile Mills, Karachi, Pakistan.
- 140TPH, 66Barg, Bagasse Fired Boiler, United Sugar Mills (JDW), Pakistan.
- 60m Height, ID2.2m Chimney for a Chemical Industry in Kazakhstan

#### Directorate of Nuclear Power Engineering, PAEC - Islamabad

- Piping and Piping support for the Secondary cooling water system and firefighting water system (FFS).
- Hydro-pneumatic tanks for FFS and fuel oil tanks and piping for FFS emergency diesel generators.
- Emergency diesel generators fuel oil tanks and piping.
- Auxiliary steam Boilers and their associated systems Piping and Equipment i.e., Blowdown Tank, fuel oil tanks, flash vessel, detractor, chimney, and exhaust vents etc.
- Water filtration & purification system equipment & piping. Including sand filters, charcoal filters & mixed bed filter vessels.

## **Engineering Software**

#### Proficient in using engineering software such as:

- Intergraph PV Elite.
- Codeware COMPRESS
- AMETank & AMEPreVA
- Meca Enterprises MecaStack for designing self-supported and guy wire supported steel stacks.
- HTRI
- PipeFlo Professional.

- AutoCAD
- MathCAD

## **Academics & Credentials**

#### **Formal Education**

- Master of Engineering in Nuclear Power NED University of Engineering & Technology Karachi
- BSc in Mechanical Engineering University of Engineering & Technology Peshawar

#### **Professional Certifications**

- Certificate of Marine Engineering in Ship architecture design and operations Institute of Maritime Studies, Lahore
- Certified ISO 9001 2015 Internal Auditor

## **Personal Development Courses**

- Management & Leadership Growing as a Manager The Open University (Online)
- Management Development Program-Level 1 **DESCON Engineering Ltd**, Lahore.
- Analysis & Design of Industrial Steel Structures National Institute of design & Analysis, Lahore
- CADWorx Plant Design Software. PAEC-PNRA, RNSD-III, Karachi
- Total Productive Maintenance Pakistan Engineering Council, Islamabad

### Membership & Association

- Member Pakistan Engineering Council (PEC MECH/15809).
- Member Saudi Council of Engineers (SCE 114196)