# Afnan Ali Butt

## Mechanical Engineer

"A passionate, industrious & observant professional engineer"
"Focused on optimization of design and operations of industrial processes by eliminating wastages and improving the quality and productivity of the system"

"Specialized in maintenance & engineering management operations research, manufacturing engineering, production engineering, management sciences, financial engineering, quality control, work study & ergonomics"



afnanbutt77@yahoo.com

+923084350085

House#147 Street # 15 Gujar Pura Ghorey Shah Road, Lahore, Pakistan

22 February, 1995

linkedin.com/in/afnan-butt-65028113a

quora.com/profile/afnanbutt77@yahoo.com

afnanbutt77@yahoo.com



#### WORK EXPERIENCE

## Rupali Polyester Limited (RPL)



(Sheikhupura, Pakistan) 2017 – Present

Mechanical Engineer

#### Achievements/Tasks

- Implemented maintenance practices and introduced FMEA (failure mode and effects analysis) in the department to effectively prioritize FSI's & SSI's of HFO/Diesel Daihatsu 6DS 32 (1.4 MW) engines to aid in root cause analysis of system failure.
- Designed appropriate check sheets for the HFO power house department to effectively monitor the engine's condition.
- Designed an effective system for the recording of maintenance activities that helps in planning schedules forehand for the upcoming miantenances.
- Planning and execution for maintenance of HFO/Diesel Daihatsu 6DS 32 (1.4 MW) engines, GE JENBACHER 620 GS-NL (2.7 MW) and ROLLS ROYCE (3.6 MW) gas engines (250, 500, 1000, 2000, 4000, 8000 & 10000 hrs. etc.).
- Coordination with OES (Orient Energy System) Service team for planning and assessment of maintenance activities on Gas Engines.
- Preparation of various engineering reports i.e. fuel reports, load sheet, Gas/HFO engines status, WAPDA failure, inter-office memo, spare parts consumption, generation, downtime, schedule and unscheduled maintenance, monthly departmental reports etc.

#### **Precision Product Enterprise (PPE)**



(Kot lakh put Lahore Pakistan) 08/2016 – 09/2016

Summer Internship

#### Achievements/Tasks

- 3D modeling of intricate parts of "KAYAK" boat on Solid Works & AutoCAD.
- Designed quality reports for the plastic parts produced by the injection molding machine.
- Successfully completed a project "Modeling of Picker Wheel".
- Introduced QC tools for the evaluation of quality of products.
- Catalogued injection mold dies based upon their respective part that they produce.
- Rotation in different departments; manufacturing department, quality department and warehouse.
- Prepared a departmental report, disclosing various gaps present in the department that were rendering various activities.

## Pak Elektron Limited (PEL)



FYP (Lean Manufacturing) (Ferozepur road Lahore Pakistan) 2016 –2017

Project engineer

#### Achievements/Tasks

- Implemented lean manufacturing principles in the transformer shop of PEL.
- Used QC tools for the planning, assessment, evaluation and root cause analysis.
- Analyzed the process flow of the transformer shop and studied each step involved in the manufacturing of complete transformer.
- Performed time study for various activities involved in the manufacturing of transformer for process evaluation.
- Implemented ISO 9000/9001 quality management standards for continuous improvement.
- Implemented line balancing function to level the workload across all processes and to remove bottlenecks.
- Improved layout by systematic layout planning (SLP).
- Use of 5S tools that resulted in better work environment.

#### **RESULTS:**

- a) Reduced lead time
- b) Lower levels of inventory
- c) Waste minimized
- d) Increased labor productivity
- e) Improved line efficiency
- f) Less probability of accidents at work place

## Steel Craft (pvt.) ltd (SC)



(Kot lakh put Lahore Pakistan) 07/2016 – 08/2016

Summer Internship

#### Achievements/Tasks

- Rotation in different departments; cutting department, quality department, design department and welding section.
- Introduced QC tools for the evaluation of quality of products.
- Prepared a departmental report, disclosing various gaps present in the department that were rendering various activities.
- Proposed a modified layout for the cutting department of muffler.
- Introduced safety practices and briefed their importance to the work force. Introduced different types of fire extinguisher and their specific usage.
- Made awareness of PPE's and their importance to the work force in the industrial environment.

# **ACADEMIC QUALIFICATION**



#### **Bachelors in Mechanical Engineering**

09/2013 – 06/2017 CGPA: 3.107 University of Engineering and Technology

Lahore

#### F.Sc Pre-engineering

Govt. Shalimar College Lahore

2011 – 2013 percentage: 86.36%

#### Matriculation

Pak Foundation High School Lahore

2009 - 2011 percentage: 80 %

#### **CO-CURRICULAR ACTIVITIES**



The American society of heating, refrigeration and air-conditioning engineers is a global professional association seeking to advance heating, ventilation, air-conditioning and refrigeration systems design and construction.

#### Achievements/Tasks

 Supervised Project; "Smart furniture design" in ASHRAE UET Chapter exhibited KIAZEN-2016 event at UET Lahore.



## **IMEC**

# **Executive Body**

Industrial and Manufacturing Engineering Club

2016 - 2017

Industrial and manufacturing engineering club of UET is responsible for developing a chain of communication between university and different multinational companies to seek various job opportunities for students.

#### Achievements/Tasks

- Organized different events like "industrial open house and career fair (IOHCF)" in UET as member of technical section, industrial & manufacturing engineering club.
- Attended one week workshop on employability skills organized by UET Lahore.

#### **PROJECTS**

- Fabricated a hydraulic crane as a mini project for the demonstration of hydraulic and pneumatic principles.
- Prepared maintenance checklists. Identified FSI's & SSI's and calculated RPN for different machines of MTDC.
- 3D Modeling of injection mold on SolidWorks as a CAD/CAM project.
- Designed a jig on SolidWorks used to assist in drilling holes in the work components.
- Developed safety layouts for an industry and gained knowledge on the effective use of string diagram.
- Implementation of lean manufacturing tools in transformer shop of PEL (Final Year Project).
- Fabricated a fixture as a project for production tooling and design.
- Designed "smart furniture" on Solid works and presented it in the university level exhibition.

## MAJOR SUBJECTS/STRENGTHS

Total Quality Management | Production and Operations Management | Metrology and Quality Assurance | Computer Integrated Manufacturing | Industrial Materials | Industrial Safety & Environment | Instrumentation and Control | Machine Design & CAD /CAM | Maintenance Engineering and Management | Mechanics of Machine | Mechanics of Material | Engineering Economics | Finite Element Analysis | Industrial Electronics | Engineering Statistics | Dynamics | Machining Processes | Production & Tooling

## INTERPERSONAL SKILLS

Leadership | Effective Communication | Good Researcher | Proactive | Administrative skills | Teamwork Spirit | Analytical Skills

#### **COMPUTER PROFICIENCY**

AutoCAD | SolidWorks | Microsoft Office | TORA | ANSYS | MATLAB | Minitab | C++ (Beginner)

#### **INTERESTS**

Internet Surfing | Socializing | Cricket | Table Tennis | Watching Seasons | Novel Reading