



MUHAMMAD USAMA

MECHANICAL ENGINEER | ANSYS EXPERT | CAD DESIGNER

+92-323-5900192 ✉ ussama.muhammad192@gmail.com 📍 #07, St #1, Village Mohra Kor Chasham, Chakwal, Pakistan www.linkedin.com/in/muhammad-usama192

OVERVIEW

A multi-skilled technical professional who can benefit your organization in the following ways:

- Understanding of today's technological landscape | Quality Product | Customer satisfaction | Process cost reduction
- Systems Testing | can conduct standard experiments and measurements for system design.
- CAD design | Can support in designing different software models.
- Mechanical Equipment Solutions | Can identify, analyze and solve machine troubles.
- Hardware Purchasing | Can work with Procurement and vendors in getting the right hardware at the right cost.
- Easily adaptable to different work environments.

WORK AREAS

- Establishing quality product by quality planning, assurance, control and improvement.
- Installation of RFC equipment's in buildings.
- Designing, installation and managing of Power Plant.
- Experience of: Maintenance, Data Records, Equipment Replacing, Group Policies, Process Flow.
- Fabrication of product using molding, forming, assembly and sheet metal process.
- Software designing using AutoCAD & Creo Parametric.
- Simulation, analysis of mechanical systems in Structural, Vibrational, Fluid dynamics & Heat transfer perspective using ANSYS Workbench.
- Calibration, investigation of new equipment's by LabView.
- Installation, monitoring and efficiency improvement of renewable energy resources systems.
- Designing, integration and replacement of heat exchangers, nozzles pumps, gears, bearings, springs, Shaft & belts.
- Training of colleagues and customers on new Mechanical technologies (hardware and software) as and when required.
- Conducting Mechanical site surveys.
- Seeking, identifying and resolving potential technical issues.
- Generating procedural documentation and relevant technical reports.
- Keeping up with new trends and technologies to increase efficiency, enhance workflow and improve customer satisfaction.
- Microsoft Office

EXPERIENCE

INTERN ENGINEER - CEMENT MILL AREA

D.G. KHAN CEMENT COMPANY LIMITED- PAKISTAN
JULY 2017-AUG 2017



- Performed feasibility studies for proposed equipment and system
- Monitoring of installation and testing of equipment's
- Met with team members to discuss requirements and constraint issues
- Evaluated data collection systems
- Consolidating daily reports, and reviewed to identify and recommend engineering solution

EDUCATION

CAPITAL UNIVERSITY OF SCIENCE & TECHNOLOGY, ISLAMABAD, PAKISTAN

BACHELORS OF SCIENCE (BS) – MECHANICAL ENGINEERING

Major Courses: Thermodynamics, Machine Design, Gas Dynamics,
Power Plant, Refrigeration & Air Conditioning, Quality Management



CERTIFICATION & TRAINING

ASHRAE CUST STUDENT BRANCH, ISLAMABAD, PAKISTAN

Integrating Indoor Air Quality & Energy Efficiency in Buildings by
Dr. William P. Bahnfleth (Training)



COMPLETED PROJECTS

- Final Year Project: Developed an automatic sun tracker mechanism with cooling system to increase the efficiency of solar panel
- Designed 110 MW capacity power plant
- Quality control of Honda
- Calculated Heating & Cooling load of a building
- Designed differential for automobile and modeled on Creo parametric
- Analyzed industrial chimney for calculating convective heat loss
- Designed and analyzed suspension bridge

KEY MILESTONES

- Chief Organizer – Water Rocket Competition – Inter Departmental event
- Managed a team of 30+ students as part of Event organizer team.