

IFTKHAR ALAM

Rawalpindi, Pakistan

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EXECUTIVE SUMMARY

Highly accomplished and dedicated Instrumentation and Control System Engineer with 24 years of diverse experience in various roles, including General Manager, Executive Engineer & Sr. Engineer with MS degree in Control Theory & Control Engineering and BE degree in Electronics. Proven expertise in tri-sonic wind tunnel (TVM-500), an Aerodynamic Testing Facility of Space Vehicle Models, Research and Development (R&D) work in Aerodynamic Testing Facility in Aerodynamic Research, preparation of blow-down testing of Space vehicle models (Missiles) in wind tunnels and administrative roles etc.

PROFESSIONAL EXPERIENCE

General Manager **2007-2022**
Defense Science and Technology Organization (DESTO)
Islamabad, Pakistan

- Led a team of Managers, Assistant Managers, and other technical staff responsible for smooth and efficient operation of tri-sonic wind tunnel (TVM-500), an Aerodynamic Testing Facility of Space Vehicle Models (Missiles)
- Research and Development (R&D) work in Aerodynamic Testing Facility in Aerodynamic Research Centre, Upgradation of TVM - 500 wind tunnel system with installation and commissioning of Twin Ejector system (TES) and Dynamic Pitch Rig (DPR)
- Erection and Commissioning of new tri-sonic wind tunnel with across-border teams
- Managing, conducting, and supervising the calibration of measuring equipment like six component strain gauge balances, pressure transducers, and temperature sensors used in TVM-500 tri-sonic wind tunnel and newly commissioned tri-sonic wind tunnel
- Supervising and maintaining proper file record of data acquired during calibration of measuring equipment
- Assisting and coordinating with the operation team during the preparation of blow-down testing of Space vehicle models (Missiles) in wind tunnels
- Making sure that wind tunnel system instrumentation (WTSI) is working properly and efficiently
- Reviewing and analyzing the data acquired after the blow down testing of space vehicles in the new tri-sonic and TVM-500 wind tunnels
- Arranging and conducting training sessions for officers and staff for enhancing their knowledge on wind tunnel instrumentation system
- Keeping higher authorities informed on all important matters
- Assisting and coordinating the safety service department in establishing high safety measures Recommending leaves for officers and staff

Executive Engineer Electrical/ Electronics **2005-2007**
PEPSI COLA Ltd
Islamabad, Pakistan

- Led a team of sub-engineers responsible for troubleshooting of a facility of Automation Control System used in the filling of soft drink canning line and pet line
- Erection and commissioning of pet line filling and blow molding machine used simultaneously in the cycle of production and filling of pet bottle line
- Assisting and coordinating with chemical laboratory staff during the change of recipe for different flavor of soft drink filling schedule
- Supervise, conduct electrical/electronic problems inside the plant in either direction
- Observation and analysis of canning line and pet line production plant
- Assisting and coordinating with the mechanical and operation team in order to minimize and eliminate the breakdown frequency Recommending leave for sub-engineers and technicians
- Keeping higher authorities informed on all important matters

Sr. Engineer Electrical/ Electronics **1998-2005**
The General Tyre & Rubber Company Pakistan
Karachi, Pakistan

- Led a team of sub-engineers, technicians, and electricians responsible for the troubleshooting and maintenance of electrical/ electronics equipment in the area
- Erection and commissioning of Banbury; a mixing plant of natural rubber, synthetic rubber oils, and other materials for the development and production of rubber layers
- Erection and commissioning of steel belted radial tyre building machines Upgradation of old tread cutting machine with new tread skiver cutting machine
- Troubleshooting and maintenance of Banbury, 4-Roll Calendars, Tread Extruders, Tread Skiver, and radial, passengers, truck tyre building machines
- Minimizing equipment downtime by the use of engineering procedures
- Making personal investigation of repetitive breakdown to analyze causes and arrive at means to eliminate or reduce the breakdown frequency
- Assisting and coordinating with the planning department, establishing, and maintaining already planned effective maintenance system in the area

- Delegating responsibilities to staff reporting to me and giving them the freedom to operate within the established guidelines

HANDS ON EXPERIENCE

- Supervisory Control and Data Acquisition (SCADA) System, a network of Simatic S-7/400 PLCs of Siemens with S-7/200 PLCs, National Instrumentation NI PXI System with LabView Programming, SCXI System and Signals Conditioning System for tri-sonic (subsonic, transonic, and supersonic) wind tunnel
- Calibration of 6-component strain gauge Balances, pressure transducers, temperature sensors etc., used in tri-sonic wind tunnels to measure the aerodynamic coefficients during the blow down testing of Space Vehicles (Missiles).
- Simatic S-7/300 PLC of SIEMENS used for the safety interlock system and IPC with Borland C++ used in Data Acquisition (DAQ) System and Signal Conditioning System for TVM-500 tri-sonic wind tunnel
- S- 7/300 PLCs of Siemens for Control Automation of Twin Ejector System (TES) upgraded portion of TVM-500 and handshaked with tri-sonic wind tunnel (TVM-500)
- Simatic S-7/300 PLCs of SIEMENS used in controlling Banbury, a mixing plant of synthetic rubber, natural rubber oils and other material
- Programmable logic controllers PLC 5/30 of ALLEN BRADLEY control automation, control the operation of Radial tyre building processing machines, Tread Skiver machine closed loop system which control the position of different mechanical arms
- CEGELLE (GEM80 130/131) PLCs control the operation of green tyres building processing machined in the process control of radial and truck tyres building machines
- Servo Controller used to control the operation of Servomotors at Tread Skiver Machine
- Frequency inverter of Danfoss and Micro Master
- Speed controlling motor DC Drives of ISE, SIMOREG, LENZE, BRUSH and RETA
- 3.3KV HT switchgear systems of SIEMENS, ALSTOM(AEG) and HEMALF used in the operation of 250HP, 350HP, 500 HP and 1500HP motors
- Simatic S-7/400 PLCs with S-7/300 and S-7/200 Control Automation of pet line blow molding machine with filler through conveyor belts.
- S-7/300 PLCs of SIEMENS for filler, palletizer and de palletizer machines of Canning line

TRAINING COURSES

- 60 days training on Twin Ejector System (TES) and Dynamic Pitch Rig (DPR) used in the development and upgradation of TVM-500 Tri-sonic wind tunnel system in VZLU Aerodynamic Research Centre Czech Republic on behalf of Defence Science and Technology Organization (DESTO) Pakistan
- 20 days training on SIMATIC S-7/300 PLC of SIEMENS in SIEMENS Factory Karachi, Pakistan
- Attend different Seminars and training on Industrial Automation Trends, PLCs System and Instrumentation at Pearl Continental, Regent Plaza on behalf of General Tyre and Rubber Company of Pakistan Ltd.

EDUCATION

MS (Control Theory & Control Engineering) Percentage: 86% 2012
Beijing University of Aeronautics and Astronautics (BUAA), Beijing, China
Thesis: Designing high-precision Sliding Mode Controller (SMC) for Missile Technology.

Bachelor of Engineering in Electronics Percentage: 82% 1998
NED University of Engineering and Technology (NEDUET), Karachi, Pakistan
Final Year Project: Designing of Micro-Processor Multifunction Based System.

CORE SKILLS

- Programming (GW BASIC, Turbo C++), Office Automation (MS Window, MS Office, Internet Browsing)
- Project Management and Coordination, Report Writing and Presentation, Problem Solving, Research & Critical Thinking.
- Sustainability and desire to learn, Teamwork and Team Collaboration, Flexibility and Adaptability

PROFESSIONAL AFFILIATION

- Pakistan Engineering Council (P.E.C # ELECTRO/5082)

LANGUAGES

- **English** (Fluent)
- **Pashto** (Fluent)
- **Urdu** (Fluent)

PERSONAL INFORMATION

Father Name: Gul Shahwaz	Religion: Islam
Passport: Yes	Date of Birth: March 04, 1975
Marital Status: Married	Nationality: Pakistani

REFERENCE

Will be furnished upon request