

FAISAL MASOOD AWAN

in: <https://www.linkedin.com/in/faisal-masood-1961b531/>

☎: +971567114627 / +923009787415 ~ 📍 Abu Dhabi, UAE ~ ✉ faisalmasoodawan@gmail.com

ACCOMPLISHED PROFESSIONAL – INSTRUMENTATION & CONTROL ENGINEERING

Instrumentation Engineer offering 15+ years of rich experience in PROJECT EXECUTION, INSTRUMENTATION & CONTROL ENGINEERING AND MAINTENANCE STRATEGY FORMULATION while working with reputed organizations/ clients in the Oil & Gas, fertilizers, petrochemical industry across Pakistan & UAE

FOCUSED PROJECT PLANNER: Led end-to-end **PROJECT MANAGEMENT** from scoping, SOWs, engineering design deliverables, resource, FAT& SAT / material management, progress tracking, metrics reporting to timely delivery within budget and quality norms. Proficient in **TECHNO-COMMERCIAL FUNCTIONS** like **MATERIAL MANAGEMENT, TECHNICAL EVALUATION OF VENDOR QUOTATIONS, Procurement, PR/ BOMs/POs, Spares / Material Selection** and Availability to effectively meet project / plant demands

CONCEPT –TO EXECUTION DRIVER: Proficient in planning, review, creation and execution of all Instrument related Maintenance and Project activities on Process Facilities. Led Installation, Commissioning and Shutdowns covering Gas Compression Area, Oil & Gas Wells, Well Head Control Panels, Separators, Vessels, Gas Turbines, Compressors, Electrical Substation Switchgears, Transformers & Motor Protection Systems, ADNOC ICSS (DCS, PLC, ESD, SCMS, VMS, PMS, F&G System), Control Valves, Motor Operated Valves, Choke Valves, HIPPS Systems, Online Gas Chromatographs, Analysers, Flow Boss Metering Systems, Field Bus & HART Type Transmitters as per Local and Industry Standards.

RESULT-ORIENTED LEADER & PROBLEM-SOLVER; Recognised for directing & mentoring team members, effectively coordinating with cross-functional teams, vendors, clients, sr. management & other stakeholders for smooth project execution. Highly-skilled in SAP - Work Management System and Maximo for effective planning, scheduling and management of Maintenance Procedures, Job Plans and Work Instructions. Strong understanding of control philosophies, ILD, PFDs, P&I Diagram, Functional/ Ladder Logic Diagrams, Cause & Effect / Wiring / Process Flow Diagrams, Preparation & evaluation of Instrument Design Specifications, provided Instrument Design Inputs, prepared Instrument / IO Schedules, Datasheets, Sizing and Selection of Control & Pressure Safety Valves.

NOTABLE ACCOMPLISHMENTS

ADNOC – Abu Dhabi, UAE: Played a pivotal role in **Modification & Replacement Pilot Project for Separator Level Trolls with Guided Wave Radar Level Transmitters**, which contributed to **35% process efficiency** and cost-effectiveness with No Nuisance Trips. Front-led successful project completion of Modification and Replacement of Old Well Head Control Panels to Remote, within scheduled time

Fertilizer Plant, Pakistan. Errection & Commissioning: Successfully Errection and commissioning of new trains, like Ammonia reactor distillation, evaporation area, Prilling area, compressors, DCS control systems, Skids and packages, Gas Chromatographs, Analyzer houses.

MOL Pakistan Oil & Gas PLC: Successfully executed Replacement Project of Old Gas Chromatograph at Metering Skid achieving **20% more efficiency** and better Metering performance. Monitored WHCP Remote Monitoring Project and Plant Performance, and effectively scaled production by 20%

ICI Pakistan PTA Ltd.: Innovatively designed an **Online Analyzer for Reactor Oxygen Monitoring Replacement Project**, which resulted in significant reduction of Nuisance Trips and improved production efficiency by 30%. Led modification & rewiring for Instrument Air Compressor for Wastewater Treatment Plant, and achieved process improvement of 35%

AREAS OF EXPERTISE

Strategy Roadmap Planning
Project Management
Plant's Engineering Design
Instrumentation & Control Systems
Installation, Commissioning and Shutdown
Preventive & Predictive Maintenance
Calibration, Testing Troubleshooting
Spare Part Interchangeability Record (SPIR)
SIL, HAZOP Review/ Study
Material Management & Procurement
Equipment Sizing & Calculations
Vendor Offer / Technical Bid Analysis
Techno-Commercials – BOMs, POs
Quality Assurance / HSE Compliance
Budgeting / Cost Estimation, OPEX, CAPEX

ACADEMICS & CREDENTIALS

B-Tech. Honours - Electronics Technology from Preston University - Pakistan (2008 – 2013)
Diploma of Associate Engineering- Instrument & Control from Govt. College of Technology – Pakistan (1992 – 1995)

Certifications:

- PMI Agile Certified Practitioner (PMI-ACP)
- Compressor Controls & Protections
- Yokogawa Centum VP Engineering
- First Aid (CPR& AED) American Safety & Health Institute
- SIL Assessment & SIL Design
- Work Management System - SAP
- Introduction to Artificial Intelligence -Coursera

IT & TECHNICAL EXPERTISE

- MS Office (Word, Excel, PowerPoint), SAP System and MAXIMO
- Electrical Substation Systems / Control Valves
- P&I Diagram, Functional/ Ladder Logic, Cause & Effect / Wiring / Process Flow Diagrams

EXPERIENCE SCAN

Sep 2012 –Apr 2022: ADNOC, Abu Dhabi, UAE as Instrument Engineer

Highlights/ Key Projects Executed:

- Worked on Yokogawa Centum -VP DCS System, Emerson Delta-V DCS System, Pro-Safe-RS PLC, Allen-Bradley, Foxboro Invensys, HIMA, TRICONEX ESD Systems
- Leveraged latest design methods and techniques e.g., SIL, HAZOP, Review and full understanding of plant's engineering design, maintenance strategy and philosophy, interlocks, cause & effects and participated in development and Implementation of condition monitoring procedures/routines

- **Played a key role in maintaining complete schedule, determining necessary skill levels**, allocating work to technicians, arranging for support services materials, and/or test equipment availability
- Developing plans for Emiratization CAS & CAM trainees within the section, preparing for training programs and evaluations.
- Engineering Site/Construction Support for ongoing projects.
- Scope identification and variation order preparation.
- **Used MAXIMO & SAP Fiori for scheduling and planning for PM**, corrective work orders and manpower scheduling
- Efficiently led and managed the:
 - **Calibration, Testing, Repairing, Configuration and Troubleshooting of all types of Hart/FF Field Transmitters, PIT/LIT/VT/TIT/FITs**, Control & On/Off Valves, with smart positioner configuration & testing
 - Calibration, Troubleshooting and Modifications for H₂S, Hydrocarbon, UV/IR, IIR, and Simplex F&G System and Instruments
 - **Repair & adjusting of Yokogawa FF (Field Bus) System Transmitters' Spurs**, HART Compatible Instruments, remove & replace defective parts
 - Calibration of components and instruments according to manufacturers' specifications
 - **Routine Testing and Troubleshooting of Liner and ESDV PST (Partial Stroking)** using Yokogawa PRM and Valve Link Software
 - Testing, Repair and Calibration of all types of Control and ON/OFF Valve Choke Valve and Motorized Operated Valves like ROTORK and BIFFI
 - Testing, Calibration, Modification and Hardware Replacement of Online Gas Chromatographs, Testing and Troubleshooting of Moisture Analyzers, Oxygen, CO₂, NO_x, OX and other Analytical Instruments
- **Worked on Schneider, SIEMENS, Merlin Gerin 33KV, 11KV and 3.3 KV with Transformer Control & Motor Control Protections** in Substation Systems, PAC Schneider SCMS System, Workshop Special Equipment's and Calibration Work Bench
- **Monitored progress of Instrument and Control, Planned Preventive Maintenance on equipment**, provided advice, technical evaluation and development plans arrangements. Participated in the section's routine daily planning and KPI inputs
- **Initiated Terms of Reference (TOR), organized Daily / Weekly Meetings with Technicians**. Facilitated Daily Routine Run of Reports for Critical System Alarms and Process Alarms (CAMS) from DCS HMI and Packages HMI
- **Provided technical expertise in troubleshooting and problem-solving**, preparing root cause analysis and continuous improvement plans, managed the:
 - Troubleshooting, Commissioning, and Modification of Well Control Panels and Shutdown Systems (WHCP)
 - Operations, Maintenance, Troubleshooting of Rotating Equipment in Process Gas Turbine Generators and Compressors like GE & Novo Pignone
 - Maintenance, Installation, Troubleshooting of Bentley Nevada 3300 & 3500 Vibration Monitoring System
- **Administered Material Management-** Execution of MCAD Requests (Materials Creation, Amendment and Deletion) for Spare Parts General Materials, Capital, Insurance and Project Materials as per ADNOC Materials Master Data Governance Policies and Procedures, effectively:
 - Reviewed Spare Part Interchangeability Record (SPIR), verified, identified buyout spares, scrutinized and provided technical clarifications
 - Developed BOM, assessed criticality of spares, led selection of materials as per services and recommended for alternative spares
 - Conducted Technical Study and suggested alternate materials. Originated Material Demand Slips (MDS) and followed-up to receipt of materials
 - Evaluated Vendor Offers, Technical Bid Analysis, preparation of Purchase Requisition and Vendor Quality Review

KEY PROJECTS EXECUTED

Project 1:	Full Field Development	Duration: 2 Years
Role:	Instrumentation Engineer	Client: ADNOC
Description:	The project aimed at ADNOC Full Field Development, Installation, and Commissioning of a new DCS System, New Gas Compression Trains, Oil Producers & Gas Injection Wells	
Project 2:	Oil Producer's Wellhead Control Panel Conversion for ESP System	Duration: 6 months
Role:	Instrumentation Engineer	Client: ADNOC
Description:	The objective of this project was Old Oil Producer's Wellhead Control Panel Modification, Automation, and Remote Communication with Central Control	
Project 3:	Oil Producer Well's Conversion Project to Artificial Gas Lift, Oil Producer Wells	Duration: 2 years
Role:	Instrumentation Engineer	Client: ADNOC
Description:	Actively involved in FAT and SAT for Gas Lift Wells, New WHCP Installation, F&G and Process Instrumentation Installation, PLC System Installation, Logic, C&E, Remote DCS Linking and all Instruments Testing and Flowing the Wells	
Project 4:	Replacement Plan for Old Level Trolls with Guided Wave Radar Level Transmitters	Duration: 6 Months
Role:	Instrumentation Engineer	Client: ADNOC

Feb 2005 – Aug 2012: MOL Pakistan, Islamabad, Pakistan as Instrument Supervisor

Highlights:

- Pre-commissioning & Final commissioning of Early production facilities (EPF) for all Production/separation, Degasification, Compressors, gas stabilization skids, heaters and wells.
- Pre-commissioning & Final commissioning of Central production facility (CPF) for all Production/separation, Degasification, Compressors, gas stabilization skids, heaters and wells.
- Handled Preventive & Corrective Maintenance of Fire & Gas System for Process Plants, Wells and Buildings Areas, and other functions like:
 - Yokogawa Centum-CS 3000 DCS Diagnostics and Problem Solving
 - Allen-Bradley-Logix-5555, PLC System Preventive & Corrective Maintenance
 - Calibration, Testing, Repairing, Configuration, troubleshooting of all Types of Smart/FF Field Transmitters, PIT/LIT/VT/TIT/FITs, Control & On/Off Valves, with Smart Positioner Configuration & Testing
 - Preventive and Corrective Maintenance of Daniel, Yokogawa Online Gas Chromatographs, Online Analyzers, Flow Computers Systems and their parts ordering. Troubleshooting of Gas Burners
 - Maintenance, Installation, Troubleshooting of Bentley Nevada 3300 & 3500 Vibration Monitoring System
 - Diagnoses of Faults for Reciprocating & Centrifugal Compressors Instrumentation & Control Systems and minimizing downtime

- Reviewed Spare Part Interchangeability Record (SPIR), conducted their verification, identified buyout spares, scrutinized and provided technical clarifications. Performed technical study and recommendation of alternate materials as well as technical evaluation of all vendor quotations
- Worked on SIEMENS, Merlin Gerin 11KV and 3.3 KV Switchgear, with Transformer Control & Motor Control Protections in Substation Systems
- Supported Material Management, Cost Estimation, OPEX, CAPEX, Preventive and Corrective Maintenance of Field I & C Systems and their vendor evaluation for parts ordering. Developed BOM, assessed criticality of spares, selected materials as per services and recommended for alternative spares

KEY PROJECTS EXECUTED

Project 1:	Early Production Facility development projects for MOL Pakistan	Duration: 2 Years
Role:	Instrument Supervisor	Client: MOL Pakistan
Project 2:	Debottleneck project for Gurguri & Makori EPF for MOL Pakistan	Duration: 6 Months
Role:	Instrument Supervisor	Client: MOL Pakistan
Project 3:	Central facility Development Project for MOL Pakistan	Duration: 2 Years
Role:	Instrument Supervisor	Client: MOL Pakistan

Commenced career from Feb 2002 – Jan 2005: ICI PTA Ltd, Karachi, Pakistan as Senior Instrument Technician

Highlights:

- Carrying out day to day preventive, corrective and break down maintenance activities on instrumentation and control systems in assigned plant for following control systems and equipment:
- Emerson PROVOX & Delta-V DCS System
- Allen-Bradley Control SLC and PLC systems
- GE, SERVOMAX O₂ and CO₂ Analyzers
- Bentley-Nevada-3300 vibration monitoring system
- Control Valves Maintenance and overhaul
- HIMA ESD System
- Fire & Gas Suppression systems, Vesda, and photain F & G System
- Worked at SIEMENS and Merlin-Gerin 11 KV & 3.3 KV /415 Volts switch gears with transformers & motor protection systems.
- Active participation in major overhaul and shutdown maintenance activities as assigned by superiors
- Carrying out shutdown preparation, data collection and condition monitoring duties as assigned
- Pre-commissioning & Final commissioning of Ingersoll-Rand Waste Water Treatments & Utilities Compressors Control Systems modification

KEY PROJECT EXECUTED

Project 1:	ICI PTA LTD utilities Compressors Modification & commissioning	Duration: 1 Year
Role:	Senior Instrument Technician	ICI PTA Ltd

PERSONAL DETAILS

Date of Birth: 25-09-1975 | **Languages Known:** English, Arabic, URDU | **Address:** Pakistan,