

ANOOP G S

Lead Instrumentation & Control Eng.
FS Eng (TUV)



FS engineer
SIS

www.tuvsud.com

ID.TP22051767

+91-8483074515 [INDIA]

anoopsre@gmail.com

Core Competencies

❖ Instrumentation – Detailed Engineering

- ❖ Process Control System
DCS/ ESD/ FGS/BMS/WHCP & Package
Control Systems

❖ Functional Safety Management

- ❖ Guiding the I & C team of engineers and
designers.

❖ Field Instrument Sizing and Selection

- ❖ Calculations for SIS loops, Control
Valve, Orifice Sizing, and ESDV.

❖ Cyber Security scope development as per EPC scope

- ❖ Interdisciplinary and vendor
coordination

❖ Tendering, Budgeting support

- ❖ Risk Assessment

Certifications/ Awards/Approvals

- ❖ TUV FS - Functional Safety and SIL -SIS
- ❖ ADNOC Approved Engineer.
- ❖ Honeywell Six Sigma Green Belt Core
- ❖ Honeywell TPS & EPKS DCS System Certified
Engineer
- ❖ Honeywell Safety Control System Certified
Engineer
- ❖ ISO 45001-2018 Certified Internal Auditor
- ❖ Honeywell Bronze Award for Control
System Engineering

Academic Details

- ❖ Post-Graduation in Cybersecurity (ongoing)
- ❖ B.E. (Electrical & Electronics) from Anna
University, Chennai in 2010; secured 79%
- ❖ 12th from St. Josephs HSS, Tamil Nadu
secured 83.2%

Profile Summary

Competent FS TUV certified professional with an experience of 13 years for detailed engineering for Instrumentation, Control Systems, Cybersecurity through various phase of the project. Handled all phase of the projects including Concept study, FEED, Detailed engineering, Execution and Commissioning for Onshore, Offshore, Gas Processing, FPSO & Power projects.

Lead Project Engineer- Functional Safety [Feb'23 – Current]

ABB, Pune, India

<https://global.abb/group/en>

Lead Instrumentation & Control Engineer [Oct'22-Jan'23]

Probus Engineering & Construction, Abu Dhabi, UAE

<https://www.probussec.com>

Lead Instrumentation Engineer [Jan'18 – Oct'22]

Control Contracting & Trading Co. (Pvt.) LLC, Abu Dhabi, UAE

<https://cctcuae.com>

Lead Engineer –DCS & Safety Systems [Apr'15-Jan'18]

Honeywell International, Pune India

<https://www.honeywell.com>

Sr. Instrumentation & Control Engineer [Mar'12 - Apr'15]

Focus Energy Limited, Delhi, India

<https://www.focusenergy.co.in>

Project Engineer- Instrumentation & Control [Jun'10 - Mar'12]

ABB, India (Payroll on Icon Controls Pvt Ltd)

<https://global.abb/group/e>

- Expertise in all the aspects of Instrumentation & Control System FEED, Detailed engineering for Oil & Gas greenfield and brownfield projects.
- Developing and guiding the design team for FEED and EPC I & C deliverables such as Design Basis, Instrument and F&G Datasheets, Specifications for DCS, ESD, F&G, FACP System, Burner Management Systems and analyzers, Adequacy reports, I/O Lists, Cable Schedules, Cable Routing Layouts, System Architecture, SOWs, FEED Reports, Instrument Selection, JB Schedule, Control Philosophy, Cable Block Diagrams, Instrument Locations, Hookup diagrams, Control Logic Diagram, Cause and Effect, Function Design Specification, SIS loops calculations, Control valve, and orifice sizing, Design criteria for Package Instruments, sizing calculations for flow elements, control valves, and safety relief valves, Method Statements, Alarm Management Philosophy, MR, TBE, etc.
- Expertise in developing Functional Safety deliverables in line with IEC 61511 such as Safety requirements Specifications, SRS Checklist, GAP & Impact assessments, SIL Validation & Verifications, SIS HAZOP.
- Participating in P&ID Design Review, HAZID, OHID, ENVID, HAZOP and SIL Workshops, FAT.

Engineering Tools, Control System & Field Instrumentation

❖ MS office Suite, InstruCalc, Smart Plant Instrumentation (SPI), EPLAN, AutoCAD

❖ Integrated Control and Safety System (ICSS)

DCS:

- Honeywell- EPKS C300, TPS
- ABB- 800xA, AC800F
- Schneider- Foxboro
- Yokogawa- Centum CS

SIS:

- Honeywell- Safety Manager,
- Schneider -Triconex, M580
- ABB- 800 Hi, Plant Guard

Process PLC Systems:

- Honeywell - Control Edge, HC900
- Schneider- M340, M580
- ABB- AC500M, AC800M

SCADA/ Custody Transfer:

- Schneider / AVEVA - Citect SCADA
- Emerson FloBoss and Daniel Gas Chromatography, Ultrasonic Metering Technology

❖ **Field Instrumentation:** Control Valves, ESDVs, Flow, Temperature, Pressure, Level, F& G detectors and devices, Local Control panels, YRAPs, Analyzers, etc.

Few Major Projects

Client	Project	Scope of Work
Prony Resources, Australia	VNC Boiler No. 5 Control System Integration	Functional Safety Management & Detailed Engineering for Boiler BMS System.
ADNOC Gas Processing	Habshan /Bab and Habshan-5 Heaters Burner Management System Upgrade	Detailed Engineering for Burner Management System upgrade, ICSS modification, and Field instrumentation for 8 No's Hot oil heaters at Bab, Habshan-1, 3 and 5
ADNOC-OFFSHORE	EPC Work for Offshore Site Schemes at Upper Zakum Field - Four Site Scheme Project	Detailed Engineering 1) EDG Replacement at ACPT & WIP 2) F&G System & Detection upgrade at ACPT1, ACPT2, Central Complex, and all Satellite platforms (NSP, WSP, SSP) 3) STP Replacement 4) Debottlenecking for Water injection Platform
ADNOC-OFFSHORE	EPC Work for Offshore Site Schemes at Lower Zakum Field- Four Site Scheme Project	Detailed Engineering for F & G System Modifications & LV Switchgear replacement at ZCSC & ZWSC.
ADNOC-ONSHORE	EPC for Permanent Power for JD Pumping Station - Power Supply Skid	Detailed Engineering for Power Supply Skid, Field Instrumentation, F&G, DCS, ICSS Modifications, and HVAC.
ADNOC-OFFSHORE	EPC for Electrical Submersible Pumps (ESP) at UAD WHT 01 & 11	Detailed Engineering for I&C related to ESP pumps and Well Head Controls
TARGET/ ADNOC ONSHORE	EPC for IGD Expansion Project - Phase II	Detailed Engineering for I&C for HVAC Systems at IGD Expansion project.
NPCC/ ADNOC-OFFSHORE	ULL FFD Phase-II Project EPC Package - 2 Umm Lulu Super Complex & Subsea Composite Power Cables.	Detailed Engineering for I&C for Gas Gathering Platform GGII and Accommodation Platform.
NGHI SON REFINERY CO, LTD.	Centralized Control System (DCS, ESD, FGS & SERVER NETWORK) For Nghi Son Refinery, Phase I (NSRP) VIETNAM	Honeywell System Package for Distributed Control System (Experion-EPKS), Emergency Shutdown System (Safety Manager), and Fire & Gas System (Safety Manager) for Nghi Son Refinery, Phase 1
MRPL	DCS and ESD Upgrade for Mangalore Petrochemical & Refinery (MRPL),	TPS for Mangalore Refinery & Petrochemical Unit (MRPL) -HCU, CDU, VIS Breaker Unit, and Sulphur Recovery Unit.
ONGC	Neelam Redevelopment Project at ONGC Offshore.	Detailed engineering for DCS, ESD, F & G, Smoke Aspiration Systems, and Fire Alarm Panel for Neelam Re-development.

Client	Project	Scope of Work
HPCL	Flare Gas Recovery Unit for HPCL Refinery, Hydrocarbon Detection & Control System for HPCL Refinery	Detailed engineering for Instrumentation, Process Control & Emergency Shutdown Systems for Flare gas recovery unit at HPCL, Refinery, and Hydrocarbon Detection System

Responsibility Held

- Executing I & C engineering design activities for Instrumentation and Control System for Pre-FEED, FEED, and EPC stage of projects.
- Reviewing the ITB (Invitation to Bid) documents submitted in the proposals stage prepares man-hour estimates and provides input to the project execution plan and developing discipline EDDR, and FEED verification reports.
- Developing the I&C deliverables such as SOW, Control Philosophies, Control System (DCS, SIS, BMS, FGS, FACP) Specifications, Logic Block Diagrams, Specifications, SIS calculations, Safety System Requirements, Addendums, Cause & Effect Charts, Schedules, Datasheets, MR, TBE for field instruments, Analyzers, Package Equipment's, Bulk materials, and Control System (ICSS).
- Functional Safety Management for SIS Systems and project execution as per IEC 61511
- Proficient with Smart Plant Instrumentation deliverables (SPI), Flow Meter, Control Valve Sizing Software (InstruCalc, Fisher Valve Specification), Field Instrument Sizing and selection, and Custody Transfer Metering Skids.
- Leading the discipline technical meeting with the client to identify and resolves discrepancies and divergences from the original contract, raising technical queries (TQ) and request for information (RFI)
- Participates in multi-discipline Engineering Design Reviews, P&ID design reviews, HAZID, HAZOP, OHID, ENVID, and SIL assessment studies and provides I & C inputs for a successful workshop.
- Coordinating with package vendors, OEMs, and HSE Consultants, reviewing vendor deliverables, and approvals. Participates in Factory Acceptance Test.

Strengths

- Well verse with the latest ADNOC specifications and standards (AGES/AGS/DGS)
- Strong Work experience in Integrated Control and Safety Systems (ICSS)
- Hand-on experience in major DCS, Safety Systems, and Alarm Management systems
- Experience in Field Instrument & Valves (Safety Valves, Shutdown Valves, Control Valves)
- Proficient in Cybersecurity guidelines for ICSS and ADNOC CSMS
- Thorough awareness of relevant international codes and standards.
- Expertise in Brownfield and Greenfield projects
- Good Communication and team-building skills.

Personal Details

Date of Birth: 20th July 1988

Languages Known: English, Hindi, Tamil, and Malayalam.

Marital Status: Widowed

Nationality: Indian

Current Location: Pune, India

Dependents: 1