

Holds a B. Sc. in Electronics & Communications Engineering and has about 23 years hands-on experience working in I&C field.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 28/09/1976
Gender : Male
Marital Status : Married

EDUCATION

: B. Sc. in Electronics & Communications Engineering, Menoufia University, 1999

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel), Internet
: SPI and InstruCalc

TRAINING COURSES AND CERTIFICATIONS

: Leadership Skills Development Workshop.
: Practical Safety Risk assessment and shutdown systems.
: Lead Engineering Development Program.
: Practical control valve sizing, selection and Maintenance.
: Practical Industrial Flow Measurement for Engineers and Technicians.
: Risk Management Training (Risk analysis, Probability analysis & consequence analysis, Hazard Identification and verification, Hazardous area classification).
: Practical Safety Instrumentation and Shutdown Systems (SIS).
: Turbo expander Technology and maintenance MTC.
: ICSS (Integrated Control and Safety System).
: Instrumentation & Control Fundamentals.
: Process Fundamentals Program.
: Off-Shore Survival: HUTE (Helicopter Underwater Escape Training).
: Yokogawa Distribution Control System DCS.

- : Allen Bradley Control System.
- : Data & Voice Networking: NORTEL NETWORKS.
- : Utilities packages trainings:
 - Multi-Phase Flow Meter MPFM (Roxar).
 - Well Head Control Panel WHCP (Alderly).
 - Nitrogen Package.
 - Oil Metering (Alderly).
 - Gas Metering (Alderly).
 - Acid Gas Incinerator (PCC - STERLING).
 - Heater (verga engineering).
 - Fuel Gas Skid (Oil and Gas System).
 - Booster Compressor (Howden).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jun. 2021 till now
- Employer** : TECHNIP Italy
- Project** : Assiut National Oil Processing Company (ANOPC) Assiut Refinery upgrade
 The new complex will process 2.5 million tons of heavy fuel oil mazut annually from the Assiut refinery to produce 1.6 million tons of Euro-5 diesel, over 400,000 tons of naphtha for high-octane gasoline production, 101,000 tonnes of butane and 330,000 tonnes of sulfur. The \$1.9 billion project aims to meet Upper Egypt's needs for petroleum products, decrease importing and contribute to the government's scheme to develop the country's south.
- Job title** : Lead I&C Systems Engineer
- Job Description** :
- Discipline Coordinator for Instrumentation and Automation Discipline.
 - Liaise with the local company in order to guarantee timely and appropriate execution of engineering activities to be delivered for the project
 - Leading in the area of Health, Safety, Security and Environment (HSSE) and actively promoting the culture within the organization.
 - Providing technical support to assure technical integrity of the running projects throughout their life- cycle. This is done through technical review and assurance of the design, construction and commissioning of projects, such that plant changes are implemented according to appropriate technical standards.
 - Ensuring contractor's deliverables are as approved Discipline Delivery Plan and that these deliverables complies with the client Technical Standards Philosophy. Where compliance is lacking, these need to be escalated to managements and other relevant authority levels.
 - Provide Process Automation Control and Optimization expertise to support assigned Brownfield projects.
 - Select the appropriate standards, vets and, if required, escalates requests for deviations from the approved Codes & Standards to managements.
 - Participate in technical and compliance verification exercises.
 - Participate in critical HSSE reviews, including bow-ties, IPF/SIL, HAZOP and Alarm Management workshops.
 - Participate in FAT and site SAT.
 - Support on the job training and development of local staff in performing

the role of owner engineers.

- Work with vendors, Engineering Contractor and main MAC to deliver modifications and/or work packages safely, on time, and cost effectively.
- Manage and coordinate the onsite activities of vendors associated with installation, commissioning and handover of HSSE critical items (including control and safeguarding systems) to agreed quality standards, schedule and cost.
- Provide engineering leadership for the execution associated with rehabilitation and upgrade of existing systems.
- Build an excellent relationship and interface with all stakeholders and design/construction contractors.
- Provide innovative solutions for complex problems using, at time, incomplete information.
- Ensure delivery of high quality critical as-built documents and drawings related to their respective asset.
- Providing assurance of integrity in the design of the facilities, specifically control and automation systems and network e.g. re-use or replacement of legacy control & automation systems and brown-field sites.
- Support a robust re-instrumentation and control and safeguarding design in conjunction with the Main Automation Contractor (MAC) and selected PLC system integrators, including providing expertise in PLC, DCS and SIS during the implementation, pre-commissioning and commissioning phases.
- Supporting the implementation of fit for purpose designs for both brownfield and Greenfield sites within an organization that has had limited exposure to training and new technologies.

Dates : From Jun. 2020 till Jun. 2021

Employer : SAIPEM

Project : Anadarko Mozambique LNG Project

The LNG project consists of the construction of two Natural Gas Liquefaction (LNG) trains, with a total nameplate capacity of 12.88 million tons per annum (MTPA), as well as all necessary associated infrastructures, storage tanks and export jetty facilities.

Job title : Lead I&C Systems Engineer

Job Description :

- Promote HSE awareness and ensure that all Client/SAIPEM HSE requirements are implemented and adhered to.
- Provide effective and practical construction input into study, FEED, and contract action phases of projects to ensure constructability aspects of project execution are adequately considered.
- Ensure that construction hazards and risks are fully considered by designers and contractors and that the appropriate mitigation actions are implemented during the project execution phase.
- Coordinate with all project stakeholders, especially within Client, to facilitate the project execution with minimum disruption and hazards to both ongoing operations and the construction Contractor.
- Liaise with the Contractor and other PMC groups to ensure timely and effective release of construction data/drawings and resolution of problems.
- Ensure that efficient and effective communications are maintained between the Contractor and PMC, ensuring that all reporting

requirements are met.

- Ensure, through review and monitoring, that the construction schedules are achievable and that early mitigation of slippage or use of opportunities is identified and appropriate action taken.
- Provide notification of any potential commercial risk or opportunity to the Contract group for further action.
- Develop close working relationships between all assigned construction team members and the HSEQ team to provide a consistent approach and effective resolution of issues. Encourage the same degree of cooperation within the Contractor organization.
- Develop a good team spirit within assigned PMC personnel and encourage team working with the Contractor and other Client groups.
- Ensure that construction quality is maintained at an acceptable level, including all required records and tests; thus, ensuring that pre commissioning, commissioning and handover are achieved.
- Participate in engineering workshop, SIL study workshop, Fire & Gas Mapping workshop, HAZOP/HAZID, etc.

Dates : From Aug. 2019 till Apr. 2020

Employer : Woodplc (Iraq)

Project : Basra Gas Company in Iraq / BGC

As part of the Iraq South Gas deal signed end November 2011 between South Gas Company (“SGC”), Shell (“RDS”) and Mitsubishi (“MC”), it was agreed to establish the Basra Gas Company (“BGC”), herein referred to as COMPANY. BGC (incorporated in Oct. 2012) is a Joint Venture (“JV”) between SGC (51%), RDS (44%) and MC (5%). The COMPANY was established in May 2013.

Job title : Senior PACO Engineer

Job Description :

- Develop specification and prepare material requisitions for control systems, instruments, control valves and all other instruments.
- Issue material requisitions to the Material Management Department for enquiry, order placement and for any subsequent revisions.
- Prepare the Master Requisition Index and update and issue it on a regular basis.
- Review Vendors’ quotations prepare technical quotation evaluation and recommend the final technically acceptable Vendor, in conjunction with Materials Management Department commercial quotation evaluation. Technically approve Order Variation Summaries.
- Hold co-ordination meetings and engineering review meetings with Vendors of major equipment as required.
- Arrange for site surveys and definition of activities and deliverables.
- Liaise with other Groups and Client as necessary.
- Assess progress and procedure associated reports and input to the DMS. Derive and suggest plans to recover slippage, correct inefficiency and to take any resulting agreed actions.
- Advise the Chief / Principal Instrument Engineer of any major slippages and their causes, all policy matters, major technical problems and unresolved differences with other Groups, and requests for changes by the Client which may constitute a contract change.
- Assist in the preparation of Auxiliary Flow Diagrams as necessary.
- Establish and maintain a filing system of project documents.

- Arrange for the transfer of records to storage, microfilming and for destruction.
- Prepare, check, approve and provide technical input into project deliverables to the required quality standards in conformance with or better than, the approved budget.
- Provide relevant knowledgeable practical skills in the response and actions for:
 - Arrange for site queries and discussions.
 - Supplier, vendor, contractor, client and site related discussions.
 - Site based activities.
- Prepare and support discipline contributions to Proposals including: Interpretation of the discipline technical content of the Enquiry and understanding the relationship with other disciplines.
- Advise Proposal Manager of any omissions, anomalies, inconsistencies or interpretations and develop these to a conclusion.
- Liaise with the Estimating Group on the preparation of equipment cost estimates and installation work content.
- Contribution to Proposal's discipline write up.
- Ensure that all work is completed without compromise to quality and is delivered according to the project schedule.
- Provide direction and guidance on all Instrument and Controls engineering technical queries raised by either internal or external parties.
- Liaise with the Client's Engineering, Operations and Maintenance staff as required to ensure a consistent approach to project completion.
- Provide sound technical advice and solutions to a diversity of technical problems within the discipline.
- Co-ordinate with other disciplines during all stages of design development, construction, pre-commissioning, and start-up.
- Assist in the coordination of all activities related to Instrument and Controls engineering design.
- Identify any areas of concern with respect to progress and/or quality and recommend corrective actions as required.
- Responsible for design, specification and services related to control systems including basic process control systems, safety systems, control panels, analyzer systems, telecommunications, field instrumentation, and valves.
- Under direct supervision, independently evaluates, selects, and applies standard engineering techniques, procedures, and criteria, using judgment in making minor adaptations and modifications.
- With additional experience within one functional area, assists in the design of larger and more complex assignments which involve conventional types of plans, investigations and surveys with relatively few complex features for which there are precedents.
- Job tasks, correctly performed, impact indirectly on cost containment, efficiency, profitability or operations.
- In collaboration with Operations, Maintenance, and Project's drive Venture performance in asset integrity, reliability, costs, and product quality by providing high value credible engineering services.
- Provide technical assurance to the Venture that design, construction and commissioning of projects, and plant changes are implemented according to appropriate technical standards and RoK requirements.
- Establish and sustain a structured and aggressive approach to transfer

knowledge from expatriate staff to national staff.

- Assure design / technical integrity of Production installations throughout their life cycle, including coordination and accountability for the delivery of Technical Authority roles in relevant Engineering disciplines.
- Provide Engineering support to Production Operations, including input into and support of commissioning / start-up of new or modified plant and troubleshooting of existing plant.
- Ensure appropriate Engineering discipline controls for projects and plant changes throughout the Opportunity Realization Process phases (Identify, Assess, Select, Define, Execute).
- Set and maintain Engineering standards, work processes, systems and tools for POD.
- Assure effective management of the Engineering skill pools, including learning and development opportunities for local staff.
- Maintain strong connections to shareholder Engineering Best Practice Networks.
- Assure technical integrity of CLIENT installations throughout their life cycle.
- Represent Engineering in HAZOPS, SIL, Risk Assessments and other safety reviews.
- Lead & participate in complex Process Safety incident investigations related to discipline.
- Promote Process Safety and shares learnings from Process Safety incidents across the organization.
- Provide innovative solutions for complex problems using, at time, incomplete information.
- Contribute new ideas and identify opportunities to improve efficiency of business processes and to improve value delivery to projects.
- Identify, analyze & promote improvement opportunities to optimize equipment capacity & performance.
- Provide support in troubleshooting, diagnosis & investigation of discipline related issues and to establish a plan for correction or mitigation.
- Review operational issues and formulates proposals to improve MTBF and MTTR in a cost-effective manner.
- Accountable for exercising appropriate discipline controls for CLIENT projects throughout the ORP phases (Identify, Assess, Select, Define, Execute).
- Undertake tasks and projects of moderate complexity.
- Define the scope of work and progresses contracts for services related to C&A projects, with minimal supervision.
- Assist in the management of technical interfaces with contractors and vendors.
- Ensure high quality critical as-built documents and drawings related to the discipline for CLIENT assets and for all projects.
- Develop effective working relationships with relevant disciplines and customers.
- Act as role model to promote strong service culture.
- Play a key coaching & mentor role for National staff in the skill pool and frontline technicians.
- Visit CLIENT onshore facilities to build a strong collaborative relationship.

Dates : From Aug. 2018 till Aug. 2019

Employer : Worley Parsons ABU DAHBI

Project : ASORC NAPHTHA COMPLEX (ISBL)
ASORC operates and maintains Asyut Oil Refinery at Assiut Governorate, Manfalut, Gahdam, Egypt. ASORC NAPHTHA COMPLEX is a new Lump Sum EPC refinery Contract for inside Battery Limit (ISBL) to feed capacity of 660 KTPY of Straight run Naphtha and to provide high octane gasoline and different grades of gasoline to Upper Egypt. Project total cost is of US\$200 Million.

Job title : PMC - Lead I&C Systems Engineer

Job Description :

- Take part in design review/HAZOP/HAZID with Client to verify the proposed design.
- Attend and co-ordinate with other disciplines and reviews other discipline deliverables (e.g., plot plans review, 3D Model, specification for Package and Mechanical/Machinery, P&ID's mechanization).
- Carry out sizing calculations for control valves, safety valves and flow elements, accumulator sizing calculations, Instrument cable voltage drop & Intrinsically Safe circuit calculations.
- Review all instrumentation and F&G engineering deliverables such as design basis, specification, data sheets, instrument index, I/O schedule, logic diagram, cable / JB schedule, Hook-up drawings, etc.
- Prepare Safety Requirement Specifications, SIL verification calculations, Fire Detection & Alarm System deliverables.
- Develop control system and telecommunication systems architecture.
- Elaborate technical and functional specification for the ICSS (DCS/ESD/F&G Systems) and third-party Systems, ESD-PSD block diagram, cause and effect diagrams, control narratives, logic diagrams and system loop diagrams.
- To provide inputs and review detailed drawings such as 3D model, location plans, cable routing layout, instrument/device installation, process / pneumatic hook-up.
- Direct & supervise a team of instrument/control engineers providing expertise and ensure the application of correct standards in the design and development of projects associated with gas processing, production and export.
- Full involvement in the P&ID's development, cause & effect, instrumentation package deliverables, control system architecture
- Participate in the process hazard analysis and level of protection analysis.
- Review and approve instrument data sheets and the as built drawings in liaison with the site-based construction, operations and maintenance personal.
- Review and approve the project functional design spec., DCS system design drawings, database and construction procedures, including DCS control schemes, Instrument functional diagrams, loop diagrams, I/O assignments, etc.
- Review and approve the systems integration development, ensure safe, economic and technically sound decisions related to area of responsibility during EPC phase.
- Review & approve FAT and SAT procedures and attend the Testing the control systems during FAT and SAT test.

- Follow up with the EPC contractor the construction planning and progress on daily basis. Working on the definition and execution of instrumentation scope of work, man-hours estimates, manpower loading and schedules updates.
- Support the effort of resolving the pending and punched items during project stages.
- Review and approve the process logics as per the project specifications.
- Fully understand the company HSE policy, procedures, regulations and objectives as they relate to area of responsibility. Ensures that work under control is performed in a safe and environmentally sound manner.
- Preparing load out plan for equipment's, offices, tools, and construction materials.
- Coordinating with QA/QC Coordinator regarding Inspector, NDT Technicians & equipment.
- Ensuring piping work progress is monitored and reported accurately.
- Ensuring all extra works are documented, acknowledged and signed by the Client.
- Demonstrate excellent personal HSSE leadership and HSE behaviors.
- Providing ongoing technical input to engineering & construction contractors during design and fabrication engineering, respectively.
- Provide oversight across all instruments and control installation activities, from site ramp-up through final acceptance including MC handover processes.
- Actively participate in construction-related decisions; provide a discipline perspective to delivery schedules, materials availability, material delivery configuration and sequence.
- Interface with design and construction contractors, to ensure instruments & controls constructability input is being actively considered and implemented.
- Input, as required, to the development and review of project documentation, including all associated fabrication procedures.
- Anticipate and identify adverse trends/events throughout the fabrication and construction cycle and work with the relevant parties to avoid them or achieve timely resolution.

Dates	:	From Jun. 2017 till Aug. 2018
Employer	:	Eni Oil & Energy Company (Eni Progetti)
Project	:	Zohr Project (Phase 1 and Phase 2)
Job title	:	PMC - Lead I&C Systems Engineer
Job Description	:	<ul style="list-style-type: none"> • Review and approve instrument data sheets and the as built drawings in liaison with the site-based construction, operations and maintenance personal. • Review and approve the project functional design spec., DCS system design drawings, database and construction procedures, including; DCS control schemes, Instrument functional diagrams, loop diagrams, I/O assignments, etc... • Review and approve the systems integration development, ensure safe, economic and technically sound decisions related to area of responsibility during EPC phase. • Follow up with the EPC contractor the construction planning and progress on daily basis. Working on the definition and execution of

instrumentation scope of work, man-hours estimates, manpower loading and schedules updates.

- Prepare all telecommunication Engineering deliverables such as Design Basis, Specifications for various telecommunication systems and fiber optic cables, system block diagrams, datasheets.
- Support the effort of resolving the pending and punched items during project stages.
- Identifying, evaluating, and resolving Engineering issues during the early work phase and EPC phase.
- Review and approve within the specified approval durations, the EPC Contractor key deliverables and other works within the discipline ensuring its compliance with design requirements and Licensor PDP, which involves the interpretation and review of calculations, specifications, plans, investigations, surveys, structures, system or equipment with relatively few complex features.
- Monitoring Project controls within discipline.
- Review and approve key design documents of Vendors, equipment manufacturers or subcontractors & prepares comments & recommendations incorporating any comments received from Owner.
- Attend technical meeting with Owner, Licensor, EPC Contractor and Vendors.
- Attending all Project technical sessions by the EPC Contractor such as Design Review.
- Participate in FAT, IFAT, SAT, of Schneider ICSS (triconex and Foxboro) system commission & startup.
- Provide the Technical Follow Up of the Detail Design and Orders in place for Zohr Ramp up phase Project.

Dates : From Aug. 2014 till Jun. 2017

Employer : TOTAL E&P, Qatar

Total is a global, integrated energy and provider, the world's fifth-largest international oil and gas company and second-largest solar operator.

Project : Average daily production of Al Khalij field: 23 000 bopd + 210 000 bwpd:

Off shore field with four main production platforms and three well satellite platforms, connected to train A&B at terminal located on Halul island, 120 km away from Qatar. Around 45 production wells activated by electrical submersible pumps, 8 water injection wells and 3 water source wells. Fiscal and allocation metering systems. ICSS System with 18 PLC and communication network.

Job title : Lead Instrumentation Methods Engineer

Job Description :

- HSE:
 - Knowledge of Company HSE policy, rules and procedures (HSE MS) and in particular ISO14001 standard.
 - Observance of the company HSE policy, rules and procedures.
 - Participation to HSE activities and global improvement (e.g. referential, reporting, REX, audits, MAESTRO, trainings, HSE action plans...) and specific other HSE responsibilities.
- Asset Integrity:
 - Contribute to the ALK Asset Integrity initiative by reporting any anomaly, defect, bad practice, and lack of equipment, lack of competence that could result in a major HSE incident or loss of

production. I am the technical authority regarding Instrument, fiscal metering and ICSS in Al Khalij field.

- Activities:
 - Ensure the quality of operation by organizing audits and review. Also, design, follows-up and optimize maintenance concepts in close cooperation with the maintenance contractor.
 - Determine, within my field, the maintenance policy of the subsidiary.
 - Defining the types of maintenance to be carried out on equipment (preventive, systematic or conditional, corrective, etc.).
 - Defining the stock management policy regarding spare parts (type of management, supply thresholds, etc.).
 - Establishing the operating and maintenance procedures to be applied.
 - Updating maintenance routines.
 - Prepare the budgets for his overall area of activity.
 - Drive the Technical contract in my own activity and ensure a good quality of result.
 - Ensure proper planning, scheduling, and execution of heavy maintenance operations taking into account production or other constraints.
 - Analyse indicators provided by the CMMS, stock management and intervention reports in order to optimize maintenance in his area (HSE, availability, preservation of equipment, OPEX reduction).
 - Propose and justify recommendations for the improvement of equipment availability, efficiency or maintainability and works in good collaboration with other entities to execute desired modifications.
 - Make sure that all equipment and spare parts documentation are updated (paper/electronic documentation and CMMS data base, SAP system).
 - Ensure that the preventive maintenance operations scheduled on Facilities are executed as planned, ensuring that all necessary spare parts and materials are available as and when required.
 - Prepare scopes of work for approved work programs ensuring that all relevant operating procedures and safety regulations are written in and that all necessary materials and equipment are available as and when required.
 - Prepare strategy, calls for bid and issues these to contractors invited to tender for work to be carried out.
 - Assist with the analysis of equipment malfunctions and makes recommendations for repair and future preventive action.
 - Very good knowledge of TOTAL GS standards.
 - Attend and witness FAT for HIPS, NOVEC 123 and fiscal metering Skid at the vendor factory.
 - Get liaison with the following resources: Other operations department within the subsidiary, Maintenance contractors.
 - Responsible for maintenance Methods within the field of competence.

Dates : From Sep. 2013 till Aug. 2014
Employer : McDermott International, INC, Saudi Arabia

A leading engineering procurement construction and, installation (EPCI) company focused on executing complex offshore Oil & Gas projects worldwide.

Projects :
• Engineering for offshore Safaniya phase including new 10 wells platform (1040/1049) and 5 Auxiliary platforms (216/221)
• Engineering certificate for Manifa field development 2PDM 460/469 and 470/479 platforms and 10 observation platforms

Job title : Senior Instrument Engineer

Job Description :
• Supervise and Lead a team of engineers and designers in carrying out detailed engineering work or FEED / Proposal work for large sized projects with full responsibility for conceptual and detailed design and provide necessary technical information for procurement in compliance with project specifications / data sheets and within budgeted man-hour and project schedules.
• Review the ITB (Invitation To Bid) documents provided in the proposals, issue inquiry requisitions, reviews techno-commercial vendor offers, prepare various estimates like Bill of quantities, Material cost, Man-hours, Software cost, Vendor assistance, Vendor visits & any other estimates as needed for the bid.
• Review contract requirements for project execution, organize the preparation of the Technical Document Register (TDR), identify requirements and scope of work; review specifications, Process Data Sheets (PDS), Piping Material Specifications (PMS), Piping & Instrumentation Diagrams (P&ID's), Plot plans, General Arrangement (GA) drawings, Review Philosophies, Area Classification Drawings, Fire and Gas Detector Layout Drawings and other relevant documents. Establish contract review criteria, identify and resolve discrepancies and divergences from original proposal through the investigation of technical queries to projects/client.
• Organize the preparation of equipment and material specifications and data sheets, administer the development of detailed engineering calculations and drawings including the preparation of the design basis document, Instrument Index, Input & Output Lists, Bill of Quantities, Block Diagrams, Equipment system specifications, cable routing, control room layouts, Cause and Effect Diagrams, Complex Control loop narratives and Safety narratives, Loop Diagrams, Functional Logic Diagrams, Terminations Diagrams, Installation Hook-up Drawings, Instrument Plot Plans, Control Panel Drawings, Control/Equipment Room Lay-outs, Cable Tray Layouts, Cable Schedules and Cable Drum Schedules, JB schedules, Interconnection Schedules, Installation detail drawings, Fire/Smoke Detection Lay-out and Alarm Lists.
• Coordinate between teams (fabrication, electrical, communication, supply chain and, drafting).
• Responsible for preparing technical proposals for bids including MTO, CTR.
• Responsible for the preparation of instrumentation deliverables including index, data sheets, specifications.

Dates : From Jun. 2012 till Sep. 2013

Employer : Aibel Company - Norway – Stavanger
A leading service company that works within the oil, gas and renewable energy sectors.

- Project** : Draugen offshore Platform upgrades 2013 Campaign Project, Shell, Norway: Project scope is to install additional living quarter (ALQ) on the Draugen platform as well as replace the current free-fall lifeboats. In order to, alleviate the current bedding constraint on upcoming project and outstanding E&M scope.
- Job title** : Senior Instrument Engineer
- Job Description** :
- Participate in the development of P&ID's, cause and effect.
 - Prepare data sheets as well as requisition for control valves & orifice plates.
 - Member of the package management team who manages requisition aviation fuel skid following Norsok and DEP's (Shell) standards.
 - Prepare in tools datasheets for safety relief valves "sizing & selection" following API standards.
 - Responsible for preparing instrument indices and lists such as; instrument list I/O list, alarm and shutdown set point list following EIS Aibel system.
 - Assist procurement personnel in procuring equipment, materials and services.
 - Prepare technical reports for required equipment when potential work scope change occurs to determine equipment specifications and, utilization.
 - Capture scope change (additions / deletions) and submit claims when required and provide necessary inputs to change management systems.
 - Optimize engineering for constructability and construction efficiency.
 - Review suppliers' documents to make sure it's compatible with the required specifications.
- Dates** : From Oct. 2010 till Jun. 2012
- Employer** : CB&I Lummus Company
The most complete energy infrastructure focused company in the world.
- Projects** :
- SOUTH CAUCASUS PIPELINE (SCBX/BP): Upgrade the pipeline of the existing SCP system to accommodate an additional 16.0 BCMA, Install new intermediate compressor stations and parallel pipeline section. The SCP Expansion Project involves modifications and additions to the existing South Caucasus Pipeline for the transmission of additional gas from a location close to the Caspian Sea at Sangachal in Azerbaijan through Azerbaijan and Georgia to the Georgian / Turkish border. Along the pipeline route will be located a Main Control Centre, Sub Control Centre, Block Valve Stations, Metering Stations and off takes. The gas is metered for custody transfer and fiscal purposes.
Principal Duties:
 - Feasibility Studies, FEED preparations and verifications for the project.
 - Carrying out detail engineering design and review of:
 - ❖ P&ID, C&E Charts, SAFE Charts, Equipment layout, Installation scheme.
 - ❖ Fire & Gas detection and Protection Layouts.
 - ❖ Specification and data sheets of Field Instruments and Valves.
 - ❖ Instrument Layout and Hook-up drawings.
 - ❖ Process Shutdown, Logic diagrams.

- ❖ DCS, ESD, F&G System logics.
- ❖ Review of Layout, Cable Routing Layouts, and Typical Installation drawings.
- ❖ Procurement, Project Management during Construction, Fabrication, Installation and Commissioning.
- Leading Instrument Design and Engineering Activities Held at Cairo Office.
- Co-ordination with CB&I London office on technical issues.
- Responsible for the administration, supervision, coordination, technical accuracy and quality of the Instrument and Controls design/engineering effort.
- Supervise all Instrument and Controls designers/ engineer assigned to the project.
- Confirm the project scope and design basis by evaluating as-sold data received at kickoff meeting.
- Develop input information for project schedule that is compatible with project requirements, especially correct sequencing of Instrument and Controls design equipment manufacture, and material deliverables.
- Support progress reporting efforts by preparing weekly reports that supply data to track progress of Instrument and Controls design /engineer activities.
- Support the design and development of all Instrument and Controls drawings.
- Provide input into project 3D model.
- Review and issue all Instrument and Control system drawings to meet project design requirements and to coordinate with other disciplines.
- Kick off meeting with Vendors and Contractors.
- Project Co-ordination with main Client and Contractors.
- Preparation, verification and approval of installation, Pre-commissioning, Commissioning procedures.
- Onsite Coordination, supervision, expediting and commissioning checks of Field Instrumentation, at Gas Metering , compressor station PLC and Valves.
- Cartagena Refinery Expansion Project (Reficar): Refinery expansion project to process an additional 150,000 BPSD of crude. Approx. 15 process units and supporting utilities and offsite.
- SEGAS (Spanish Egyptian LNG): Study to improve PRMS operation, Egypt, and Participate in preparing the execution plan and scheduling, HAZOP study to related modification.
- Nagarjuna, Cuddalore Refinery, Tamil Nadu, India: New Refinery, Partially relocated from Germany; CB&I Lummus was commissioned by the client to dismantle selected existing processing units and incorporate them into a new refinery complex in India.

Job title : Senior I&C Systems Engineer

- Job Description** :
- Have experience in the use of SPI (Intools) for the preparation of discipline deliverables such as I/C wiring Diagrams, Instrument Loop Diagrams, Instrument Specification Sheets, MTO etc.
 - Be able to demonstrate a high level of competency for the sizing and selection of field instrumentation including control valves, safety relief valves, orifice plates etc.
 - Prepare, review, approve and ensure the quality of instrumentation

deliverables:

- Instrument index.
 - I/O list.
 - Development of instrumentation data sheets (PRV, ESDV, CV and transmitters).
 - Systems (DCS, ESD, SCADA, ...) specifications.
 - Wiring diagrams.
 - Cable routing layouts, instrument layouts.
 - Sizing of Equipment and instrumentation (Control Valves, FE, PRV etc.).
 - Cause & Effect diagram safe charts.
 - Instrumentation narratives and control philosophy.
 - Design review and interdisciplinary coordination.
 - Technical bid evaluation and vendor drawing review.
 - Proposal Engineering.
 - SIL assessment and evaluation.
 - Man hour estimation and control.
- Coordinate, interface and provide inputs with other parties, activities for all assigned projects, on technical matters, project schedule and implementation strategy in various phases of lifecycle i.e. study, SOW preparation, pre-award evaluations, engineering, procurement, commissioning and start-up phases.
 - Ensure all applicable environmental and safety and engineering standards and policies, within process design engineering, are fully incorporated on all assigned projects.

Dates	:	From May 1999 till Oct. 2010
Employer	:	Gulf of Suez Petroleum Company [GUPCO] / British Petroleum joint venture (Leading Exploration & Production Company in Egypt)
Job title	:	Senior I&C Systems Engineer
Job Description	:	<ul style="list-style-type: none">• Define the types of maintenance to be carried out on equipment (preventive, systematic or conditional, corrective, etc.).• Ensure that the preventive maintenance operations scheduled on facilities are executed as planned, ensuring that all necessary spare parts and materials are available as and when required.• Assist with the analysis of equipment malfunctions and make recommendations for repair and future preventive action.• Ensure that maintenance methods under his responsibility are carried out in strict accordance with the company's current safety rules and operation procedure and in accordance with standard industrial practice, thereby guaranteeing the quality of maintenance operations, within his field, carried out on site by maintenance team.• Direct and coordinate all installation, servicing, calibrating, repairing and testing of instrumentation and control systems in the Plant.• Liaise with operations to ensure the provision of an adequate service, including providing time estimates for work completion and relevant priorities• Liaise with contractor and equipment manufacturers to evaluate various specific tasks on an economic and capability basis.• Manage and provide onsite technical support for Process calculations (valve sizing, press. Drop control valve and safety valve sizing), PFD and

P&ID generation, HAZOP, writing SORs (Statement of Requirements), SOW (Scope of Work), Conceptual Study Reports, MOC (Management of Change), plant troubleshooting, carrying out preliminary feasibility studies, cost & benefits estimations, etc.).

- Participate in the CAPEX & OPEX.
- Identify & order spare parts through the MAXIMO Inventory System and comprehensively update the onboard Critical Instrument Spares inventory.
- Carry out permit to work tasks as area authority for designated area and conduct toolbox talks/ job safety analysis as required.

- Field of experience :**
- Professional I&C Systems Engineer with about 23 years of diversified experience. Specialized in instrumentation and control systems in all phases of the job such as: FEED, detailed engineering, pre-commissioning & commissioning, start-up, maintenance and operations, especially in the oil and gas industry. He has been exposed to onshore refinery plants and offshore production platforms having participated in many major projects in Egypt, Qatar, Norway, Yemen, Dubai and, Saudi Arabia.
 - Has great experience working with all types of instruments like transmitters (level, flow, and pressure), valves (control valves, Safety relief valves, and on/off valves), control systems (DCS/PCS and SIS, Turbo-machinery, gas compressor control system, anti-surge system), fire and gas systems, metering packages (custody transfer and allocation metering), utility and other equipment packages (Nitrogen plant, water cooling systems, power generations, well head control Skids, multi-phase measurement, and air compressor) and analyzers (water cut, moisture, oil in water, and CO₂).
 - SPECIFIC AREA OF EXPERTISE:
 - Good knowledge of international codes and standards (i.e. API, ISA, BS...etc.) and ARAMCO Standards.
 - Good knowledge with turbo-machinery control systems and Bentley Nevada vibration system.
 - Ability to perform safety analysis and calculations according to IEC 61508/61511.
 - Extensive working experience in instrumentation, automation and DCS system (ABB 800XA, YOKOGAWA CS 3000, Allen Bradley Control Logix 5000, Foxboro IA DCS and Triconex ESD system in the Oil, Natural Gas fields.
 - Able to carry out DCS engineering and DCS project management including:
 - ❖ Project scoping, engineering, specification, criteria, requisition, evaluation, selection.
 - ❖ Interface/coordination, supervision and manage of DCS vendor.
 - ❖ Review /monitor of materials, cost, estimate, schedules, progress reports, staffing.
 - ❖ Participate in activities associated with equipment and material procurement.
 - ❖ Participate in FAT, IFAT, SAT, commission & startup.
 - ❖ Analyze and make independent recommendation regarding solutions to problems with varying complexity in accordance with organization and /or project objectives and guidelines.

- ❖ Specification, selection and purchase of process control systems, safety systems, vibration Monitoring systems, tank gauging systems, leak detection systems, RTU's.
- ❖ Functional design of the process control logic and safety logic (defining requirements).
- ❖ Operation / maintenance support to offshore oil & gas control & instrumentation systems.
- ❖ Experience in programming and configuring modern control systems including DCS/PLC/SCADA systems.
- Demonstrate leadership & personnel supervisory skills.
- Extensive knowledge of instrument maintenance procedures on process and utilities equipment, on an Oil & Gas facility.
- Conversant with international codes, standards and recommended practices to be employed in oil/gas projects.
- Very good knowledge of Norsok standards as I-001.I002, I104, I105.
- Perform control systems sizing calculations for control valves, relief valves, flow elements, thermowells and other instrumentation.
- Create instrument index and datasheets, generate reports, and monitor design wiring and loop development activities in Intergraph Smart Plant Instrumentation database.
- Proficiency in conducting training for onshore /offshore personnel on Instrument Equipment's and newly installed/upgraded systems.
- Develop complex control systems narrative specifications.
- Prepare complex instrument design and installation requirements.
- Develop complex control systems logic diagrams and/or cause and effect diagrams.
- Represent control systems in model reviews; closely monitor 3D modeling prepared by the design group using review software.
- Conducting regular meetings to communicate department strategy and initiatives.
- Developing succession plans for key department roles.
- Develop and review estimates and schedules, progress reports including manpower forecasts.
- Experience in HAZOP/HAZID reviews, IPF review, Fire & Gas Mapping review, Alarm Management study, Main Automation Contractor package.