

## Leading and Supervising Experiences

I have worked in different positions as a leader or project manager, experience that allowed me to get skills for developing business opportunities, such as; bid preparation, cash flow projection, analysis and development of contracting schemes of suppliers, alliances between suppliers companies, resource planning, risk analysis and scenario estimation.

Then as leader and developer of business opportunities related to automation and control, develop over the years the ability to manage personnel, conflict resolution, customer service, stakeholder management, support to the logistics system for the achievement of project objectives, expense recovery by claims and disputes, closure of the project life cycle.

Additionally as a specialist in Instrumentation and control for maintenance equipment in oil & gas facilities, develop the capabilities for solving problems related to radar level transmitters, pressure differential transmitters for steam boilers, temperature and flow smart transmitter, repair, calibration and maintenance of control valves, relief and Emergency Shutdown Valves, vibration sensors for gas compressors and turbines system, PLC fault analysis on; power cards, communication, IO. Search and fault resolution of the field instrumentation grounding system.

## Brief Narrative working with Automation & Control System

Working at SINCOR (oil & gas company producing 200.000 BBDS/day), I ran the maintenance of the automation and control platform of the process control systems **PCCS**, fire and gas detection system (**F&G System**), and the Emergency Shutdown System **ESD**.

The **PCCS** process System run under a PLC redundant architecture, utilizing GE **Fanuc 90-70**, around 3000 I/Os.

The **F&G System**, run under a redundant architecture, fault tolerance 1 oo 2, utilizing GE **Fanuc 90-70**, around 1000 I/Os.

The **ESD System**, run under a PLC redundant architecture, I/Os redundant configuration, fault tolerance 1 oo 2, utilizing GE **Fanuc 90-70**, 2000 I/Os



My accountabilities during SINCOR period were:

1. Review and adjust the PLC logic according to the control narrative, loop diagrams, and operational needs.
2. CPU maintenance, revision, analysis and clean out of the I/O fault table.
3. Maintenance, programming and adjust of the I/O modules
4. Spare part inventory, keeping a good shape, the max and min spare part numbers.

Beside I was also responsible for maintaining and troubleshoot the Main Station Data Acquisition and Supervisory system (SCADA), Oasys 13.0 System, with UNIX operating system, two real-time Hot Standby servers, two historical servers also in Hot Standby mode, and AUTOCAD process graphics editing and development module, management of data with MYSQL, Shell Security C Shell, redundant networks link to PLCs with Nortel fiber optic systems.

With **FLUITEC** I got experience working with a small application, designing, programing and installing an automatic control for an **Oil Water Treatment Plants**.

I used the LOGO Siemens PLC, with a couple of I/O extensions. This control system has been installed in different location of **Venezuela** and **Colombia**.



The Siemens PLC has worked exceptionally without any faults or complaints to report.

After FLUITEC, I worked at Mechanical Integrity and Reliability Services **MIRS**, a company focused to Develop Mechanical's Integrity Projects associated to the **Delayed Coke Units** / Oil refining process.

The Unheading Coke Drum System utilize a **Rockwell Automations Products** for its Control System, like a Control System Engineer at **MIRS**, I got an incredible experience with all Allen Bradley PLC and its I/O devices platform.



A redundant Processor Logix1756 with a very interesting redundant I/O and power supply architecture is the core of those application.

During the Engineering phase of those projects, I got the opportunity to integrate the Rockwell PLC to the current Main Plant Control System (Honeywell DCS / Foxboro DCS), to do that, we developed products from Basic Engineering like PLC datasheet, PLC layout, Cabinet Specifications, Integration to DCS Specifications, Control Architecture, Control Narrative, Interposing Relay Specification and so over.

Beside during the detailed engineering phase, we developed products like Wiring Diagrams, Junction Box Connection, Loop Drawings, Hook-up Drawing, Cable and Conduit List, PLC Layout, Cable List, among others.

Almost in all projects I ran the pre-commissioning and commissioning phase, on those phases I verified the FAT procedures, and executed step by step with the client and the manufacture representative.

### **Industrial Functional Safety Standard Understanding IEC 61511- 2016**

Recently 2018 / 2019, I have developed studies of the IEC 61511-2016 standard, for certification as a specialist in functional safety TÜV ISA 84 / IEC 61511 certification, knowledge in:

Management of functional safety, Safety life-cycle requirement, Verification, Process H&RA, Allocation of Safety Functions to protection layers, SIS requirements specification (SRS), SIS design and engineering, maintenance and testing design requirements, and **SIS** installation, commissioning, safety validation, **operation – maintenance, modifications**, and decommissioning.



*Pics from my speech at University about Automation on Unheading Coke Drum System, right corner family outdoor activities.*

I am willing to keep learning in this challenging and updated word of the Automation and Control System.

Thanks, in advantage for consider my profile.