

**CONTROL AND INSTRUMENT ENGINEER**

Engineer focused and committed to customer service, with more than 21 years of successful experience and extensive background in the Oil and Gas industry, with strong skills in the area of instrumentation and Process Control, deployed on the fields of Exploitation, Upgraders and Refining Extra Heavy Oil.

Highly qualified to install, commission, debug, troubleshoot, and maintain PLC and PLC programming, smart transmitters, and communication systems. Expert in the fields of computing, **PLC** integration, **SCADA**, Process Control, Fire and Gas Detection Systems, Emergency Shutdown, and control valves. Coordination and execution of Interlock test, Control Loop Test, engineering drawings associated with Instrumentation and Control, P & IDs, configuration and programming on Functional blocks, Ladder Logic, cascade control strategies. Configuration of communication of third-party equipment via serial interface. Coordination and execution of **FAT/SAT** tests. Participation on Risk Analysis session during projects developments (**HAZOP** and What If). Knowledge of International Standards, deep comprehension of **IEC 61511, ISA 84**.

**SKILLS****Duties on Field**

- Instrument & Automation deep understanding on the EHO facilities
- Control, Shutdown, Blowdown & PRV Valve Repair
- Troubleshooting on Electrical and Electronic failures
- Pre – Com, Commissioning & SU of ICBS / SIS / F&G
- Wiring and Test of MCC, E S/E, PLC Cabinets, JB
- Integration of third-party equipment/ Data Acquisition.

**Duties on a Control Room / Engineering Office.**

- Diagnostic, maintenance and debugging of GE and Rockwell's Automations devices (HMI/PLC).
- E&l Engineering Deliverables - Production/Upgrades
- Maintenance of SCADA servers/ real time-historical
- Coordination and execution of FAT/SAT tests
- Regular review and testing of safety Interlock / SIS
- Safety Life Cycle's Management / TÜV IEC 61511

**PROFESSIONAL EXPERIENCE**

- Control System Engineer Contractor (**Looking for new Opportunities**) April 2019 - Actual

Engineering Consultant for Metering & Custody Upgrade Project. Decoding PLC program SELMA PLC Model.

- Mechanical Integrity Reliability Services – **MIRS, Project Manager** April 16 – March 2019

Engineering, Installation and Aftermarket - Turnaround Services / (DELTAVALVE™) for Delayed Coker Units, Venezuelans Oil& Gas PDVSA Upgraders. Milestone Achieved on TA Services: 100% of tasks achieved on time, saving 9% of the budget, and 6% on BAC (H-H), 7% raised revenues on claims due to administrative time's extension and scope of work's changes / Safety Culture developed - 18350 HH without accident.

- Engineering and Supply Technologies – **Automation & Instrumentation Leader** March 2015- April 2016

Revamp Engineering project to install an Automatic Unheading System in the Delayed Coke Units PDVSA Petropiar Venezuela.

Develop and Verification of more than 1000 deliverables to be meet with the scope of work (wiring diagrams, loop diagrams, instruments datasheet, cable trays, cable schedule, cable specification, instruments index, panel layout, control narrative, cause and effect diagrams, bill of materials among others)- Coordination and scheduling interdisciplines reviews of documents and products (workbench – project fast track timeline reduction on 15%) - Ensuring compliance of comments received from customer demands - Providing process Technical guidance between consultants and suppliers like Rockwell, Foxboro among others.

- FLUITEC **Project Leader** April 2007 – March 2015
  - Responsible of routine maintenance on external workshop bench testing and “In-situ” online testing of about 1000 Pressure Relieve Valve for PDVSA Petropiar, according to API 576 Inspection and Testing of PRV/ API 526 Flanged Steel Pressure Relief Valves / ANSI/API Recommended Practice 527, Seat Tightness of Pressure Relief Valves. (Crosby 600 & 900 series, Consolidated, Fulflo and Farris, among others)
  - Responsible of main Construction projects like **Project Leader**, using PMBOK methodology.
  - More than 20 Bid preparation per year – 70% on projects won. Cash flow projection, analysis and development of contracting schemes of suppliers, alliances between suppliers' companies, resource planning, risk analysis, scenario estimation, defined project scope in collaboration with customers, detailed work with schedule, timelines, and deliverables, management of determined resources required to complete the project.
- SINCOR **Control System Engineer** Jul 1999 – April 2007
  - During my early star I contributed to reach a continue and stable production of 200 MBBD of Extra Heavy crude, as part of the commissioning, startup, maintenance, and operation team of SINCOR. Completing the routines of preventive maintenance, corrective, troubleshooting of the Control System and Instrumentation of whole production platform, some like Crude Oil Heater Boosted International Heaters, Shut Catcher, Oil & Gas Dehydrator, Multiphase Pumps, 100 K BBLs Storage Tanks, firefighting pumps system among others.
  - Screen and database SCADA (OASYS 6.X) modification and display adjustments (utilizing AutoCAD) to fit the operational requirements according to ANSI/ISA-5.1 Instrumentation Symbols and Identification.

## EDUCATION & TRAINING

- Polytechnics Institute of National Army Forces (IUPFAN) **Bachelor of Electronic Engineering**, Major in Automation & Process Control. Maracay, Venezuela. Jul 1992 – Aug 1996
- Andres Bello Catholic University. **Best Practice for Project Management Process** PMBOK, UCAB Venezuela. Jul 2007 – Dec 2009

## OUTSTANDING PROJECTS

• Major Maintenance of the Unheading Coke Drum System (TA)/PMM	Project Manager /MIRS	Vzla 2018
• FAT, Motor Control Centerline 2100. Rockwell Automation	A&C Engineer /MIRS	México 2017
• Consultant Services for a Reliance Janmagar Refinery Project/DELTAVALVE	A&C Engineer /MIRS	India 2017
• FAT of Control System, PLC and Main LCP/ Petropiar Project in Houston	A&C Engineer /MIRS	USA 2016
• Engineering for PDVSA Petropiar, Integration of the Unheading Control System to the ICBS / SIS Safety Integrate System	A&C Engineer /EOG	Vzla 2016
• Commissioning and Start Up of the Unheading Coke Drum System/PCM	A&C Engineer /EOG	Vzla 2015
• Green Projects Eng & Maintenance for Orinoco Belt Oil Companies	Project Leader/FLUITEC	Vzla 2008-2015
• Management of the Control System Department, MS 200.000 BBD	A&C Engineer /SINCOR	Vzla 2002-2007
• FAT, C Shell Scripting, SSH for Oasys Server TELVENT/ NELES.	A&C Engineer /SINCOR	Canada 2002

## SKILLS/ SEMINARS / WORKSHOP / TICKETS

- Functional Safety Standard TUV IEC 61511, Risknowlogy , 2019
- 100W - Operational Security (OPSEC) for Control Systems, NCCIC, US Department of Homeland Security, 2015.
- 210W - Cybersecurity for Industrial Control Systems, NCCIC, US Department of Homeland Security 2015
- OASYS SCADA System: Advanced Oasys 6.X Configuration & Display Building, Telvent, Calgary, Canada 2002
- OASYS SCADA System: Advanced System Administration UX, Telvent, Calgary, Canada 2002
- UNIX Tru 64 04.f Administration: Network administration, C Shell Scripting, SSH, OS Installation and configuration, User management, Telvent, Calgary Canada, 2002
- SYBASE Data Base Administration: Transnational SQL, Database administration, Telvent, Calgary Canada 2002.
- SUN Solaris 9: OS Administration, Network administration, SUN Microsystem de Venezuela, Caracas Venezuela.
- UNITY PRO: Control Strategies, FB Programming, ST Programming, LD Programming, Display Building, AUTOPRO. Caracas, Vzla.
- Proficy Machine Edition: Control Strategies, FB Programming, ST Programming, LD Programming, Display Building, Autopro, Caracas Venezuela.

## AFFILIATIONS

- ISA Member since 2015, Automation Word, Automation Inside, Commissioning Training Center.
- Personal Blog [www.projectskeys.com](http://www.projectskeys.com) , LinkedIn code: danielpernia75