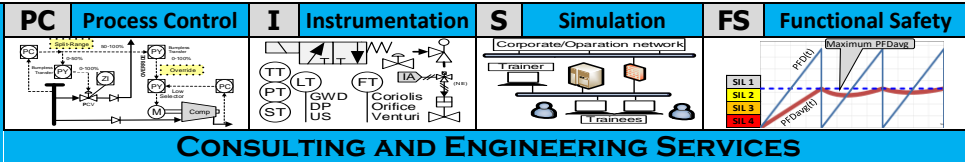


Liutaio

Quality and Precision
are our commitments



COMPANY PROFILE

After more than 30 years of achieving successful projects in the Oil and Gas industry, involved in the Control and Safeguarding Systems' design, review, Factory Acceptance Test (FAT), Site Acceptance Test (SAT), construction/installation, commissioning and startup, MSc. Claudio Passarella started **LIUTAIO** to provide Consulting and Engineering Services in the areas of "Process Control", Instrumentation, Simulation and "Functional Safety".

Vision

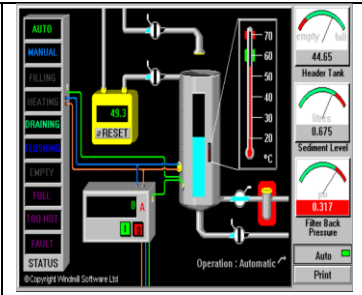
To be Leader providing Quality, Value-Added, Innovative Consulting and Engineering services in the areas of "Process Control", "Instrumentation", and "Functional Safety".

Mission

To provide simple but structured solutions and quality services to our customer, looking for improving operation stability and safety, to keep, recover or increase profit.

Process Control

PMC, FEED, Pre-FEED, Design, FAT/SAT commissioning and starting up of "Process Control" solutions for petrochemical plants like: Crude/Gas Flowlines, Compressor's stations, Gas Processing plants, Compression gas plant, Well Head Control Panels, CDU, VDU, Coker, Mercox, Amine, Sulfinol-X, ISAL, UOP FCC, UOP HF Alkylation, (Reverse) Butamer, CCR Platforming, Platforming, Gasoline Blending, Tank Farm, BTX, Cumene, Phenol, Hydro Cracker (HCU), Naphtha Hydrotreater (NHT), Sulphur Recovery plant (SRU), Fuel Gas system, Steam/Boilers and Power plants, and Utilities.

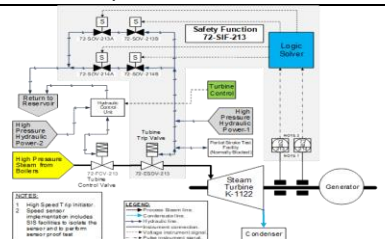


Instrumentation

Check instrumentation installation at the plant. Generate list of recommendations and required modifications/recalibrations to fulfill good engineering practices. Flow meters verification and recalibration. Instruments, calculation and control loop configuration check at plant DCS (HART, segment check for FieldBus). Control loop tuning. Control loop troubleshooting. Flow compensation and Custody transfer.

Simulation

Development/Review of specification for simulation studies, and simulation cases. Development/Review of Operator Training Simulator (OTS) specifications. Review/Verify that plant model complies with design and mass/heat balance



Functional Safety

Hazop, SIL Determination, SIL Verification, FMEDA assessment, "Safety Requirements Specifications" (SRS). Design, test, verification, commissioning and startup of Safety sequence, Safeguarding systems (SIS / IPS), Safety Instrumented Functions (SIF / IPF). Integrated design of Control and Safeguarding systems. Facilities for "Proof Testing", Full/Partial Valve stroke test.

Review our website for further information: www.LiutaioCES.com