



MECHANICAL & AUTOMATION SOLUTIONS

What We Offer

Engineering Projects

- Conceptual, Basic, and Detailed Engineering
- Clean Energy
- Energy Efficiency

Automation and Control

- Design and Implementation of Control Systems
- SCADA Systems
- Mechatronic Systems
- SKID Design

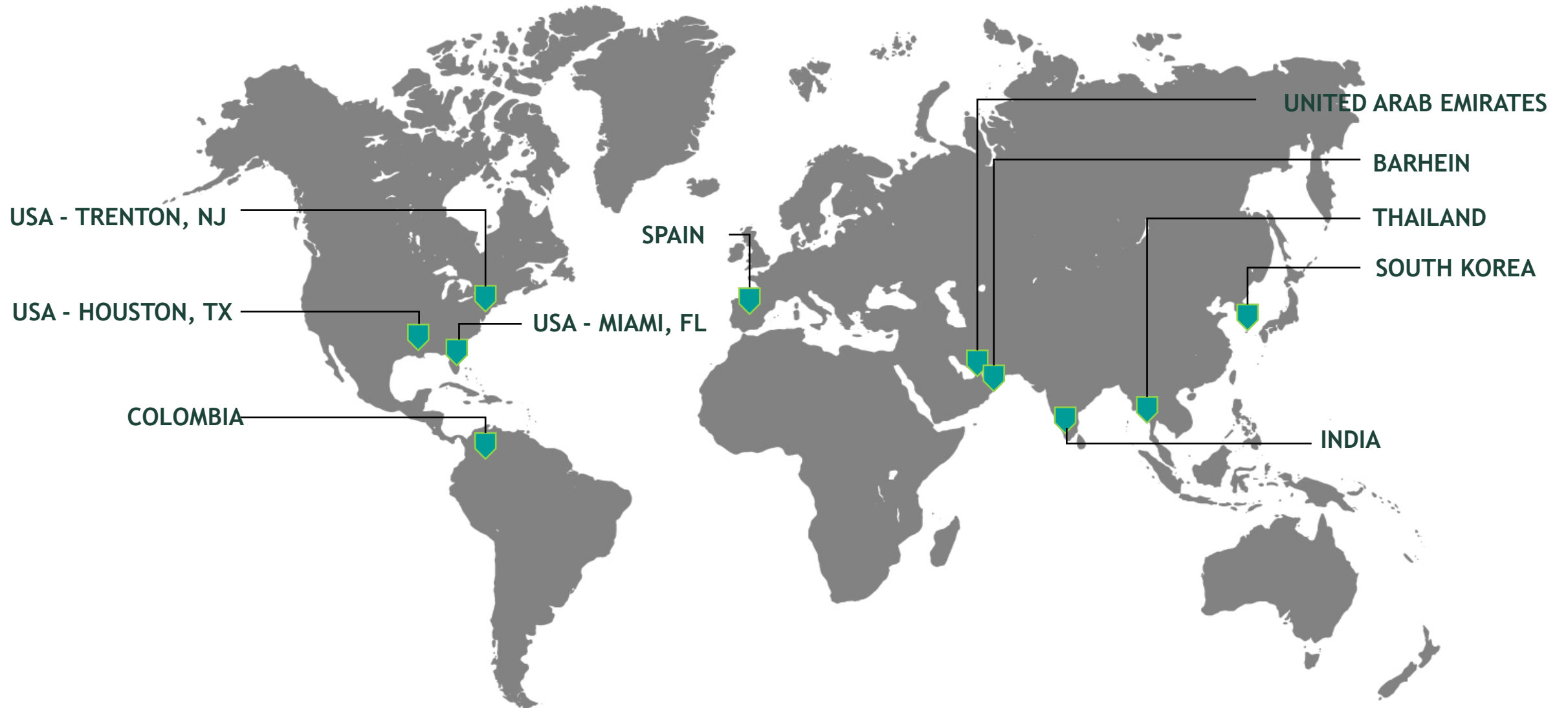
Instrumentation and Analysis

- Industrial and Analytical Instrumentation
- Chromatography and Analytical Services for Oil & Gas
- Electrical and Control Infrastructure
- Supply of Electrical and Automation Equipment

Maintenance

- Combustion Systems
- Existing Control Systems





General Scheme Of Our Process



Our Business Lines



Projects



Services



Supplies

Projects

- Control, Automation, Instrumentation, and SCADA Projects
- Design, Development, and Turnkey Commissioning
- Analytical Instrumentation, Chromatography, Gas Analyzers
- Clean Energy Projects (Photovoltaic Systems)
- O&G Measurement Skids
- Scrubbers and Natural Gas Filtration Systems
- H₂S Removal in Natural Gas
- Natural Gas Heating Systems
- IIoT Systems

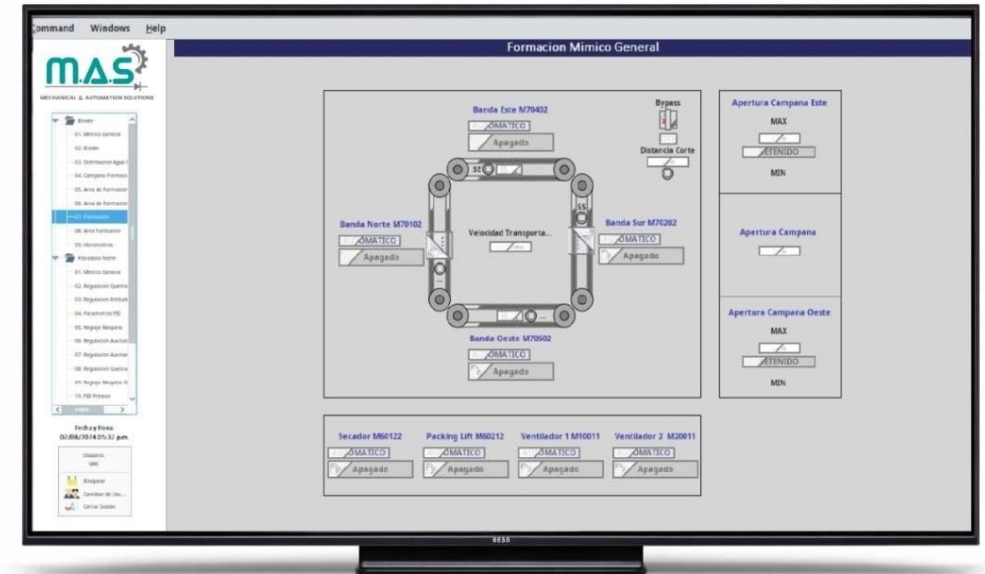
Our Business Lines



Services

- Preparation of Technical Documentation (Single/Multiline Control Diagrams, PFDs, P&IDs, and Related Documents)
- Design of Control and Automation Architectures
- Design and Installation of Electrical and Control Infrastructure
- Design and Assembly of Electrical Panels
- Design of Mechanical, Electrical, and Control Systems
- Design of SCADA Supervision Systems

Our Business Lines





Supplies

- Electrical and Control Infrastructure
- PLC, HMI, Drives, Motors, Servos, Drivers, Valves
- Instrumentation: Chromatography, Flow, Pressure, Level, Temperature, Humidity, Energy, Gas Analyzers, among others
- Control and Automation: PLCs, HMIs, Drives, Gateways, Media and/or Protocol Converters
- IIoT: Routers, MQTT, Wireless Devices.

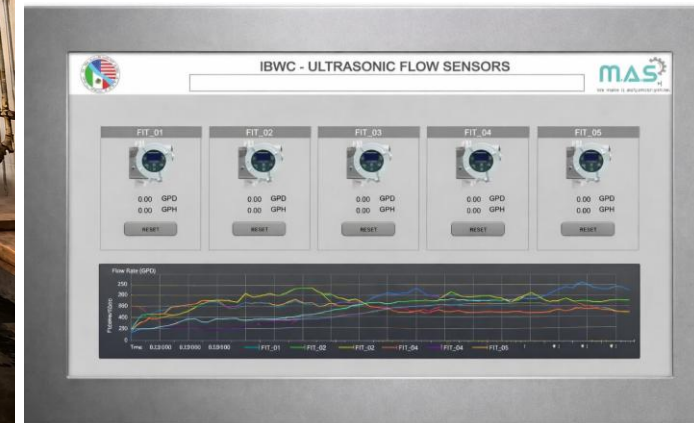


Flow Measurement and Monitoring System – ENDRESS + HAUSER – WAGO

- Basic/Detail Engineering of Measurement and Monitoring System
- Full Solution Supply: Instrumentation, HydroPower Plant
- Water flow measurement testing for a Power Plant in 157-inch and 56-inch piping.
- Logical-Graphic Development of Control and Automation Solution
- SCADA System Implementation and Supply



KEY RESULTS



Control - Automation

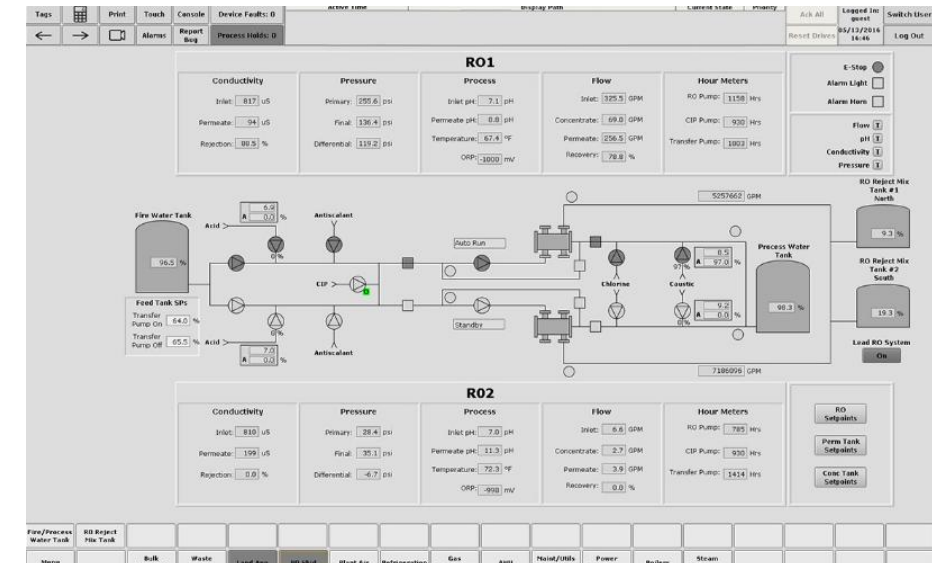
Control and Automation System. WAGO - CODESYS

- Basic/Detail Engineering of Automation and Control System
- Commissioning of Control and Supervision System for a Trigenation Project: 3 MW Electrical + 240 T/h Cooling + 3,200 kg/h Saturated Steam
- Logical-Graphic Development of Control and Automation Solution
- SCADA System Implementation and Supply
- Integration with Client's Hubgrade via MQTT



Design, Development, and Implementation of SCADA IGNITION – by Inductive Automation.

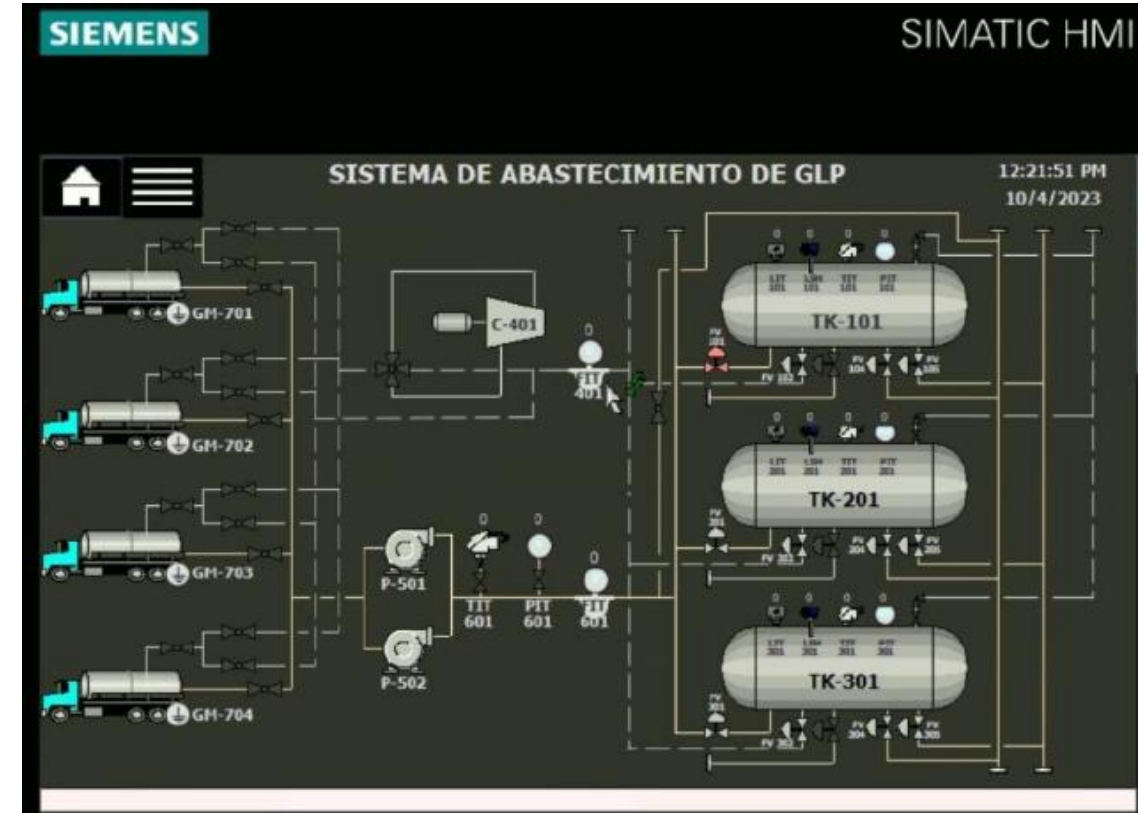
- Signal Selection Analysis for Visualization
- Integration of Seven (7) Production Plant Subsystems into SCADA via OPC, Modbus TCP/IP and S7 Profinet Protocols
- Design, Development, and Implementation of Ignition SCADA System Based on ISA 101 Standards
- Installation of Electrical Infrastructure for Communication: Ethernet and Fiber Optics



Control System

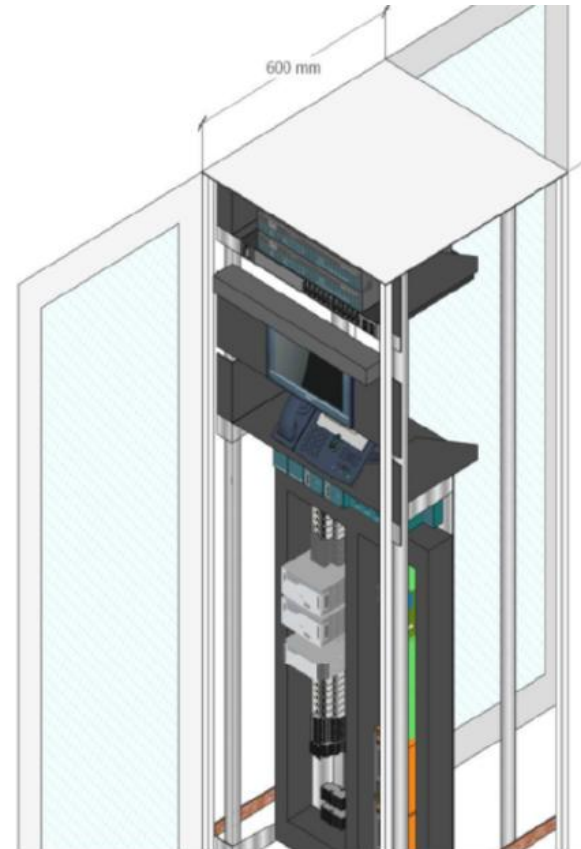
Control System Design for LPG Storage Plant SIEMENS – S7-1500 | S7-1200

- Design, development, and commissioning of Siemens control systems.
- Multi-protocol integration: S7, Profinet, Modbus TCP Client & Server, Modbus RTU Master.
- Commissioning of Variable Frequency Drives (VFDs).
- Design and implementation of HMI visualization systems.
- Integration with PCS 7 DCS.



Basic and Detailed A&C Engineering for Crude Oil Valve Control System in Pipeline. YOKOGAWA – STARDOM

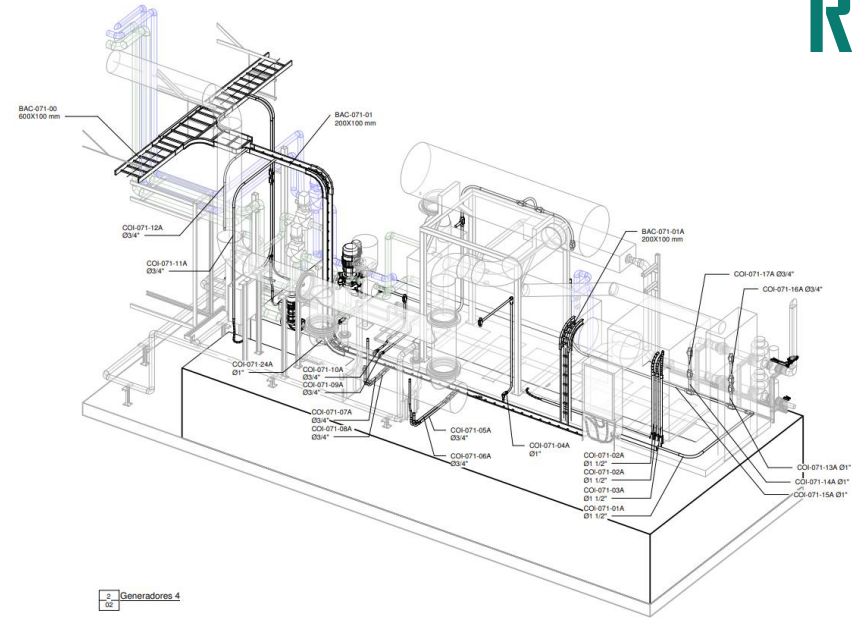
- Basic/Detail Engineering of Automation and Control System
- Control System Programming
- HMI Graphical Interface Programming
- Control and Communications Panel Assembly
- Integration with External Systems: Fire & Gas, FAST/TOOLS SCADA



Process Engineering

Basic and Detailed Engineering BIOGAS

- Basic/Detail Engineering of Automation, Control, and Instrumentation System for 10 MW Biogas Cogeneration Project
- Installation of Electrical and Control Infrastructure
- Installation of Instrumentation Associated with the Cogeneration System
- Installation Support and Commissioning Assistance
- As-Built Electrical, Control, and Instrumentation Documentation



Automation & Control Software



SIEMENS



Process



Design Software

Autocad, Revit, Eplan, Solidworks, Sketchup.

Instrumentation



Endress+Hauser
People for Process Automation



IIOT and Communications





OUR CLIENTS



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