



# ingemation

I N G E N I E R I A

## INGEMATION INGENIERIA DEVELOPED PROJECTS

SOLUCIONES INTEGRALES DE INGENIERÍA

## PROJECTS DEVELOPED BY INGEMATION INGENIERIA

- (2024) All LV distribution boards for DoIWin4 / BorWin4 offshore substation (HVDC) for Dragados Offshore S.A. for Amprion (on-going).
- (2024) Engineering services for supervision of Basic, Detail and construction engineering, commissioning and start-up for a new HVO plant for CEPSA at Huelva, Spain. (on-going).
- (2024) Junction boxes, Safety switches and Maintenance panels for biomass power plant in Sinnamary, French Guiana for BERKES.
- (2024) Engineering services for the distillation unit at the BioOils plant 'La Rábida' in Huelva, Spain.
- (2024) Migration services for HMI of SCC gas detection system at CEPSA refinery, Huelva, Spain.
- (2024) Engineering services for improvement in the phytoplankton plant control system for EDM instalaciones, Cádiz, Spain.
- (2024) Study and development of an I+D mock-up for a new lighting system for Dragados Offshore S.A. to be implemented in new offshore substations (HVDC).
- (2024) ESD Panel and Marshalling Junction Boxes for a biomass boiler plant for BERKES for ACCIONA, at Caceres, Spain.
- (2024) Safety valves control panel for CEPSA Refinery of Puente Mayorga, Cádiz, Spain for ROTORK.
- (2024) Engineering services for basic, detailing and construction phases for electricity, instrumentation and telecommunication disciplines for LanWin2 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet. (On-Going)
- (2024) Engineering services for basic, detailing and construction phases for electricity, instrumentation and telecommunication disciplines for BalWin 1 and BalWin2 offshore substation (HVDC) for Dragados Offshore S.A. for Amprion. (On-Going)
- (2023) Engineering services for supervision of OT engineering, commissioning and start-up for the Vegetable oil to Gulfinishing unit at CEPSA refinery, Huelva, Spain. (On-Going)



- (2023) Engineering services for supervision of OT engineering, commissioning and start-up for the Boil-off unit at CEPSA refinery, Huelva, Spain. (On-Going)
- (2023) Turnkey supply of Master Clock Systems for PHM AVT1800 for Navantia, Morocco Navy.
- (2023) DWE-300 Power redundancy cabinets for Auxiliary Transformers for BorWin5 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2023) Engineering services for supervision of Detail engineering, commissioning and start-up for the upgrade of the PSA system from LINDE at CEPSA refinery, Huelva, Spain.
- (2023) Gateway junction boxes for BorWin5 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2023) Engineering services for improvements in the PANALARM system at CEPSA refinery, Huelva, Spain.
- (2023) Compressor PLC and HMI Migration services for CO703 - CRIOGENIC PROPYLENE of plant FCC-CRUDO at CEPSA refinery, San Roque, Cádiz, Spain.
- (2023) Turn-key supply of a CCTV system for a biomass boiler plant for ENSO, Huelva, Spain.
- (2023) Migration services of the Sulphur chipper HMI at CEPSA refinery, Huelva, Spain.
- (2023) Migration services of the Spheres Odorization PLC at CEPSA refinery, Huelva, Spain.
- (2023) Migration services of the UG2 Generator PLC at CEPSA refinery, Huelva, Spain.
- (2023) Migration services of the HC5 PLC at CEPSA refinery, Cádiz, Spain.
- (2023) Migration services of the HC2003AB PLC at CEPSA refinery, Cádiz, Spain.
- (2023) Migration services of the 20SAM30 PLC and HMI at CEPSA refinery, Cádiz, Spain.
- (2023) Migration services of the UG2 Generator PLC at CEPSA refinery, Huelva, Spain.
- (2023) Migration services of the Sulphur Belt PLC at CEPSA refinery, Huelva, Spain.
- (2023) Engineering services for development of Basic engineering for a biomass boiler at French Guiana for BERKES.
- (2023) Engineering services and implementation for the improvement of the weighing system of the coal silo of the water treatment plant in Cadiz for CAZG ( Consorcio de Aguas de la Zona Gaditana).

- (2022) Signal Light Columns system for alarming of an BorWin5 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2022) Portable Diesel Connection Box for BorWin5 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2022) MCC for Replenishment at sea C35, D35, E35 and F35 logistic support ships (LSS) for OCCAR, system erected by Hepburn Engineering Inc.
- (2022) All remote input/output (RIOs) cabinets for the control system for BorWin5 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2022) Soft starter cabinets for sea water lift pumps for BorWin5 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2022) Engineering services and implementation of a Remote control cabinet for a biomass boiler plant for ENSO, Huelva, Spain.
- (2022) Engineering services for basic, detailing and construction phases for electricity, instrumentation and telecommunication disciplines for DoIWin4 and BorWin4 offshore substation (HVDC) for Dragados Offshore S.A. for Amprion.
- (2021) Surge protection junction boxes for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2021) DWE-300 Power redundancy cabinets for Auxiliary Transformers for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2021) DWE-222 Interlock Cabinet for MV system for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2021) Several repumping's in the CEPSA Refinery of Puente Mayorga, Cádiz.
- (2021) Control panel for redundant firefighting pump skids, for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2021) Time service refurbishing for a telecommunication company, for Axians for Vodafone, España
- (2020) Supply of materials for a Strontium clock for Real ROA (Royal Observatory of the Navy), San Fernando, Cádiz.
- (2020) Cameras system for furnace safety for two biomass boilers for ENCE, (Huelva and Puertollano), Spain for GBS.

- (2020) Signal Light Columns system for alarming of an DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2020) DC/AC UPS distribution boards for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2020) Burner protection system for safety of a biomass boiler for ENCE, Huelva, Spain, for GBS.
- (2020) MCC for J4774 program erected by Hepburn Engineering Inc.



- (2020) Burner protection system for safety of a biomass boiler for ENCE, Puertollano, Spain, for GBS.
- (2019) Soft starter cabinets for sea water lift pumps for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2019) Engineering services for basic, detailing and construction phases for electricity, instrumentation and telecommunication disciplines for BorWin5 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2019) All LV distribution boards for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2019) Turn Key supply of Master Clock Systems for KSA AVT2200 for Navantia, Royal Saudi Navy.
- (2019) MCCs for HVA/C system for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2019) All remote input/output (RIOs) cabinets for the control system of an DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2019) Engineering services for basic, detailing and construction phases for electricity, instrumentation and telecommunication disciplines for DoIWin6 offshore substation (HVDC) for Dragados Offshore S.A. for Tennet.
- (2019) Migration services for several package units (GASCON I, in CEPESA refinery, San Roque, Cádiz, Spain
- (2019) Safety valves control panel for CEPESA Refinery of Puente Mayorga, Cádiz, Spain for ROTORK.



- (2019) Control system for two big biomass boilers in Viseu and Fundao, Portugal for Gestamp Biomass Services.

- (2019) Variable speed drivers' (45 integration for two big biomass boilers in Viseu and Fundao, Portugal for Danfoss.

- (2019) Motor control centre for two big biomass boilers in Viseu and Fundao, Portugal for Gestamp Biomass Services.

- (2018) Control and power panels (MCC) for a big gas plant for Esindus.

- (2017) Control system for barge tanks filling and management for PetroPeru, Perú, Fernandez Jove.

- (2017) Refurbishing of the control and electrical part of the Jose Leon de Carranza Bridge, Cádiz, Spain, Fernandez Jove.

- (2017) Design and supply of a control and energy saving system for a Cooling tower, for EGERSA-Nicaragua, Esindus

- (2017) Time service refurbishing for different CPD for a telecommunication company (Leganés, Barajas and Castellana Norte), Vodafone, España

- (2017) Supply, installation and commissioning of the Integrated Communication System for the A177 and A178 ships for Spanish Maritime rescue services, Navia, Spain.



- (2017) Technical wiring for the time references and station in the new time-service building of the ROA (Royal Observatory of the Navy), San Fernando, Cádiz.

- (2017) Migration services for several package units in CEPESA refinery (PACOL 1/2, Electrophiltes, GECO101, Mixed Bed...), San Roque, Cádiz, Spain

- (2016/17) Integration of the Integrated communication systems for four rescue boats,

Navia, Cantabria, Spain, Armon Shipyard.

- (2016) Refurbishing and optimizing of the process and control (applying modern control techniques, fuzzy logic, etc...) of a pellet and wood ship factory in Alcolea, Córdoba, Spain, Gestamp Biomass Services.
- (2016) Engineering services for a package unit refurbishing in a refinery, San Roque, Cádiz, CEPSA.
- (2016) Wireless control system for an ammonia pipeline, Huelva, Fertiberia.
- (2015) Design, supply, installation and commissioning of the heat tracing and Control system for a thermal solar plant in Getafe, Spain, OHL.
- (2015) Turn Key supply of Master Clock Systems for BAM vessels for Navantia, Spanish Navy.
- (2015) Sand filters automation for water treatment, El Cuartillo, Cádiz, CAZG.
- (2015) EIT Engineering services for FEED phase of an unmanned platform (UWP Oseberg) for Statoil, in Dragados Offshore S.A.
- (2015) Engineering services and Data Base design and maintenance for telecommunication discipline for Yamal LNG project, Thales, Technip.
- (2015) Design, development and execution of a levelling system to erect subsea curved arid beds for heavy barge load-out operations for Dragados Offshore S.A., applied and successfully tested in the Mariner Jacket load-out (21kTns), for Statoil.
- (2015) Design and development of NTP Time Server for time synchronization applications (master clocks, etc...)



- (2014/5) Migration services of PLC platforms in CEPSA factories.
- (2014) Automation systems integral maintenance services for petrochemical facility and refinery in San Roque, Guadarranque y Puente Mayorga, Cádiz, CEPSA
- (2014) Sand Management System for Offshore Platform, Vega Pleyade Project for Dragados Offshore S.A., (Total Austral).

- (2014) Integration services, supply and commissioning of a control system of a splintered biomass feeding system for a biomass boiler in Ciudad Real, GESTAMP BIOMASS.
- (2014) Automation system for food seaweed factory. Electromecánica de Mantenimiento, Cádiz.
- (2013/4) E&I leading team for the disciplines the electricity, instrumentation, control, safety, F&G, telecom and heat tracing for Vega Pleyade project for Dragados Offshore S.A., (Total Austral) (under execution)
- (2013) Design and turn-key supply for electro pneumatic part for a number of units of skids for Water Treatment Plants for Wells Steam Injection, for PipeSpain (PDVSA).
- (2013) Design and turn-key supply of pumping system for the Biomass warehouse of a Biomass Boiler in Garray, Soria, GESTAMP BIOMASS

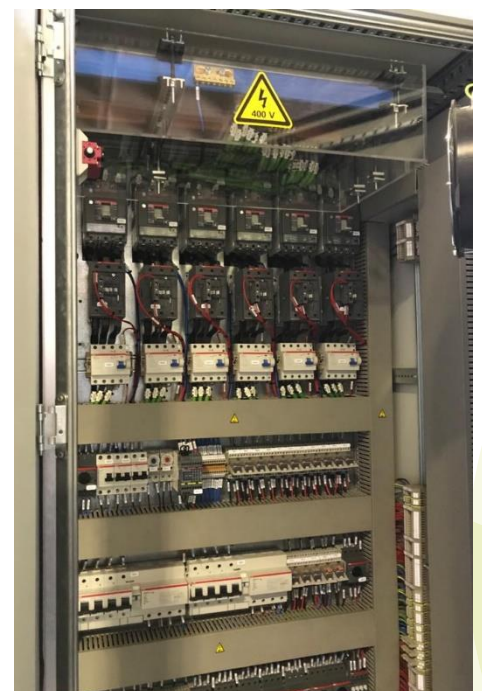


- (2013) Commissioning and tuning services for control loops of a Biomass Boiler in Garray, Soria, GESTAMP BIOMASS.

- (2013) Design and erection of a SIL 3 interposing relay panel for Horizon Oil Sands project of Canadian Natural, (Técnicas Reunidas).

- (2013) Design and turn-key supply for CCM and control panels for a ETAP “Montañés”, for Consorcio de Aguas de la Zona Gaditana.
- (2013) Post sales services in a bunkering plant in Algeciras, Cádiz. For Ecotek (Vopak).
- (2013) Coordination and installation services of lighting and instrumentation for a Biomass Boiler in Garray, Soria, GESTAMP BIOMASS.

- (2012) Permanganate injection panels for Water distribution Company, Consorcio de Aguas de la Zona Gaditana.



- (2012)



Electronic and electric services for Thermal Plant for EON Generation (San Roque, Cádiz, Spain).

- (2012) Turn-key supply of a Energy saving system for cooling towers, ESINDUS S.A.
- (2012) Turn-key supply of a Steam generation Package (two units of 3x20Tns boilers), ESINDUS S.A
- (2011) Turn-key supply (including I+D+I phase) of a RFID system to goods and inventory control, under execution (I+D+I project)
- (2011) Turn-key supply of a two cooling tower control systems, ESINDUS S.A
- (2011) Development of the construction engineering for the disciplines Electrical/telecommunication/Instrumentation for Jasmine project in Dragados Offshore, Pto. Real, Cádiz, SPAIN (Conoco-Phillips).
- (2011) Electrical/telecommunication consultancy to aid to the purchasing department for South Arné project in Dragados Offshore S.A., Pto. Real, Cádiz, SPAIN (HESS).
- (2011) Turn-key supply of a 40 Tns hydraulic winches automatization and control system for Dragados Offshore S.A. (Pto. Real, Cádiz, SPAIN)



- (2011) Services “on-site” for the commissioning of the CCM and electrical part, in a Researching Boiler (CIUDEN-Gestamp) in Ponferrada, Spain (El Bierzo).
- (2010) Loop diagram and logic diagrams definition for a Researching Boiler (CIUDEN-Gestamp) in Ponferrada, Spain (El Bierzo).
- (2010) Inspection services as “third party” of FAT test for all electrical panels of a Researching Boiler (CIUDEN-Gestamp) in Ponferrada, Spain (El Bierzo).

- (2010) Turn-key supply of a recovery of the SC4 gas pipeline control system of Sonatrach (Sougeour-Hardjet/enouss)

**PROJECTS DEVELOPED BY INGEMATION INGENIERIA TECHNICAL STAFF**



- (2009) Installation of Gas detection system in a Photovoltaic panels facility in Pto. Real for Honeywell analytics (Cádiz).

- (2009) Design basis, detailing and Engineering management of

Telecommunication, instrumentation and SCADA systems for a gas pipeline (GREO) in Algeria including a fiscal flow metering station. (Sonelgaz)



- (2009) Turn-key supply of a control system (wireless) for the synchronism of the steering system of two multi-wheels transport platforms (900 Tn, 17 axis each) with gravity centre control. Dragados Offshore S.A, Puerto Real.

- (2009) Management and design of a engineering study for the synchronism of protection relays for eight cogeneration plants of Iberdrola (Castellón) (Turk-key supply of the solution).

• (2007/8) Turn-key supply of a pipeline restore and integration of new flow measuring station for Natural gas pipeline for Sonatrach (Stroytransgaz)(THALES) Skikda (Argelia);



- (2007) Turn-key supply of a fire, smoke and gas detection system for Gas Plant Treatment (South Syria) Project coordination, basic Design and Engineering Control; Al-Furat petroleum company (THALES)

- (2007) Design and turn-key supply a portable adapter for radio and headsets of sanitary people of Superpuma helicopter crew. Spanish Air Force, Madrid

- (2007) Participation in engineering of a study of refurbishing of control system of a gas pipeline. Metragaz, Morocco.

- (2006) Turn-key supply of a CCTV system for high speed catamarans. Trapsa, Puerto de Santa Maria.

- (2006) Conception, design and turn-key supply of an Integrated Communication systems for marine rescue boats; (patented) (applied to 64 vessels of Spanish Maritime rescue services)
- (2006) Turn-key supply of a 42" gas pipeline (SC4) Sougueur Hadjret Enouss for Sonatrach (Argelia).

- (2006) Turn-key supply of a control system for waste tanks in a detergent powder plant production (Persán Ibérica S.A.)
- (2005) Turn-key supply of a control system for solid and liquid dosage in a blending area for a detergent powder plant production (Persán Ibérica S.A.);
- (2005) Turn-key supply of a temperature control system for tanks (Bodegas González Byass)
- (2004) Turn-key supply of a Control system, CCM and electrical part of a biomass boiler (Combustion Biomass actually Gestamp)
- (2004) Refurbishing of the instrumentation and



automation system of expanded plant (PTE) for Altadis, Cádiz.



- (2004) Refurbishing and optimization of automatic handling system of the International Warehouse of Altadis, Cádiz.
- (2004) Turn-key supply of an full-automatic production line to conform cartoon packing boxes for Altadis, Cádiz
- (2003) Refurbishing of PPL plant, upgrading the PLC and loop controllers for Altadis, Cádiz

- (2003) Control system programming for water pump treatment (Aguas de Cadiz)
- (2003) Turn-key supply of several auxiliary systems for manufacturing cells of automotive parts (transport and high precision measurement systems) (CIE-Mecauto, Pto. de Sta María, Cádiz)
- (2003) Automation of big cranes D3 and D4 (IZAR San Fernando)
- Basic detail engineering, tests and coordination of assembly machines, automation units testing (VISTEON)
  - (2003) PQ35 Project (Volkswagen)
  - (2002) Swin BMW (bus MOST)
  - (2002) Swin BMW (bus K-Bus)
  - (2002) EHCU and SEAT module
- (2003) Coordination and tubing supports design and engineering for KRISTIN platform unit (Dragados Offshore, Cádiz)
- (2003) Coordination of DCS project Akal-L de PEMEX (Dragados Offshore)
- (2002) Coordination of Instrumentation project for the control room for a ferry unit machines "Ciudad de Sevilla" de Transmediterránea (PROELSUR)
- (2002) Turn-key supply of HVAC system and pressurization (Z-purge) of the control system room for the platform Akal-L de PEMEX (Dragados Offshore, Cádiz)



- (2002) Refurbishing of CCTV system (ISTAMELSA);
- (2001) Turn-key supply of a blending coloring system (BASF network sweat) for Gas oil B, (ISTAMELSA);
- (2001) Turn-key supply of a blending system for IFOs performing from fueloil-gasoil (ISTAMELSA)
- (2000) Participation in management and basic project of Solar thermal plant. (Bechtel Company)
- (1999-2000) Management, design and development of a number of models of heliostats for thermal solar plant use. (ENDESA and others)
- (1999) Turnkey supply of PLC remote panels and main desk of central supervisory system for FSO Petrobras P47 (Customer: Compaq-Digital Corporation)
- (1999) Turn-key supply of a CCTV system for FSO Petrobras P47 (with Fire and gas alarms, hazardous areas) (Customer: Astillero de Cádiz S.R.L.)
- (1999) Turn-key supply of a Meteorological, oceanographic and positioning systems for FSO Petrobras P47 (Customer: Astillero de Cádiz S.R.L.)
- (1998) Research for automation infrastructure of potable water net of Cádiz (Customer: Aguas de Cádiz)
- (1998) Turn-key supply of chemical laboratory of FPSO “Cairu” (Customer: Astilleros Españoles S.A.)
- (1998) Design and supply of metrology and test workshop for the FPSO “Cairu” (Customer: Astilleros Españoles S.A.)
- (1997) Turn-key supply of meteorological and oceanographic system for semi submergible platform Petrobras P26 (offshore) (Customer: Astilleros Españoles S.A.)
- (1995) Management, design and development of aircraft park to “finger” electric power control system (Customer: Aeropuertos Nacionales)
- (1992) Participation in a HV power line parameters telemetering system (V,I,P,S,etc.) (Customer Cía Sevillana de Electricidad)
- (1989) Participation in a Synchronization system based on GPS technology for medium voltage station automation devices (Customer: Cía Sevillana de Electricidad)
- (1988) Design, development and installation of electric counters telemetering and telecontrol system. The communication media is power line (based on development system).(Customer: Cía Sevillana de Electricidad) (One important item in this project is development of ASIC device in 1.5 microns technology). One prototype of the system was installed in Tel-Aviv (Israel)
- (1987) Design and development of a power line communication systems for telemetering and telecontrol applications

**SOME PHOTOS OF DEVELOPED PROJECTS BY INGEMATION INGENIERIA / STAFF**





