

INDUSTRIAL

Energy in expansion



Industrial

Based on its extensive experience in the industrial sector, specifically in the fields of design, manufacture and repairs, and having obtained highly positive results, **ElectroRayma** has specialised in the areas of high and low voltage installations, PLCs, instrumentation, electrical tracing, and the installation, measurement and certification of communication networks, amongst other activities.

Providing a quality service to its clients combined with a competitive approach forms the cornerstone that has allowed **ElectroRayma** to become firmly established and recognised in the sector, thanks to a programme of gradual diversification and development since its creation, including a policy of on-the-job training and specialisation, together with constant investments in R&D&I.



ACTIVITIES

IRON & STEEL INDUSTRY

PETROL INDUSTRY

THERMAL POWER STATIONS

NUCLEAR POWER STATIONS

SOLID URBAN WASTE TREATMENT

BIODIESEL AND BIOETHANOL TREATMENT

WATER & WASTE WATER TREATMENT

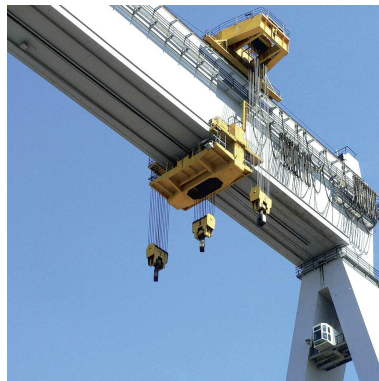
PAPER

WOOD

FOODSTUFFS

OXYGEN PLANTS

INDUSTRY IN GENERAL



ENGINEERING

- ▶ Project design and management
- ▶ Development of control systems for lifting equipment:

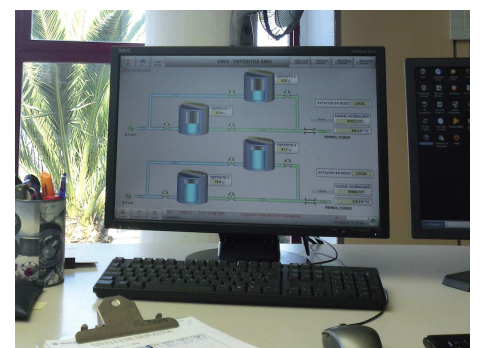
NEW EQUIPMENT

Engineering, design and documentation, manufacture of electrical panels, manufacture of operator panels, on-site assembly, weighing systems, technical service, commissioning, after-sales service.

RETRO-FIT

Engineering, study of energy efficiency, design and documentation, manufacture of electrical panels, manufacture of operator panels, control systems, supervision systems, on-site assembly, technical service, commissioning, after-sales service.

- ▶ Programming of PLCs and SCADA systems
- ▶ Commissioning
- ▶ Technical service



MANUFACTURING

- ▶ Assembly of electrical panels for:
 - Overhead cranes, gantry cranes and shipyard cranes
- ▶ Power and control equipment
- ▶ Distribution panels
 - Transformation centres and power plants
 - Distribution for secondary installations



INSTALLATION AND ASSEMBLY

- ▶ High & low voltage
- ▶ PLCs
- ▶ Instrumentation
- ▶ Electrical tracing
- ▶ Measurement and certification of communication networks:
 - Fibre optics and structured cabling



ELECTRONICS AND COMMUNICATIONS

- ▶ Repair of electronic equipment
- ▶ Repair of high power electronic equipment
- ▶ Standard and special connections
- ▶ Fibre optics:
 - Fusing
 - Connectorization
 - Loss verification
- ▶ Verification and adjustment of instrumentation



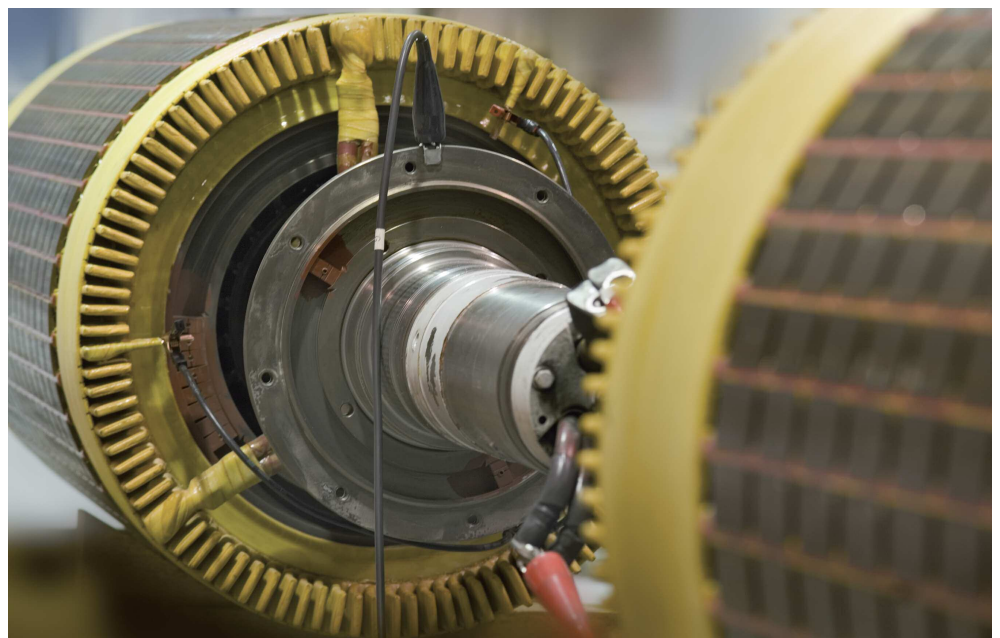
MAINTENANCE

Electrical and mechanical

- ▶ Elevating equipment:
 - Overhead cranes, gantry cranes and shipyard cranes
- ▶ Self-propelled cranes
- ▶ PLCs, PCs, CNC, HMI:
 - Programming adjustments and modifications
- ▶ AC/DC adjusters:
 - Programming and commissioning
- ▶ Installation of high and low voltage systems and DC systems:
 - Thermographic analysis of equipment and connections
 - Refurbishment of panels, cabling and equipment
 - Detection and correction of faults
 - Dry cleaning and cryogenic cleaning of panels
 - Verification of connection point torque
 - Verification of cabling condition and replacement
- ▶ Study, analysis and registration of power networks

Rotary machinery

- ▶ Predictive and preventive maintenance:
 - Vibration analysis
 - Intensity analysis
 - Shockwave test
- ▶ Corrective maintenance:
 - Windings
 - Dynamic rotor balancing
- ▶ Tests:
 - Vibration analysis
 - Intensity analysis
 - Shockwave test
 - Insulation resistance
 - Dielectric stiffness



ElectroRayma

History and departments



ElectroRayma was founded in 1990. From the outset, it has focused special attention on the technical and technological requirements of companies in relation to the construction and maintenance of electrical equipment and systems.

In doing so, it has developed its Research and Technological Development Departments in order to respond to the needs of the industrial, naval and renewable energy sectors.

ElectroRayma currently commands an infrastructure located at the Río do Pozo Business Park in Narón (A Coruña), with facilities covering a total surface of 2,600 m².

As a company that follows a strategy of constant growth and diversification, ElectroRayma employs a staff of more than 120 technicians and specialists, provided with human, productive and technological resources that guarantee its competitiveness and customer service.

Quality forms an essential part of work, making the rigorous application of methods an absolute necessity. For this reason, since 1998 ElectroRayma's working procedures have been certified by AENOR according to the ISO 9001 standard.

Safety is another of our priority objectives. To ensure its application, we have a Safety Department with specialised technicians who produce and implement Safety Plans to cover any type of incident, and which are certified according to the OHSAS 18001 standard.

Our activities are also characterised by the respect towards the environment; for instance, ElectroRayma has established an action plan for the company to be certified according to the ISO 14001 environmental management standard.

We also have a repair workshop for equipment destined for use in explosive atmospheres, certified by INERIS (the French National Institute of the Industrial Environment and Risks), as per the Saqr-ATEX reference standards (Quality Assurance System for Repairers of Explosive Atmosphere Equipment), version 4.0, which guarantees the maintenance of the original safety level of the equipment and the traceability of interventions.



