



NAVAL

Naval

ElectroRayma has been following a strategy of constant diversification and development, with a clear commitment towards its incorporation in the civilian and military naval sector. It applies a policy of continuous training and specialisation, through investment in its Research and Technological Development Departments.

Its extensive experience in design, manufacturing and repairs in the industrial sector, together with the highly reliable results obtained in terms of the quality of its customer service and competitiveness, have won **ElectroRayma** recognition from companies located in the city of Ferrol and its area of influence, who are international leaders in the civilian and military naval sector.



ACTIVITIES IN THE CIVILIAN NAVAL SECTOR

FISHING VESSELS

- Manufacture of operator desks
- On-board installation
- Main winches
- Probe cable winches
- Net drums
- Auxiliary capstans
- Automatic fishing systems
- After-sales service



OCEANOGRAPHIC VESSELS

- Manufacture of operator desks
- On-board installation
- Oceanographic winches
- Hydrographic winches
- Made-to-measure automatic drive systems
- Auxiliary capstans
- Multi-purpose elements

ACTIVITIES IN THE MILITARY NAVAL SECTOR

- Development of engineering for mooring and anchoring systems, electric propulsion and for controlling gear units.
- Design of primary and secondary conduits, cable routing, connection and positioning of equipment.
- Study and preparation for work at sea before entering shipyard.



- Manufacture of power and control panels for electric propulsion, control panels for gear units, and control panels for mooring and anchoring system.
- Connection of fibre optic cables, including testing and measurement of losses, laying, connection of cables and installation of electrical equipment.
- High voltage installations: laying, connection and verification of dielectric strength of cables.
- Metering of radar waveguide system.
- Installation of MIL connectors.
- Electric boilers, installation and sealing of watertight walkways, installation of heating cable (electrical tracing).



Engineering - Design and documentation - Regeneration systems - Manufacture of electrical switchboards

MERCHANT VESSELS

- Manufacture of operator desks
- Pipe tracing
- Mooring winches
- Auxiliary platform winches
- Automatic mooring system
- Auxiliary capstans
- Made-to-measure automatic drive systems
- After-sales service



TUGS

- Manufacture of operator desks
- On-board installation
- Torque and speed control systems
- After-sales service

Engineering - Manufacture - Installation - Commissioning - Maintenance



- Corrective maintenance (air conditioning equipment, UPS, electrical motors, battery chargers, lighting, loudspeaker systems, fire detection systems, supply and boat winches, electrical panels, general orders systems, alarm panels, power supplies, etc.)

- Preventative maintenance, including thermographic imaging and subsequent reports.

- Continuity and insulation testing for control, power and lighting cables.

- Electrical tests for demagnetisation and lighting equipment.

- Operating and commissioning tests for low and high voltage electrical equipment.

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 resour-

ces 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.



ENGINEERING

- ▶ Project design and management
- ▶ Development of control systems for lifting equipment
- ▶ Programming of PLCs, PCs, CNC, HMI
- ▶ Programming of AC/DC variators
- ▶ Commissioning
- ▶ Technical assistance
- ▶ After-sales services

MANUFACTURING

- ▶ Manufacturing of control and power equipment
- ▶ Manufacture and installation of electrical switchboards
- ▶ Manufacture of distribution panels
- ▶ Manufacture of secondary and lighting panels

INSTALLATION AND ASSEMBLY

- ▶ Low and high voltage installations
- ▶ Installation of PLCs
- ▶ Installation of instrumentation
- ▶ Installation of electrical tracing
- ▶ Installation, measurement and certification of communication networks: fibre optic and structured cabling

ELECTRONICS AND COMMUNICATIONS

- ▶ Repair of electronic equipment
- ▶ Repair of electronic power equipment
- ▶ Standard and special connections
- ▶ Optical fibre
- ▶ Verification and adjustment of instrumentation

MAINTENANCE

PREDICTIVE, PREVENTATIVE AND CORRECTIVE

- ▶ Lifting equipment
- ▶ Self-propelled mobile cranes
- ▶ Static and rotary machinery
- ▶ PLCs, variators, PCs, CNC, HMI: programming adjustments and modifications
- ▶ Low and high voltage installations and continuous current systems
- ▶ Study, analysis and registration of power networks

