

## DESCRIPTION

Industrial processes require control systems for the different products involved. These processes vary greatly and cover a wide range of products, from the petrol industry, ceramic tile industry and power stations through to the iron and steel industry, thermal treatment plants, paper mills and the textile industry.

In all of these processes, it is essential to control and supervise different factors such as pressure, flow rates, levels, temperature, pH,

conductivity, velocity, humidity or dew point. Measurement and control instruments make it possible to maintain and adjust these factors to the ideal levels, with an accuracy that cannot be achieved by operators alone. For all of these reasons, it is essential that all of this equipment is perfectly adjusted BY CARRYING OUT PREDICTIVE AND CORRECTIVE MAINTENANCE ON IT.

## ELEMENTS

Used to measure, convert, transmit, control or record different variables involved in a process, in order to optimise the different resources that are used.

The variables to be measured or controlled may be physical (flow, pressure, temperature, velocity, weight, humidity and dew point) or chemical (pH, electrical conductivity and redox).

These elements are used on a widespread basis in industry, and require specific installation, calibration and maintenance processes.



## TECHNICAL RESOURCES

NAME EQUIPMENT	MAKE/MODEL	SERIES NO.	INTERNAL ID NO.
Multifunction process calibrator	Fluke 744	7977004	835
Precision multimeter	Fluke Dual 45	8355001	3124
Digital oscilloscope	Fluke 199C	DM8370392	831
Load resistance equipment (21 to 53 mΩ)	----	----	3131
Relay checker	Sverker 750	9002526	2093
Simulator PT100	Grader PT 100	72230	3127
Loop calibrator	FLUKE 715	8333065	838344
Lux meter	TES 1330A	060116096	1101
Precision infrared thermometer	Fluke 66/68	9319-1615	498
Digital manometer	Parker-Service Junior	ER-3025	3025
Digital manometer	Parker-SCJN 600-01	ER-1707	1707
Multimeters	Fluke 189	88180169	----

## INSTRUMENTS FOR CALIBRATION

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- Pyrometric cones, cables and compensated cables
- Displacement cylinder pressure transmitters
- Flow meters
- Temperature probes
- Motorised valves
- End of travel and torque limit switches
- Load cells
- Pressure transmitters
- Thermocouples
- Pyrometers
- Pressure gauges
- Flow meters
- pH meters
- Oxygen meters
- Opacity meters
- Differential pressure transducers
- Nebulizers
- Steam cut-off valve actuators
- Atomisation cut-off valve actuators
- Flame detectors
- Turbidity meters
- Inclination sensors
- Levels

## CLIENTS

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ElectroRayma checks and adjusts electronic equipment for a variety of clients, including:

- Megasa Siderúrgica Group
- Endesa Generación
- Alcoa
- Carbuos Metálicos
- Navantia
- Repsol
- Air Liquide

