Automation Division

MONT-ELE

Evolving Energy Engineering

For over 40 years, we have been developing technologies and electrical, electromechanical, electronic and automation systems for the energy, transport, industrial and environmental sectors.

The goal of the Automation division, established in 2006, is to supply the most advanced automation and SCADA systems for all sectors of application, complying with modern technologies and offering continuous innovation to our customers.

A team of highly qualified and experienced engineers work to design automation systems for safe, reliable, efficient and sustainable management of energy and systems. The Mont-Ele systems are available 24 hours a day, seven days a week, on site or remotely controlled, for automatic processes and to support operators. Routine operations and guided maintenance procedures are user-friendly and efficient.

Application sectors

Main activities

- System design
- Software development
- Customised product development
- Control panel construction
- Testing and commissioning

System types

- Railway and city transport systems
- Electrical substations
- Conventional and renewable energy generation
- Environment and water treatment
- Chemical and processing plants
- Industrial systems

SYSTEM DESIGN

Technical office for designing automation system hardware and software (SCADA, DCS, PLC etc.) for all application types.

The main activities are:

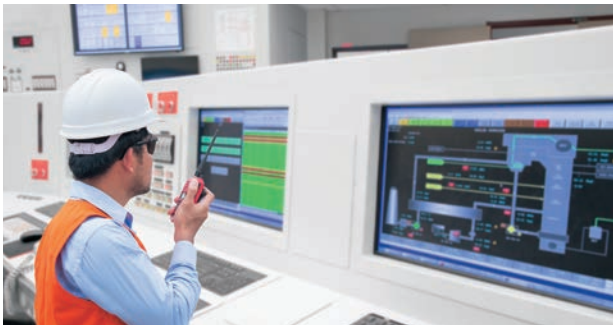
- Process requirement analysis
- Process and preliminary engineering development
- System architecture definition
- Detail project development
- Database and I/O list design
- SCADA - DCS system specifications

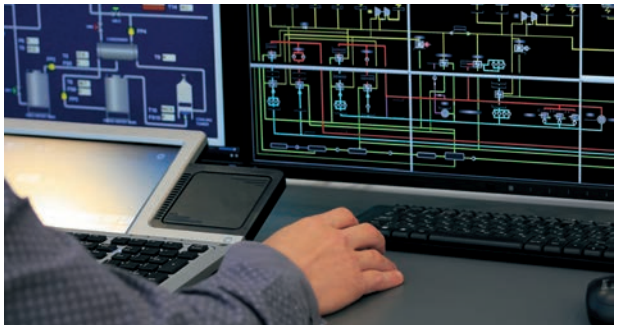
SOFTWARE DEVELOPMENT

Teams of experts for developing software configurations for SCADA, DCS, PLCs, inverters etc. for all applications.

The main activities are:

- Project specifications analysis
- Control system design and development
- Database design and development
- SCADA - DCS design and development
- HMI design and development
- Factory acceptance tests
- On-site commissioning





TECHNOLOGIES

Our systems implement modern control technologies, exploiting expertise across different sectors to bring innovation and continuous improvement.

Control systems:

We use data acquisition and control systems made by major industrial brands, according to the customer's request, to make automation and field-supervision system interface logics.

- RTU, PLC, remote I/O, IED
- Inverters, sensors and field instruments

Supervision and diagnostics:

SCADA / DCS platform-based systems for facility supervision, interaction with the operator via diagnostic and maintenance functions and interface with higher hierarchy systems.

- Client/Server applications
- Energy Management
- Historian
- Remote Control and Remote Servicing

Architectures and communication protocols:

Centralised or distributed architectures are implemented, based on ring networks and field buses.
The most important communication protocols on the market - Ethernet, serial and field bus - are used.

- IEC 61850
- IEC 60870-5-101/103/104
- Modbus TCP-RTU
- Profinet-Profibus
- Ethernet IP
- Legacy and custom protocols

CONTROL PANEL CONSTRUCTION

With the technical and manufacturing resources of Mont-Ele, the Automation division develops and constructs control panels for all sectors using high-quality products and decades of experience.

- HMI-SCADA panel
- Synoptic panels
- Control panels
- Low voltage and drive panels
- Instrument panels
- Control rooms

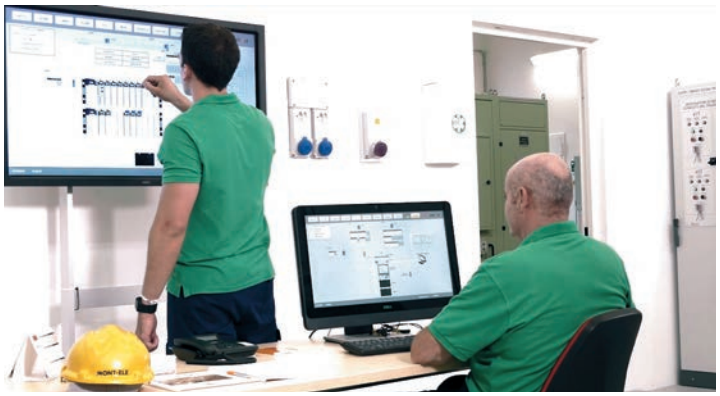
TESTING AND COMMISSIONING

Integrated testing at the factory and full on-site support

We integrate the automatic system with control and power panels in our factory and run integrated test procedures to check all aspects and system logics.

The software specialists who developed the project perform the testing activities at the factory, provide on-site assistance and conduct commissioning activities to guarantee a single contact interface to the customer with experts who know the entire system.

Full support is provided during system start-up together with a personalised aftersales service tailored to the customer's needs.



Cod. DIV.A

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