

Arneg Project

Production plants

THE PROJECT

Installation of a **centralized monitoring and control system** to rationally manage the energy consumption in the **production plants** located in Italy, with the aim of extending the project to all Arneg factories worldwide (for a total of 20 plants).

THE CHALLENGE

To control and manage all the parameters that ensure well-being and quality, optimizing resources and reducing energy costs.

OUR ACTIVITIES

- Field data collection.
- BMS management, monitoring and analysis.
- Energy management and reporting.

MANAGED SUBSYSTEMS

- Electricity and natural gas consumption
- Heating
- Lighting
- Thermoregulation
- Photovoltaic
- Fire Alarm
- Compressed Air
- Presses
- Carriage Loader
- Skylights
- Extractors



CLIENT



Arneg is an **international leader in the design, manufacture and installation of complete equipment for the retail sector**, with focus on refrigeration products.

As part of its “Naturally Innovative” program, Arneg has rationalized its technology, production plant and infrastructure in order to improve the quality of life in the workplace and reduce the impact of its industrial activities on the environment. In 10 years, Arneg has cut the company's energy requirements by over 50% per unit part produced.

ARNEG MAIN PLANT

- Covered area: 71.300 mq
- Production: 33.000 counters
- Energy requirement: 886 TOE

Data management and collection:

- **JACE8000 / QHunter** controllers
- **QContax** getaways

Legacy device integration:

- **NotifierAM** (fire detection)
- **Carel** (refrigeration and air conditioning)

Energy supervision and analysis:

- **Easylink**, native platform on Niagara framework, centralized control of consumption. The use of the optional module **Energylink** allowed an advanced and sophisticated energy management, fully integrated into the system.

The new BMS has brought the following advantages:

- *Flexibility*, thanks to the creation of modular and customizable analysis interfaces based on the field results.
- *Rapid development* of some specific diagnostic monitoring.
- *Control* of variables with easy data processing for improvement actions and future projects.

I NOSTRI PRODOTTI



easylink
energylink



QHunter
QContax

NotifierAM

CarelDriver

"The economic returns are enough high to finance other important investments and reach goals of energy excellence."

Client Cit.

THE RESULTS

Current situation of the main plant

- Extremely limited waste.
- Good plant optimization.
- Dynamic consumption: strictly based on production trends and climatic factors.
- Learned and sufficiently motivated staff.
- The remote control of the operating parameters allows a high reliability of the systems, targeted interventions and the guarantee of production continuity.

Environmental impact of industrial activities

- 45% less total Kg of CO2 emitted over 11 years. *
- 76% less annual gas consumption in 7 years.
- 33% less electricity consumption and 56% less energy purchased.
- 48% less energy requirement (886 TOE).

* infrastructure activities. No diesel, no transport