

Enercom & eSight Energy supply automatic Monitoring and Targeting solution to UNIQ Foods

Uniq Plc is a European chilled food producer. It makes predominantly fresh chilled desserts, salads, spreads, fish, dips, dressings and ready meals for sale in the UK and continental Europe. UNIQ Plc is a major supplier to leading supermarket groups in Europe on a branded and customer own label basis.



The Requirement

UNIQ Prepared Foods in Spalding, supplies many of the UK's leading supermarkets with a wide range of dressed snack, delicatessen and salad bar ranges. £3 million invested in two automated production lines in 2004 has put Spalding at the forefront of automated technology.

UNIQ were using a large amount of energy; in particular water which is used for the washing of food items along the production lines.

UNIQ's requirements were two-fold. They required:

- the ability to measure the energy and water consumption along various stages of the production line.
- a monitoring and Targeting application to analyse and report on the utility usage.

The Solution

Working in partnership Enercom and, eSight Energy delivered an end to end solution for UNIQ Foods.

UNIQ chose Enercom for the supply and installation of over 60 sub meters along various stages of their production line. Enercom also supplied their Multilog product, for the automatic logging of half hourly meter data. UNIQ selected eSight Energy automatic monitoring and targeting suite, eSight, for the automatic import, analysis and reporting of their energy data.

The combined solution supplied by Enercom and eSight enabled UNIQ Foods to:

- Automatically collect energy data at strategic points on their production line
- Log the ½ hourly meter data and transfer this to eSight on a daily basis
- Analyse the energy data to determine the cause of anomalies with the specific aim of saving expenditure on utility costs

Technology - Data Provision for Energy Management

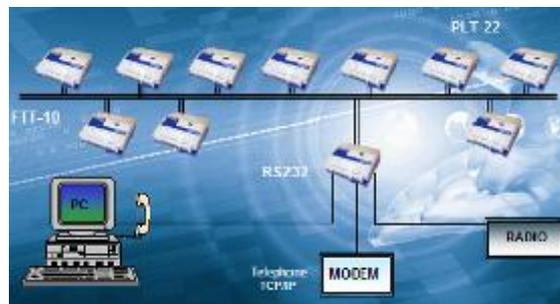
The AMR system is a system of data loggers called Multilog units which receive meter pulses (from any type of meter: gas, electric, water, oil, heat etc.) and convert the pulse count into a KWh energy usage figure for each half hour (or other programmed unit and time period) and stores the time-stamped values for up to 60 days, continuously updating the most recent sixty days worth of half hourly figures in readiness to repeat/download this data when requested by the host PC.

Multilog controller software running on the host PC initiates regular automatic downloads of the half hourly data and copies it into easy to use CSV/ASCII files for interpretation by eSight® Software (or any proprietary M&T Software or into a Building Management System (BMS)) for analysis. This allows the software to check that meter data arrives in unbroken order and to re-initiate a download if communication is incomplete. The system has proven to be resilient and reliable in operation. The Multilog system also provides useful raw meter data such as instant meter readings, time-stamped readings, energy use profile charts and the means to easily view, analyse and copy data from a Web-Browser application into Microsoft applications such as excel.

Convenient and Clean Installation

Multilog units are equipped for communication over a variety of media including existing single or multiphase mains cables using an in-built PLT-22 Powerline interface and twisted pair using an in-built LONworks communications chip. This means that installation is clean and local, there is no requirement to drill walls and lift carpets and floorboards to lay extra cabling, there would be no disruption to power supplies and also any work can be carried out during opening hours

Where network components or host PC are remotely situated, communications are extended via the internal telephone network or PSTN using dial-up modem or via TCP/IP Ethernet LAN interface to a Multilog “gateway” unit. Given that there was a requirement for minimum disruption to the clients. The Multilog system is easily expanded or altered to allow for changes at the site, or where continuous plant operation necessitates a phased approach to implementation.



The Outcome

Data is imported automatically from the Multilog units into eSight on a daily basis. UNIQ Foods are then able to analyse the ½ hourly data in both graphical and tabular formats.

UNIQ Foods are able to store complex supplier STOD (Seasonal Time of Day) tariff information and create budgets. This enables the energy data to be represented in monetary terms.

Reports detailing various performance and cost aspects of UNIQ’s energy usage can then be scheduled for automatic distribution throughout the company, via email

Testimonial

“It was a pleasure dealing with Enercom and eSight, a seamless partnership delivering on time and to budget.”

Keith Roberts

Site Services & Contracts Manager

Many thanks to eSight Energy for the provision of materials used in this case study.