

Esterline

Darchem Engineering

The Company

Darchem has four business units, three of which provide engineered solutions to the high temperature problems of, primarily, the aerospace industry. The fourth provides fire protection and high temperature insulation solutions for the offshore and nuclear markets.

Darchem utilises computer aided design techniques and software, combined with on site fire testing facilities, and unrivalled expertise to provide the optimum engineered solution to our customers' high temperature problems.

The Application

In approaching Energy Monitoring, Darchem had two clear objectives, the first to address CRC statutory commitments and the second to reduce their spiralling energy bills by identifying areas of their manufacturing process where costs savings could be made.

Darchem recognised that a comprehensive network of sensors would need to be installed, monitoring mains energy meters and providing deeper resolution by individual sub-metering sections of the facility and high energy consumption items of equipment.

The Project

Invisible Systems were introduced to Darchem by one of our Energy Consulting partners.

As one of the outcomes of an energy management report they identified a need for installation of a complete monitoring system.

Darchem selected Invisible Systems LTD as the supplier because of the low-impact installation requirements of the low-power radio sensors and intuitive energy analysis tools.

Project Outcomes

The Darchem solution was installed in July 2010 and comprised 30 RF Energy Sensors, a RF/GPRS WAN Gateway and delivery of data to version 1 of Invisible Systems Online Data Analysis tool. It is now in daily use. The solution has met the application and project requirement to enable automated CRC reporting.

The solution has also been very beneficial in the identification of the high energy usage areas of the manufacturing production line, where Darchem have made adjustments to their equipment and processes to reduce utility costs.

Darchem plan to move forward and gain even greater benefit through migration to the latest version of Invisible Systems Real-Time Online Cloud based Web application. Specifically, Darchem want to identify peak energy usage to enable better negotiation with their energy providers. Darchem have also identified a need for exception reporting that is provided against customer configurable thresholds and are delivered by email and / or SMS in the latest solution.

Dave Ayling, Facilities Manager at Darchem. *'The system is used daily and has enabled the simplification of our CRC reporting. We're now ready for the implementation of Real-Time Online Version 2, which gives Darchem a position of strength with real information when negotiating with our energy providers to drive down energy costs.'*

