



LOCATION

Costco Wholesale warehouses can be found around the world, Derby is one of 28 warehouses in the UK. Based near Pride Park and Wyvern Retail Park, the Derby store caters to both individual and trade customers throughout the week.

CASE STUDY

Costco Wholesale, Derby, Derbyshire

Operating since 1983, Costco is an international chain of membership only warehouses. Costco now has 729 warehouses worldwide with a growing membership base. Serving individual and trade customers, Costco offers choice food and drink along with household goods and luxury items. With 28 of these warehouses in the UK and a large amount of energy required on a daily basis, Costco began implementing **powerPerfector** technology with 31 units installed since 2012. The Derbyshire warehouse has been the first to be upgraded to the **powerPerfector iQ**.

In order to provide energy, cost and carbon savings, a standard **powerPerfector** unit was installed in February 2013. The advancement in **powerPerfector** technology since then has resulted in a retro-fit upgrade called the **powerPerfector iQ** which transforms a standard fixed unit into a dynamic unit. This new development benefits our customers with the most advanced electronic voltage control technology available.

With a super-fast reaction to supply voltage changes, the **powerPerfector iQ** provides precise and stable voltage control across the site, regardless of site conditions and voltage fluctuations. This control benefits site equipment, protecting vital equipment and ensuring maximum equipment efficiency through active 3 phase balancing.

Proving to be an instant success, the retro-fit installation took place in August 2016 and has resulted in an improvement of existing unit performance taking the 8% existing savings to 13% - a near 60% jump in savings.

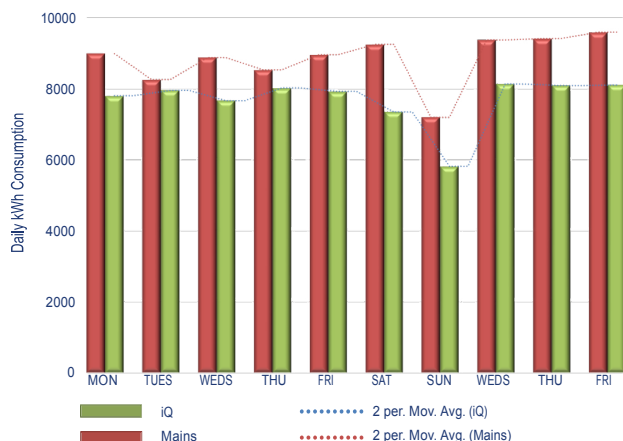
INFORMATION

Unit	powerPerfector iQ
Unit size	690 kVA
Install date	Aug 2016
Annual kWh saving (kWh)*	122,110
Annual cost saving (£)*	10,990

* Additional savings



MAINS TO pP iQ DAILY COMPARISON



Date of testing: 29/11/2016 - 23/12/2016

Total iQ: 76,906 kWh

Total mains: 88,471 kWh

Difference: 11,565 kWh (13.7%)