

# 19.9% Savings on Voltage Optimization at Beaverbrooks Retail Store

## OVERVIEW

Beaverbrooks is one of the UK's leading jewelers, with over 800 employees and 65 stores throughout the UK. Since contribution to the community and environment has always been important values in Beaverbrooks vision, and as part of the budget strategy for 2011, Beaverbrooks decided to reduce their electrical expenses and CO<sub>2</sub> emissions. Together with Apollo Enviro – PowerSines partner in the UK, they identified ComEC voltage optimization system as one route towards achieving this goal.

The ComEC voltage optimizer generated savings of 19.9% on all electric costs – exceeding Beaverbrooks' initial expectations.

*"The ComEC trial in these three stores has proven great success. These promising results will help towards the CRC Energy Efficiency Scheme. We plan for a future roll out starting with the Head Office and more stores in 2011."*

**Gary Jackson,**  
Head of Store Design & Property Maintenance,  
Beaverbrooks



ComEC installed after main switch in electric cabinet

## SOLUTION

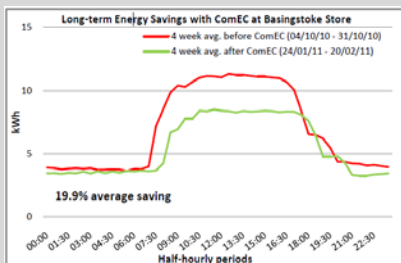
Apollo Enviro conducted site surveys in Beaverbrooks stores and chose PowerSines voltage optimizer, ComEC 3x80A and 3x125A models as the standard solution for all shops. ComEC dynamically regulates and stabilizes the voltage supplied to the facility. By stabilizing the voltage at 220V on the UK electric grid, which sometimes exceeds 240V, ComEC maximizes energy savings. ComEC, a compact unit, fits easily within the electrical cupboard after the main switch without requiring any changes to the existing electrical infrastructure. This neat, light-weight design is one of the big advantages of the ComEC.

An additional stabilization benefit is the consequent reduction in equipment maintenance and replacement costs; over-supply places extra operational stresses on equipment.

After the successful ComEC installation at three of Beaver brook's stores, Liverpool, Kinnaird and Basingstoke, generated consistent saving results that exceeded expectations; Beaverbrooks decided to roll out a deployment plan for the head offices and the entire branch network.

## RESULTS

The graph and table below shows results of ComEC installation at the store located in the Festival Place shopping mall with 19.9% average savings and an estimated payback period of about 3 years.



	Annual Savings
KWh savings with ComEC	23,500 KWh
£ savings with ComEC	£ 1,800
CO <sub>2</sub> savings	12.75 tones CO <sub>2</sub>
<b>% of total annual saving with ComEC</b>	<b>19.9%</b>

# CASE STUDY

## APPLICATION

Retail

## BENEFITS

Up to 20% direct savings for all electric loads

ROI within 1.5-3 years

Quick and easy installation

No changes to existing electrical infrastructure

Voltage optimization, stabilization and control

Internal & manual bypass & protections

Reduced equipment maintenance & operating expenses

