**CASE STUDY**

**INTRODUCTION**

The National Metalforming Centre in West Bromwich prides itself on its smart, contemporary and friendly ambience. Its conference facilities and in-house catering service have attracted an impressive client list.

The building is also home to the Confederation of British Metalforming – the leading trade association for UK manufacturers of fasteners, forgings and pressings.

**THE CHALLENGE**

Monitoring the electrical consumption of the site showed the voltage levels were fluctuating between 240V and 255V. The majority of electrical equipment in the UK is rated to run at 220V and being supplied at over 240V can reduce in increased electricity costs, higher carbon emissions and premature equipment failures.

The Powerstar team were challenged to actively reduce the incoming voltage to lower costs and limit equipment failures without impacting on the business operation and services provided by the facility.

**THE SOLUTION**

Following an audit of the site voltage profile and electrical loadings, the Powerstar team recommended a voltage optimisation system with an 8% reduction in incoming voltage, as the most effective and efficient solution for the site, to provide quantifiable savings.

Due to its unique design Powerstar also provides total phase balancing and filters harmonics from the supply.

**KEY FIGURES**

- **Energy consumption savings:** 21%
- **kWh savings:** 27,512

**CUSTOMER QUOTATION**

“The purpose of this project was to reduce our energy consumption at the National Metalforming Centre. This has been achieved with the installation of the Powerstar which has cut our energy costs by 21%.”