



HELPING MANUFACTURING SITES SAVE MONEY AND REDUCE CARBON FOOTPRINT. **GUARANTEED.**

WHY POWERSTAR FOR MANUFACTURING SITES?

Many manufacturers have yet to take steps to reduce their energy consumption and carbon emissions associated with their operations, with most companies remaining cautious about implementing energy saving technologies due to the perceived effects these technologies might have on equipment and operating efficiency.

The Powerstar voltage optimisation system is a proven and reliable technology, manufactured in the UK to the highest efficiency and holding the acclaimed Made In Sheffield accolade. The Powerstar team's project-led approach ensures the delivery of a turnkey solution from project launch to completion, safeguarding manufacturing operations from disruption.

Powerstar's patented technology reduces machinery maintenance costs due to improved power quality. This increases long term reliability and reduces down-time without affecting equipment performance.

- **Powerstar achieves average savings of 12%-15% on energy consumption**
- **Powerstar significantly reduces harmonics**
- **Powerstar offers up to 15 years warranty and a 50 year lifespan**
- **Powerstar has no moving parts and requires no maintenance**
- **Powerstar's average payback is less than 5 years**

HERE'S WHAT OUR CLIENTS SAY:

“ Powerstar is a unique find. It provides simple, pragmatic solutions to reduce energy consumption. Benefits are instant and confidence in the product is reinforced by guaranteeing the promised savings. If you are serious about energy reduction, we certainly advocate the effectiveness of energy optimisation equipment. ”

Birmingham Stopper: **James Bowyer**
Quality Manager

“ The installation of the Powerstar system has reduced our total electricity consumption by almost a quarter (23%) and we are absolutely delighted. ”

Purification Products: **Quentin Mackenzie**
Managing Director



CASE STUDIES

POLYFLOR

Polyflor strives to be an environmentally and economically sustainable business. As part of its drive to function as carbon neutral as possible, the company turned to Powerstar to determine if voltage optimisation could form a key part of its sustainability strategy.

Savings

The results from the on/off testing demonstrated annual energy consumption savings of **34,619kWh**, representing a **12.8%** reduction in Polyflor's annual energy consumption. The testing also showed that Polyflor could realise annual financial savings of **£3,635** by installing the Powerstar system.



PURIFICATION PRODUCTS

Purification Products Limited incorporates active powders into textile, board and foam type substrates, resulting in materials that are both clean and easy to handle. Powerstar was challenged to demonstrate how its voltage optimisation system could make a significant reduction to the company's electricity consumption and CO₂ emissions without having a detrimental impact on Purification Products' plant and machinery.

Savings

A **23%** reduction in total electricity consumption was attained. This represented a financial saving of **£12,000** per annum and a reduction of **90.9 tonnes** in CO₂ emissions. The Specific Energy Consumption (SEC) in kWh/Kg was also reduced by **23%**.



AESSEAL

AESSEAL takes a progressive stance towards improving its environmental performance. In particular, the company is committed to reducing its CO₂ emissions from the use of electricity. AESSEAL has an impressive track record for managing its carbon emissions, and is continually looking for new ways to use energy more efficiently.

Savings

An immediate energy saving of just under **8%** and the resultant reduction in electricity costs were achieved following the installation of Powerstar. AESSEAL received a loan from The Carbon Trust and achieved a **3 year return** on investment. The company also benefited from extended equipment lifespan.



NORTHERN FOODS

Northern Foods operates around 20 sites across the UK and Ireland. The organisation is working continuously to reduce the impact of its operations on the environment and have set challenging environmental targets. It also has a continuous commitment across all sites to identify effective ways of realising savings.

Savings

Powerstar proved to be the ideal energy saving solution for Northern Foods. Before installation, the average monthly energy consumption was **430.1kWh**. This was reduced to **387.8kWh** after installing Powerstar, meaning that substantial energy savings of **9.84%** – or an average direct saving of **33.5kWh** – were achieved. Based on 360 days of production per year, Northern Foods reduced its energy consumption by **365,883kWh**, equating to an impressive annual saving of **£21,953**.

