

# CASE STUDY



## VOLTAGE OPTIMISATION IN PLASTIC PRODUCTION

### Introduction

Portola Packaging Ltd (Europe), are a division of Silgan Closures Europe, a global manufacturer of Metal and Plastic Caps and Closures. The European plastic division are an established, high volume supplier of Plastic closures to the Dairy, Juice, Water and Food industries serving over 50 country locations across Europe and Asia. Silgan Holdings was established in 1926 and in 2013 merged Portola Packaging with Silgan Whitecap Europe/Asia.

### The Challenge

Portola were seeking an energy saving system which could have an immediate and positive affect across their operations, reducing energy consumption and the associated costs with minimal disruption to production on site. The site was also looking to save on the amount of carbon dioxide it produced.

### The Solution

Powerstar presented Portola with an energy system that increased the life expectancy of onsite equipment, reduced electricity costs and cut the companies' carbon footprint and CO<sub>2</sub> emissions. Three Powerstar units, a Powerstar 1000kVA system and two Powerstar 1500kVA systems were installed at the Doncaster Head Office site. Guaranteed savings from Powerstar were 5.5% but average savings across all three systems achieved over 8% per annum.

### Customer Quotation

“ Powerstar has provided us with great savings on our electricity bills with a quick installation and excellent service throughout. We are extremely happy and would thoroughly recommend installing Powerstar Voltage Optimisation. ”

**Max Bytheway**, Chief Engineer, Portola Packaging Ltd

### Savings & Benefits

#### Key Figures

Reduction in energy consumption: **8%**  
Return on Investment: **2 Years 6 Months**  
Tonnes of Carbon Dioxide saved: **514.8t CO<sub>2</sub>**

#### Benefits

Along with the main benefits, the unique, Powerstar system, which is the only voltage optimisation system in the world with a patent on it's design has also significantly reduced harmonics on site and improved power factor. Powerstar can provides savings on a variety of loads including LED lights and variable speed drives (VSDs), which many voltage optimisation systems can't do.



**Portola Packaging, Doncaster, UK.**



**Produces Plastic Caps & Closures**

