



Quorn Foods - Billingham

INTRODUCTION

Quorn Foods was founded in 1985 with its headquarters in North Yorkshire. The company operates 5 sites internationally and has a simple goal: to bring people delicious and exciting food that is good for them and good for the planet.

The company has an annual turnover in excess of £200 million.

THE CHALLENGE

Environmental sustainability is driven within the organisation via its Supply Chain Sustainability Strategy which prioritises improvements relating to Greenhouse Gas emissions, water use, waste and responsible sourcing. Key to this is ensuring production processes are as efficient as possible.

As a company with a large reputation for excellence, it was imperative that Quorn Food's business operations were not interrupted during the installation.

THE SOLUTION

Following a review of the Quorn Foods site in Billingham, two incoming supplies were identified which would benefit from replacing the existing onsite distribution transformers.

Powerstar offered a perfect solution to lower electricity consumption, reduce CO₂ emissions and minimise energy costs through its HV MAX amorphous core distribution transformer with integrated voltage optimisation solution.

Replacing the existing inefficient transformers with Powerstar HV MAX systems increases the efficiency of the HV infrastructure, and the 27.3V reduction in voltage produces significant reductions in energy consumption.

SAVINGS & BENEFITS

The supply feeding TX1 and TX3 was monitored and the readings showed the maximum voltage supplied to site was 256.6V with the average being 248.4V. Replacing these transformers with a 1600kVA Powerstar HV MAX yielded annual consumption savings of 10.2%.

The supply to TX10 was also monitored and registered a maximum voltage of 230.9V and an average voltage of 227.3V. TX10 was replaced with a 453kVA Powerstar HV MAX system which is also providing the site with annual consumption savings of 5.1%.

KEY FIGURES

TX1 & TX3

- ✓ **Annual Consumption Saving: 10.2%**
- ✓ **Annual kWh Reduction: 637,033**
- ✓ **Annual CO₂ Saving: 284.5 tonnes**
- ✓ **Annual financial saving: £57,900**

TX10

- ✓ **Annual Consumption Saving: 5.1%**
- ✓ **Annual kWh Reduction: 151,093**
- ✓ **Annual CO₂ Saving: 80.5 tonnes**
- ✓ **Annual financial saving: £13,943**



Quorn Foods is saving a total of £71,843 annually following the Powerstar installations.

LITE MAX HV MAX