



Vassiliko Cement Works Public Company Ltd

INTRODUCTION

Vassiliko Cement Works Public Company Ltd is the largest heavy industry company in Cyprus. It has been operational since 1967 and listed on the Cyprus Stock Exchange since 1996.

Currently, the company operates four quarries to extract the raw materials for their production of clinker and cement.

Sustainability and environmental protection are core to Vassiliko Cements Works' operations and in 2011 they completed a €180 million upgrade of their cement plant to make operations more efficient.

These upgrades have resulted in Vassiliko Cement Works reducing their electricity and water consumption in their production by 70% and their thermal energy consumption by more than 30%. This has resulted in the company's CO₂ emissions being reduced by an impressive 15%.

THE CHALLENGE

Vassiliko Cements is HV metered and the supply feeds several substations to 11KV and 415V.

Powerstar were chosen due to the experience they possess installing into similar challenging environments. The site evaluation, monitoring and installation processes were carefully scheduled to result in minimum down time.

THE SOLUTION

After a full site evaluation, Powerstar recommended looking at the substation supplying the **Raw Mill Air Compressors** as a priority. The incoming voltage at that point was found to be high and fairly unstable with an average incoming voltage of 241.6V.

The Powerstar team recommended the installation of Powerstar MAX, an electronic-dynamic voltage optimisation system. The solution offered by the installation of a 1438kVA unit reduced, conditioned and stabilised the incoming voltage by an average of 20.4V.

LITE MAX HV MAX

SAVINGS AND BENEFITS

Analysis of the site following installation has shown a higher than guaranteed electricity consumption saving of **9.7%**. This equates to an annual reduction of 449,611kWh and 458.15 tonnes of CO₂ emissions.

They have now ordered a second Powerstar MAX system, for substation LV5.4 supplying the Pre-Heater loads, which will generate guaranteed energy consumption savings of 7.2%.

This will help Vassiliko Cement Works to achieve their goal of further energy efficiencies and reduce their impact on the environment.

KEY FIGURES FOR FIRST INSTALL

- **Annual Consumption Saving: 9.7%**
- **Annual CO₂ Reduction: 458.15 tonnes**
- **Payback Period: 1 year 2 months**



Vassiliko Cement Works: clinker and cement production facility



Raw Mill Air Compressors: electrical consumption savings of 9.7%