

Plastek UK Limited

A water treatment case study

- Site system and process analysis
- Changes to chemical cycle and dosing
- Changes to reporting and monitoring
- Operational improvement
- Efficiencies and lower water use
- Enhanced compliance



Overview

Plastek is a division of the US-based Plastek Group – a world class manufacturer within the plastics industry. The UK 240,000 square metre manufacturing facility is a technically advanced injection moulding site offering custom injection and blow moulded components for multi-national FMCG clients in the personal care, household, food and beverage, healthcare and cosmetic markets.

Key issues

The UK site is subject to a continuous improvement regime which guarantees the highest levels of efficiency. The site is also expanding – with additional manufacturing equipment investment and evolving water treatment and cooling needs to keep pace with manufacturing.

Plastek's management enrolled on the 'Legionella Control for Everyone' course (WCS Group) and wanted to elevate and optimise water treatment systems and process control and drive efficiencies. They were looking for heightened compliance, reductions in water use and smarter testing and reporting regime, enabling greater understanding and better decision-making.

WCS Group's approach

We began by creating a 'best practice' service programme including the cooling towers, domestic systems and chilled water systems. We reviewed every aspect of water treatment, process and system control and current performance KPIs to create a start-point and new, improved KPIs.

Biocide dosing was changed to correct inconsistent testing results and reduce site maintenance management time.

A 'smart' WebMaster dosing system was installed enabling full data collection and monitoring and chemical cycle change parameters. This improved system also compiles datalogs for conductivity and bromine levels and can raise email or SMS alarms if agreed targets are not met. The system can self-correct to pre-agreed adjustments.

System control was enhanced by the use of WebMaster and other improvements. Chemical and water usage is down and all information is readily interrogated and exportable in to the site Log Book. Installation costs were recouped in less than 18 months.

Corrosion monitoring has enabled fine adjustments to extend plant and equipment service life.

Set-up enhancements and service programmes to the water cooling towers have been adjusted to optimise operating results.

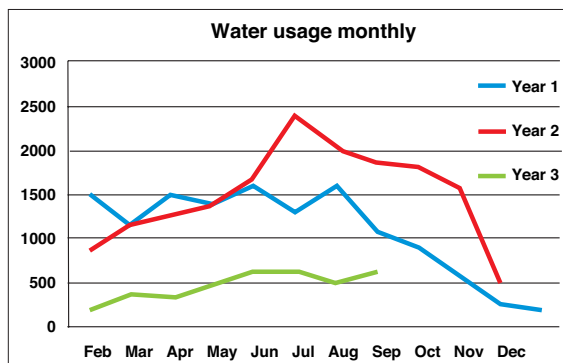
WCS Group conducts weekly visits, monthly checks and analysis and a six-monthly operational review to ensure that plant and equipment efficiency is maximised and site competitiveness is maintained.



Outcome

Water usage is down significantly. The site's water and separate chilled cooling systems operate much more efficiently and seamlessly. Chemical use is down. Smart dosing and WebMaster monitoring has enabled the company to pursue and maintain far higher water systems and process KPIs. The service life of assets has been extended even though plant and equipment is now working harder. Site, maintenance and operating employees enjoy greater knowledge and benefit from proactive, technical WCS Group knowledge and best practice.

"The changeover of water treatment service provider and improvement of the control programme was carried out with the minimum of disruption. Within three months we have had tighter control and cost savings. We continue to provide service of a very high standard. They have worked in partnership with us to deliver cost savings, site improvements and efficiencies."



About WCS Group

WCS Group are water treatment and control improvement specialists. They provide water systems and process management, life cycle management, Legionella control, ACoP L8 compliance and training to help organisations reduce energy and water usage safely and reliably and remain compliant. A WCS Group company was a founding member of the Legionella Control Association. We are an INVESTORS IN PEOPLE partner and accredited to ISO 9001 ISO 14001, OHSAS 18001, CHAS, SafeContractor and Altius.

A Marlowe Critical Services company

WCS Group is the 'Water Treatment and Hygiene' division of the Marlowe Critical Services Group owned by parent Marlowe plc. The Group provides one access point for specialist 'highest standards' across 'Fire & Security', 'Water Treatment & Hygiene', and 'Air Quality' – three divisions can be accessed singularly or in combination. The Group shares many common customers and collectively employs 1,100+ specialists, servicing 10,000+ customers, carrying out 500,000+ service visits and helping manage over 10 million assets for circa 6% of the UK's 1.8 million non-residential buildings.

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