



SOFT DRINKS CASE STORY

SOFT DRINK MANUFACTURER LOWERS ENERGY COSTS BY 45% WITH GRUNDFOS PUMPING SOLUTIONS



Britvic is a leading company in the Soft Drinks Industry that has continuously been growing across the core markets Great Britain, Ireland, France and Brazil. With Corporate Social Responsibility (CSR) being of vital importance to Britvic, they contacted Grundfos Industry Optimization team to discuss new tailored solutions for their factory in England.

THE SITUATION:

Britvic's growth in the Soft Drinks Industry meant they had to evaluate the water supply to their local factory in England. The approach was to increase the storage capacity on site, meaning at high demand, they could meet their customers' production expectations without generating an adverse effect on the local community.

Britvic was looking for a solution that would not only deliver the correct varying amounts of water, at the right pressure, but also reduce energy costs and the carbon footprint for the site. Remote

access was also requested for monitoring, so trends would help with the continued optimization of the system. Britvic needed a partner who could not only meet these expectations and supply the right water booster set, but a company that would provide a complete water package in a container. To start the process Grundfos Pumps' Optimization Team visited Britvic's factory and conducted a full audit of the site.



THE SOLUTION:

Following initial meetings with Grundfos, the concept and design of the container was agreed: Britvic were looking for a system with a high efficiency 5x Grundfos booster set, using Grundfos multistage CRE 95 pumps. Also included in the package would be a Grundfos dosing and disinfection system, that would automatically clean any of the water holding tanks, while leaving at least one in operation and working. This fully automated system would clean itself and conduct a full sterile check before going back in operation, without stopping the main water supply to the factory – resulting in continuous operation and manufacturing.

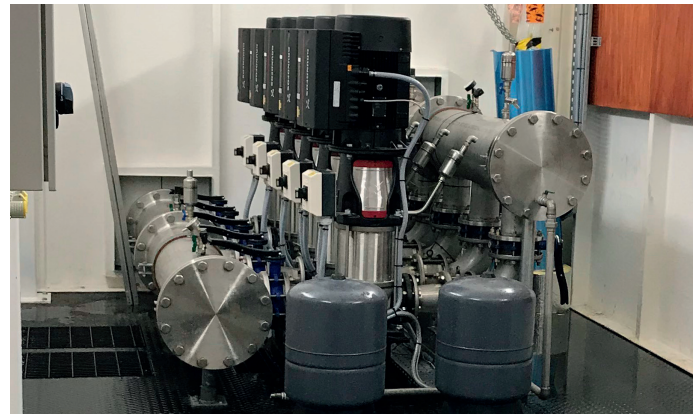
Grundfos built and tested the full pump and disinfection package with full PLC control at their manufacturing facility before mounting it in a mobile, weather proof container.

THE OUTCOME:

When it was time to get the finished container installed, Grundfos shipped the unit from their manufacturing plant in Sunderland to Britvic's site in Rugby. Installation time, costs and risks could be reduced significantly, as Grundfos packaged plants are ready piped, wired, tested and precommissioned in a clean, safe factory environment. Preparation at Britvic's site was done separately, and in advance.

Britvic worked closely with the Optimization Team at Grundfos Pumps, which helped mitigate risk and facilitated a precise swap over. The close partnership between Britvic and Grundfos from concept to final commissioning, ensured that no production time was lost.

The new, more efficient pumping system now helps Britvic to meet its own strict energy targets, in line with its strategy of reducing energy consumption, improving efficiency and process optimization across its global business.



NEW SYSTEM

- Grundfos booster system with 5 CRE 95 22kW multistage pumps
- Grundfos dosing and disinfection system for holding tanks
- PLC control with SCADA integration and remote access

KEY FEATURES

- Flow rate 1277 gpm under fully automated control
- Variable frequency controlled pumps capable of adjusting to water demand
- System self-cleaning without interrupting production
- Remote monitoring and data trending
- Designed with expansion in mind: capable of flows above 1761 gpm
- Container solution installed in a matter of hours

KEY BENEFITS

- > Energy costs reduced by 45%
- > Cost savings of around USD 82,000 per year on energy
- > ROI in less than two years
- > No production time lost during swap-over

"The Grundfos Booster Pump System provided to Britvic has proved to be a great success even in the short time its been in operation, not only have we seen an immediate improved water supply with stable and constant pressure, but we have been able to monitor and trend the flows, enabling continuous improvements on our processes."

Calvin Winch CEng

Operations Development GB & I, Britvic Soft Drinks Ltd