

Case Study Brakes Group reduce their water use by over 22% since 2010

brakesgroup

“ The opportunities identified during the site visits have helped us to kick start our water reduction programme. We are really pleased with the progress we have made, but it won't stop here, as our engineers will be working with the FHC to find further savings ”

David Flood, Brakes Group



Brakes provide both food and non-food products to the food service industry, ensuring their foods meet the highest technical and food safety standards.

Since joining the FHC in December 2009, each of their food manufacturing sites has received an FHC technical site visit.

Collectively Brakes manufacturing sites have realised an impressive 22.4% reduction in absolute water use whilst recording an increase in total production since 2010. Supported by the findings of the visits, recent successes have been demonstrated at their Flint and Grimsby sites through the implementation of a range of water saving initiatives and process alterations.

M&J Seafoods (Grimsby)

M&Jseafood
fresh fish specialist

M&J's initiatives include:

- installation of sub-meters to key areas of the site allowing accurate monitoring and assessment of the effectiveness of changes made to the cleaning process;

- review of wash down routines, reducing the number of hoses and increasing the use of squeegees. The remaining wash down hosepipes have been replaced with smaller bore pipes, fitted with automatic shut-off (trigger guns);
- review use of water in equipment such as pressure washers and spray bars, which has been reduced without compromising effectiveness; and
- redesign of the 'Box Wash' system reduced the water being used by 9 litres per minute, saving 471 m³ per year. The manually operated on/off valve was replaced with a ball valve that controls the flow of water, limiting it to the required volume, preventing the constant overflow of water.

Since 2010, the site has reduced absolute water use by 45% whilst increasing production by 12.5%. Whilst production changes have been partially responsible for this reduction in water, implementation of the above initiatives has made a significant contribution. M&J have subsequently been able to reduce their Maximum Daily Demand (MDD), saving the site £16,000 a year.

Creative Foods (Flint)

Flint's initiatives include:

creative foods

- relocating the site's CIP (Cleaning in Place) machine, which due to a reduction in pipework length, takes less cleaning. This has resulted in water savings of (780 m³ per year);
- investigating the cleaning process of the two pasta cookers; water use was reduced by 1,300 litres per clean, saving 946 m³ per year; and
- reviewing the pasta cooling process; water is now delivered as a mist for cooling instead of a spray. The mist uses less water, which is entirely absorbed by the pasta. This has resulted in water savings of 2,054 m³ per year. In addition, no waste water is produced.

Overall the site has reduced absolute water use by 5% in 12 months, whilst increasing production by 7.5%.

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