



Preventing Scaling in the Brewery



A green chemical free water treatment system





Fluid Dynamics

Hard water solutions since 1973

Fluid Dynamics Green Solution



Utilizing chemicals near food stuffs has always given cause for concern and can give rise to copious risk assessments. It also poses product contamination risks. Nowhere is this more likely than in brew water which must not be chemically contaminated at all.

Major breweries over the years have taken advantage of non-chemical treatment systems installing them to treat both cooling water and water that becomes part of the brew.

For thirty five years Fluid Dynamics International has been supplying specialist water treatment equipment that uses no chemicals to deal with the problems caused by hard limescale deposited from water.

Dozens of breweries throughout Europe have benefited from using Fluid Dynamics technology. A few examples follow...





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Guinness

Scaling caused by hard water, used to cause problems for **GUINNESS** which is world famous for it's quality beer.

GUINNESS fitted their first Colloid-A-Tron, non-chemical scale prevention unit to a steam injected calorifier which had previously required closing down for a 3 day period while scale was physically removed.

Following the installation of Colloid-A-Tron the calorifier has stayed scale free.

Encouraged by this **GUINNESS** fitted units to various other processes where scaling was a problem and, as a result, substantial savings have been made in the cost of chemical descalers, and the time and effort of manual descaling.

Customer Benefits:

Cost of cleaning over 3 day period. Cleans carried out once every 6 weeks. Equipment efficiency increased by 7%. Cost saving from the elimination of chemical use gave this customer a return on investment inside 12 months





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Elgoods Brewery



At Elgood's Brewery at Wisbech Cambridge the water is very hard with 330mg of Calcium and severe scaling was experienced particularly in the cask washer and also in the Angeleary Heater.

The difference in maintenance downtime in the Angeleary has been enormous. Almost as soon as the unit was fitted, old, previously deposited scale actually started to be removed.

Since then for more than ten years no acid descaling of the heater has been necessary. The Angeleary passes its insurance inspections every time.

Chief Engineer Alan Pateman is delighted. "Colloid-A-Tron has saved hours of downtime and, more importantly we have been able to do away with dangerous acid descaling and manual chipping out of scale that previously used to take up to two days".





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McMullen and Sons



McMullens Brewery in Hertford has been using Fluid Dynamics water conditioner technology since 1988 when their first Magstream was installed in their current brewery.

The unit greatly reduced the scale build up in the Paraflow heat exchanger (pictured below) and the hot liquor tank and made the descaling of these items much easier. After 10 years use a replacement unit was installed which has continued to give good service.

McMullen recently built a new brewery which will be used for producing specialist real ales.

Because the Fluid Dynamic's technology has proven to be so beneficial an additional unit has been installed for use in their new brewery.





Freeminer



At Freeminer Brewery in Cinderford Gloucestershire there is a determination to avoid the use of chemicals wherever possible. Steam from the boiler is used in the brewing process and the head brewer wanted to ensure that no contaminants could possibly get into the process.

So he decided that he could not chemically treat his boiler, instead he chose to install a Colloid-A-Tron on the feed line to his steam boiler. Five years after installation the boiler is still scale free. The hardness of the water in Cinderford is 300mg/l (300ppm) and the only water treatment the boiler receives is a Colloid-A-Tron on the feed line treating all the water going in to the boiler.





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Other Breweries Utilizing Fluid Dynamics Equipment





Technology

Fluid Dynamics catalytic water conditioning products operate by neutralizing the scaling tendencies of the water as it passes through them so calcium, while remaining in the water, no longer forms a hard scale. No chemicals or electrical connections are required.

Large Range of Sizes

Equipment treated ranges from small applications utilizing ½" diameter units all the way up to giant water systems. For example, the 16" unit shown to the right was exported to Argentina to treat a flow of 5724 GPM.





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Summary

Fluid Dynamics NA, LLC offers inexpensive and robust environmentally friendly green solutions to eliminate hard water problems. With over 40 years in the business and over hundreds of thousands of units installed, all of our products are confidently



We look forward to working with you.

