

Ultrasonic nozzle cleaning: the next big thing?

A new device has been created which claims to improve the cleaning powers of water. Could this be the next big thing to implement at your business?



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It's all about clean living these days and it seems even the process of cleaning itself isn't clean enough. A device has been created by scientists at the University of Southampton which claims to make the cleaning powers of tap water even better.

In fact the invention has got them an award of £250,000 for innovation from the Royal Society. It seems a hefty amount for dishwasher.

But the scientists themselves can throw out large numbers on the subject. Apparently each cubic metre of water used for cleaning in the nuclear industry can cost around £10,000 to subsequently treat. Hospital-acquired infections from instruments that are not properly cleaned cost the NHS £1 billion per year. And conventional pressure washers use 20 litres of water per minute. The new device, an ultrasonic nozzle invented by Professor Tim Leighton and Dr Peter Birkin, will use less power, less water and less additives for cleaning.

Leighton says, 'Society runs on its ability to clean. There's a very obvious need for technologies that improve our ability to clean while saving on our most important resources, water and energy.'

The nozzle attaches on to the end of a tap or hose and works with cold water generating both bubbles and ultrasound, giving an all-round deep clean. It claims to use less than 200 watts of power while pressure washers use 2 kilowatts, as well as generating large volumes of contaminated run-off and aerosols.

Scientists believe applications will be many and varied, from homes to hospitals, building sites and luxury hotels. Leighton remarks, 'Ineffective cleaning leads to food poisoning, failure of manufactured products and poor construction.'

Licences for this technology have already been sold to companies across a range of industries, according to The Royal Society.