

# INFECTION CONTROL

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Champions Fight Against  
Antibiotic Resistance.  
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working together to reduce hospital infections

## Ebola Pandemic Crisis

How UK Firms are Responding

## Product of the Month

Prepclean Forever Wet

## Probiotics for Kids

Allergy Prevention and More



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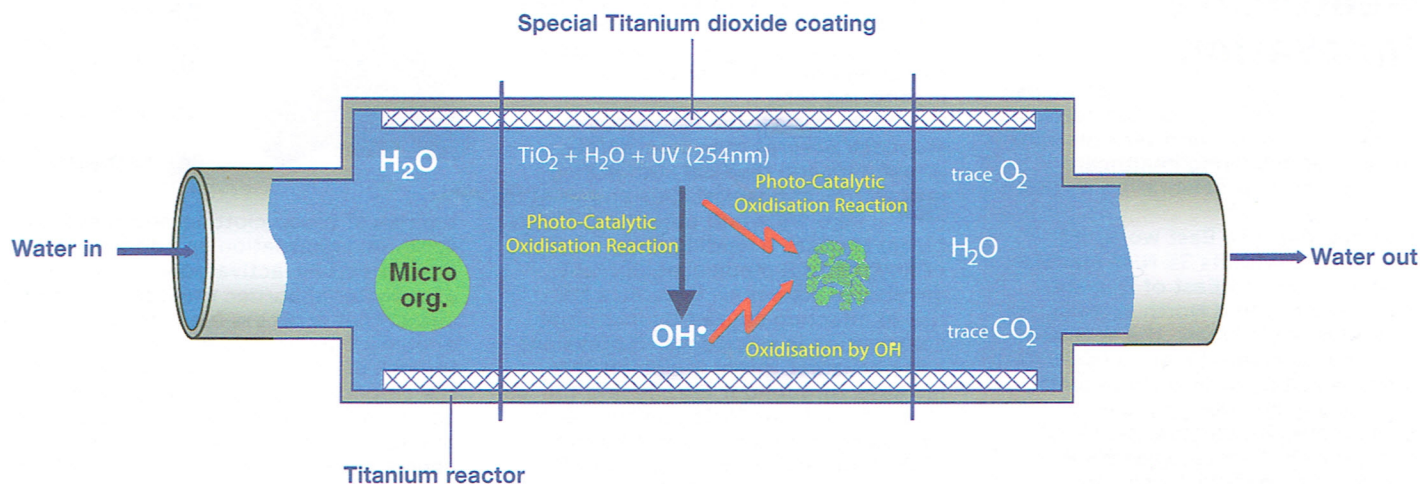


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# Rodin Titanium AOP

## THE GATEKEEPER SOLUTION TO WATER TREATMENT



The Rodin Titanium Advanced Oxidation Process (AOP) is an environmentally friendly 'gatekeeper' solution that prevents Legionella and other organisms from entering the water system of a building while preventing the formation of bio-films.

The system has been installed throughout the UK, Europe and Asia in a range of applications including potable water supplies, cooling towers, humidifiers, swimming pools, spas, showers and process water. It has proved significantly more efficient than any other physical and chemical treatment systems.

The Titanium AOP unit produces a proliferation of Hydroxyl Radicals ( $\text{OH}^\bullet$ ) that are extremely unstable and aggressive. These radicals react instantaneously with micro-organisms

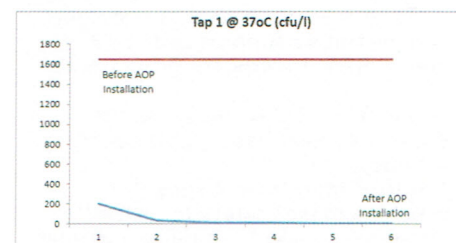
and continues to break down all by-products and pollutants eventually to carbon dioxide, oxygen and water.

The chemical reaction is so quick that the Hydroxyl Radical exists for only a few milliseconds before it reverts back to the stable state of water. The system has been shown to provide an exceptional capacity to 'kill-all' waterborne organisms as well as to decompose the resulting organic matter.

Having gained an excellent reputation, the system was tested for the NHS on the mains water supply to a community hospital. The AOP replaced an older chlorine dioxide unit which had proved unreliable and difficult to maintain. Subsequently a number of samples were taken over the test period from two outlet taps within the hospital. These were then analysed for Coliform,

in colony count was 99.8%, 100%, 99.7% and 100%. The mean reduction for bacterial count at 22°C and 37°C was 99.8% and 100% respectively.

*Graph showing reduction in bacterial count at one sample pointed tested at 37°C*



Overall the bacterial count in the hospital water was reduced by 99.9% and the AOP was able to deliver clean water into the potable water system and reduce bacteria within the hospital.

Traditionally the most common form of Legionella control has been achieved by using a biocide treatment such as chlorine dioxide but that involves both the safe storage, and usage, of chemicals within the water system. Many organisations are now looking for an alternative, chemical-free solution to address this requirement. The Rodin Titanium AOP system is a fully WRAS approved, environmentally friendly, water sterilisation system that is also more cost effective.

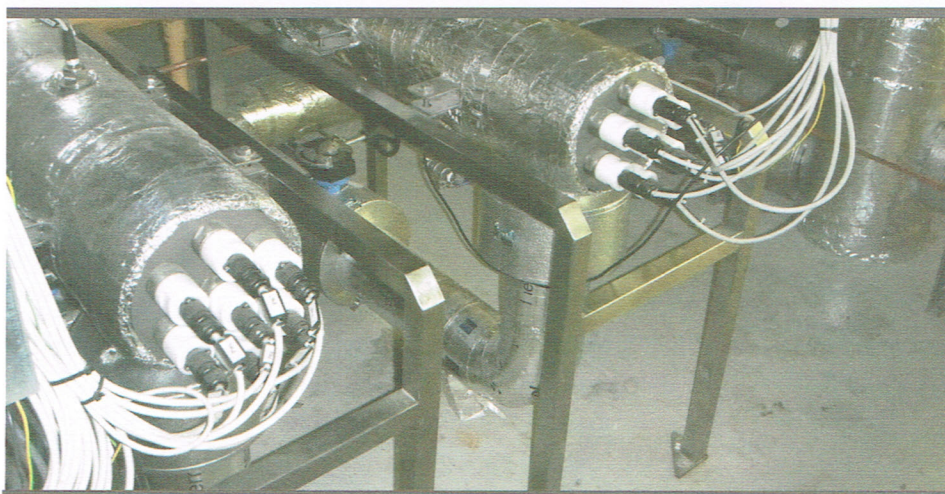
Following the successful NHS tests Rodin Titanium AOP units have been installed by Skanska Group, at the Royal London Hospital in Whitechapel, at a prison and Ministry of Defence establishment, with other installations most appropriately described as "in the pipeline."

### The results showed a clear and significant improvement in the bacteria count within the hospital water system

and other organic contaminants within the water and literally tear them apart by removing hydrogen atoms from any living organism present within the reactor chamber. This hydrogen extraction and electron transfer completely destroys their cell structure

E. Coli and Colony Counts at 22°C and 37°C respectively.

The results showed a clear and significant improvement in the bacteria count within the hospital water system. Of the two sample points tested at both 22°C and 37°C the percentage decrease



For more information on the Titanium AOP and other water treatment solutions contact The Rodin Group on 01795 423400, visit [www.therodingroup.co.uk](http://www.therodingroup.co.uk) or email [info@therodingroup.co.uk](mailto:info@therodingroup.co.uk)