



## Fitness clubs improve water treatment to protect clients' health

### The Situation

In 2022, the team at Grundfos South Africa was asked by the South African branch of a worldwide fitness chain to refurbish their water treatment systems to maintain water quality to ensure that waterborne outbreaks of Legionellosis do not occur and to prevent biofilm growth.

Legionellosis is a pneumonia-like illness caused by Legionella bacteria that grow in poorly-maintained water systems, often by surviving in water between temperatures of 20 – 50°C and within biofilms that develop on pipes and in tanks. The World Health Organization estimates that there are 10 – 15 cases of Legionellosis detected per million of population in the USA and Europe per year.

The most common control methods for reducing the risk of contracting Legionellosis are disinfection of the water system, having a residual disinfectant such as chlorine in the water supply, and maintaining hot water temperatures above 50°C and cold water systems below 20°C.

Grundfos's client had treatment systems that were approaching the end of their lifespan and were looking for new options.

### The Solution

The Grundfos team has worked with this client for a number of years, regularly servicing their water treatment systems to protect their fitness club attendees from waterborne illnesses.

Grundfos South Africa proactively engaged with their client to provide an end-to-end solution for their water treatment system. Grundfos supplied, installed, and commissioned the equipment, and have a three-year service agreement to maintain the systems to guarantee the health of those attending these fitness clubs throughout the country.

The Grundfos South Africa team used the Oxiperm Pro to disinfect the fitness clubs' water treatment systems. The Oxiperm Pro doses the water with chlorine dioxide proportionally to the flow through the system and maintains the dose within the system set-points.

**GRUNDFOS** 

Possibility in every drop



Water demand at fitness clubs can be variable, so the treatment system must be able to handle the flow rate changes to prevent the gym users from being exposed to inadequately treated water.

The Oxiperm Pro is also capable of maintaining the quality of pipework within water systems, so it is highly effective in preventing biofilm development, therefore reducing pipe maintenance.

**The Outcome**

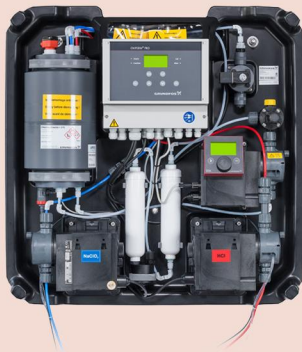
Grundfos South Africa was able to satisfy its client's needs by

providing a complete end-to-end solution with a safe, easy-to-use system that keeps drinking water safe in the fitness clubs.

By using the Oxiperm Pro system, Grundfos's client is providing safe water that does not have any taste or smell problems, which is essential for a fitness club.

**Grundfos Supplied**

14x Oxiperm Pro units



Oxiperm Pro OCD 162 up to 60gh Clo2



Grundfos Chlorine Dioxide Generators