

# Veolia Water Technologies Delivers a 100% Recovery, Recycle, Reuse Solution for Zimmer Orthopaedics

## Pharmaceuticals | Case Study

### The Client

Zimmer Orthopaedics manufacture products that restore mobility, alleviate pain and improve the quality of life for patients around the world. In order to produce products of the highest possible quality Zimmer rely on a continual supply of Purified Water at every stage of their production. Zimmer has operations in more than 24 countries around the world and sells products in more than 100 countries.



### The Client's Needs

With increased demand for their products world-wide, a new manufacturing facility required a dedicated water solution that would not only ensure a highly efficient and sustainable supply of Purified Water that would also be innovative and adaptable to meet the facility's growing needs.

In May 2011 an agreed design was in-place that would see a single-unit Recovery RO (Reverse Osmosis) solution being added to the Pure Water infrastructure that is today recovering 100% of the waste water generated. 75% of this is sent back once again to begin the purification cycle as raw water; the remaining 25% is re-used within the plant for other services.

### The Solution

This solution is comprised of an RO Concentrate Recovery System consisting of a 2,000L Polypropylene Concentrate Tank, a booster pump and a MegaRO™ unit. The waste produced by the MegaRO™ unit is further treated using UV sterilising technology enabling it to be used in alternative applications by the customer.

The MegaRO™ Mk2 reverse osmosis systems produces high purity water, removing up to 98% of dissolved inorganic and over 99% of large dissolved organics, colloids and particles.



The system has been standardised and optimised in order to fulfil the essential demands of the relevant applications and minimise operating costs. With its high output, low-energy membranes it achieves a desalination rate of about 96 to 98% and at the same time, a water recovery of 100%.

### Veolia Water Technologies

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## Quote

*“The success of our company and our products is built upon a spirit of innovation. We are constantly striving to do things differently and as such we demand this same progressive thinking from our business partners and suppliers. Veolia Water Technologies have proven themselves to be highly capable in the area of Pure Water solutions and what is more, their forward thinking with regard to ‘Green Solutions’ creates ideal synergies between our two teams. The net result of this project has led to sustainable development and on-going financial savings”*

**Michael Finn, Facility Manager, Zimmer Orthopaedics Manufacturing**

## Benefits

The suite of Veolia technologies which make-up the Pure Water infrastructure at this plant today boast a number of features; the clearest benefit of this project is the 100% recovery of the waste water generated.

This project is a clear example of Carbon Strategies and reducing Water Footprint in action; Zimmer’s Environmentally Conscious’ approach to the running of their facility is exemplary. Addressing the issues of freshwater scarcity and pollution is part of the corporate social responsibility.

From the outset the tangible environmental and financial benefits of this solution were clear. Michael Finn and his team were extremely focused on capitalising on these benefits and it was this drive and focus that saw the entire project being fast tracked.



## Results

- 100% Water Recovery
- Water footprint reduction
- Adaptable to meet the facility’s growing need

This efficiency, functionality and sustainability delivered by this solution can easily be replicated across all industries. For more information about our innovative ‘Green’ Solutions please contact a member of our team.

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