

Process Water for soft drinks manufacturing, UK

Food & Beverage | Case Study

The Client

One of the UK's largest global soft drinks bottler's, which makes, sells and distributes billions of bottles and cans every year, is expanding to produce and distribute a new drink in the UK. With growth in mind, an investment was made in new production capability

Key Figures

Application: Process Water

Process:

- Degassing
- Reverse osmosis
- Continuous electrodeionisation (CEDI)

Water quality: $10\mu\text{S}/\text{cm}$ conductivity

Water Flow: 40m³/hr

The Client's Needs

Water is one of the principal ingredients in soft drinks, and water quality has a major impact on clarity, shelf life and taste. An important factor in the production of soft drinks is the consistency of the water used in drinks globally. This is to ensure that the products taste exactly the same, wherever they are produced. The customer's water quality specification is extremely low conductivity which means that treated water would need additional processing to meet this specification.

The Solution

Veolia Water Technologies developed a water treatment plant to meet the required specification and flow (40m³/h). The system includes three stages - degassing to remove carbon dioxide, reverse osmosis (to remove between 90-99% of the dissolved salts, organic and particulate impurities and bacteria) and continuous electrodeionisation (CEDI) to produce water of less than 10 $\mu\text{S}/\text{cm}$ conductivity. The treated water is then stored in a stainless steel tank from which it is pumped, via a ring main, to the points of use.

The customer needed to ensure that contingency plans were in place to avoid any loss of production. Veolia Water Technologies's "AQUAMOVE™ disaster recovery plan" provides full support and deployment of a mobile reverse osmosis water treatment system at short notice.



The Benefit

The plant was designed to include the necessary terminals to facilitate rapid connection of the mobile solution to the mains supply and distribution system. Details including connection type and size and where to connect the mobile plant, are recorded so that, in the event of a water treatment plant emergency, the AQUAMOVE™ team can be on site in within a few hours to ensure minimal disruption to production.