Process Water Treatment
Food & Beverage | Reference: Mineral Water Brand, Poland

Client

Our client is a well-known producer of high quality beverages in Poland. The company belongs to one of the fastest growing beverage brands in the European market and one of the most important producers of beverages in Central Europe.

Assignment

The customer required a new hygienic water treatment plant with a capacity of 90 m$^3$/h in order to treat well water for filling as mineral water in accordance with European mineral water standards (directive 2009/54/EC). The new plant was to remove high iron and manganese concentrations as well as smell and produce high quality beverage water for low sodium diet and food’s preparation for infants.

Solution

The customer selected a BERKEFELD PurBev® solution with intelligent automation to fulfil the demand for perfectly hygienic treated water for use in high quality beverages. Core element of the new system is a two-stage media filtration plant:

• 1st media filter stage: Iron and manganese removal
• 2nd media filter stage: Ammonia reduction (nitrification)

Benefits

The BERKEFELD PurBev® hygienic standard is based on the expertise of our engineers specializing in beverage water solutions. It takes into account both legal requirements and international standards & directives applicable to beverage water production.

• Optimum product quality & product safety
• Maximum system availability
• Economical operation
• Reduced chemicals, water & energy consumption

<table>
<thead>
<tr>
<th>Treatment Process</th>
<th>Main Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxidation of dissolved iron &amp; manganese, reduction of inert gases</td>
<td>BERKEFELD PurBev® Well Water Break Tank followed by Inline Aeration</td>
</tr>
<tr>
<td>Removal of iron &amp; manganese, ammonia reduction</td>
<td>BERKEFELD PurBev® Media Filters</td>
</tr>
<tr>
<td>Tank for treated water</td>
<td>BERKEFELD PurBev® Mineral Water Storage Tank</td>
</tr>
</tbody>
</table>
Process Water Treatment

Process Description

- Well Break Tank
- Aeration Unit
- BERKEFELD PurBey® Media Filters
- Water Storage Tank

- Raw & Product Water
- Backwash & CIP Water
- Wastewater

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