The challenge

The operator of the wastewater treatment plant, Ex Central Highlands Water, aimed at improving the sludge mixing in the digester and at minimizing foaming in the tank. There was an initial preference to use jet mixers because this would have been straightforward with standardized spare parts and maintenance. The challenge was to convince the operator that Sulzer’s radically different thinking could dramatically reduce energy consumption and improve process outcomes at the same time.

The solution

Sulzer offered a Scaba agitator option, which was very competitive and economical. The capital investment was smaller, the mixing efficiency higher and the installed power much lower compared to jet mixing. In addition to the energy saving, the maintenance requirements, noise levels and footprint of the Scaba agitators were superior to the jet mixing system.

Scaba top-mounted vertical agitators are used for mixing and agitating process liquids in many industries, including wastewater and industrial applications. They ensure homogenous mixing results, high process reliability, high efficiency, low operating costs and low environmental stress.

The Scaba agitators were factory tested and field tested. They have given excellent mixing results, which in turn has improved the sludge digestion. The gas production increased by 100% versus compressed gas mixing.
Customer benefit

- Increased gas production versus old system with compressed gas mixing
- Reduced footprint, noise and maintenance costs
- Sulzer’s catalogue-claimed performance was achieved in site testing
- Easy installation of the Scaba system
- Less vibration

Product data

<table>
<thead>
<tr>
<th>Sulzer Scaba 60FVPT-Lbb</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motor</strong></td>
</tr>
<tr>
<td><strong>Gearbox</strong></td>
</tr>
<tr>
<td><strong>Tank diameter</strong></td>
</tr>
<tr>
<td><strong>Tank height</strong></td>
</tr>
<tr>
<td><strong>Fluid</strong></td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
</tr>
</tbody>
</table>

A comprehensive range of standardized agitators are available within the Scaba TreatX concept, especially suitable for selected applications in the water and wastewater industries.

For more information on our products and solutions for wastewater treatment, please visit sulzer.com.

Applicable markets

- Municipal and industrial wastewater treatment

Applicable products

- Scaba agitator

Contact

ramandeep.saroya@sulzer.com