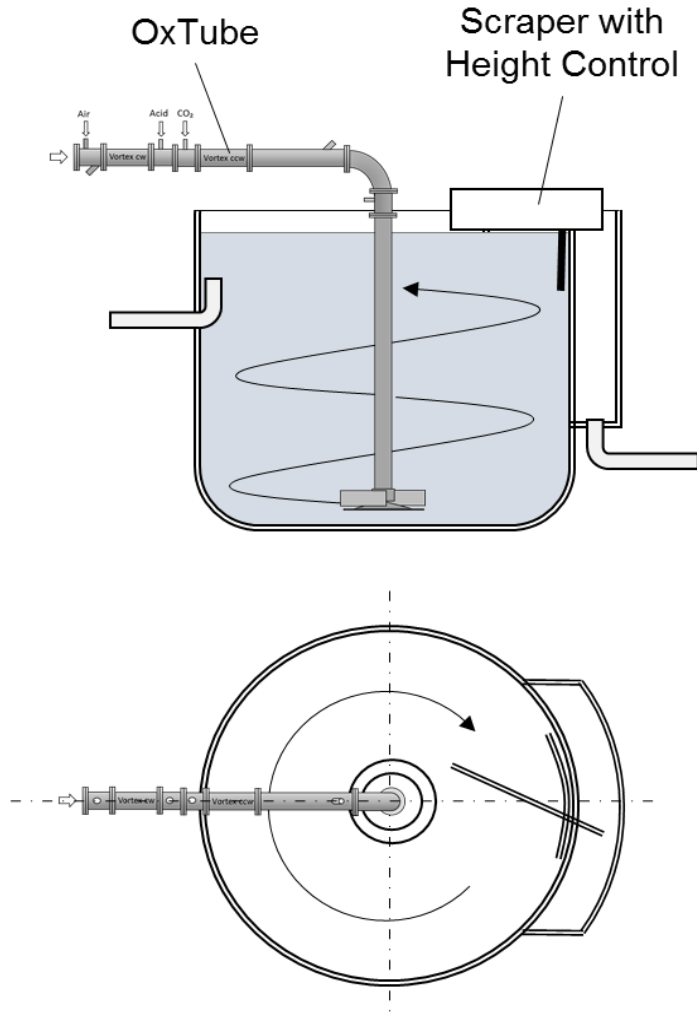


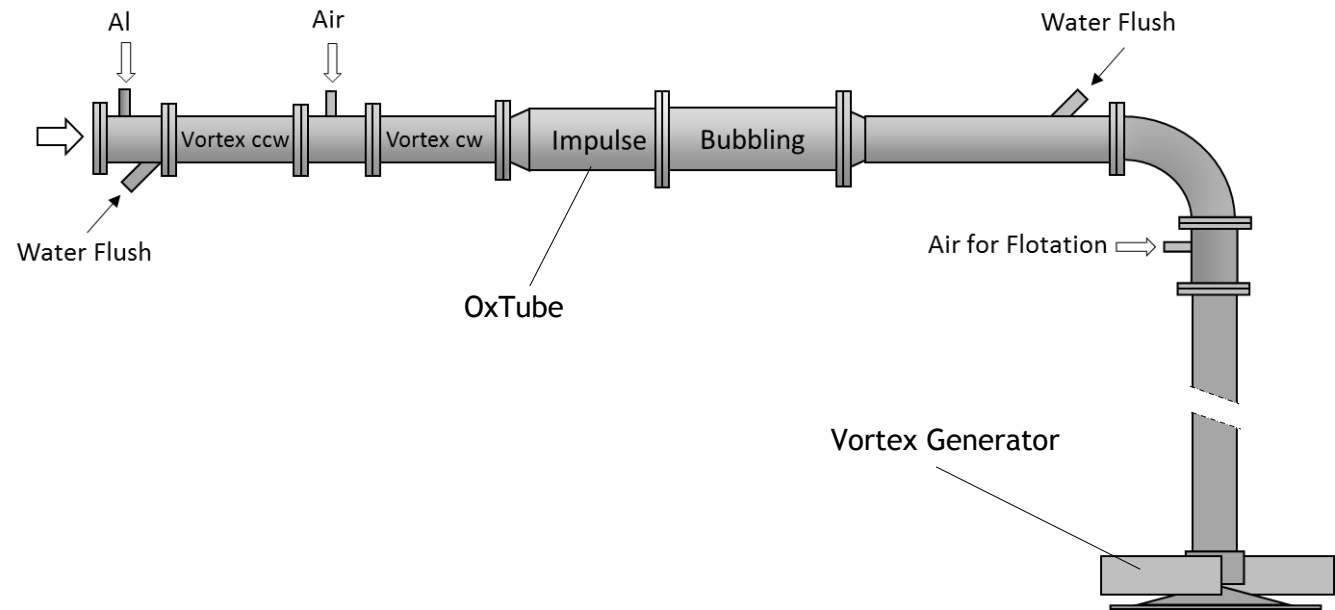
VoxFlotation

Vortex Flotation



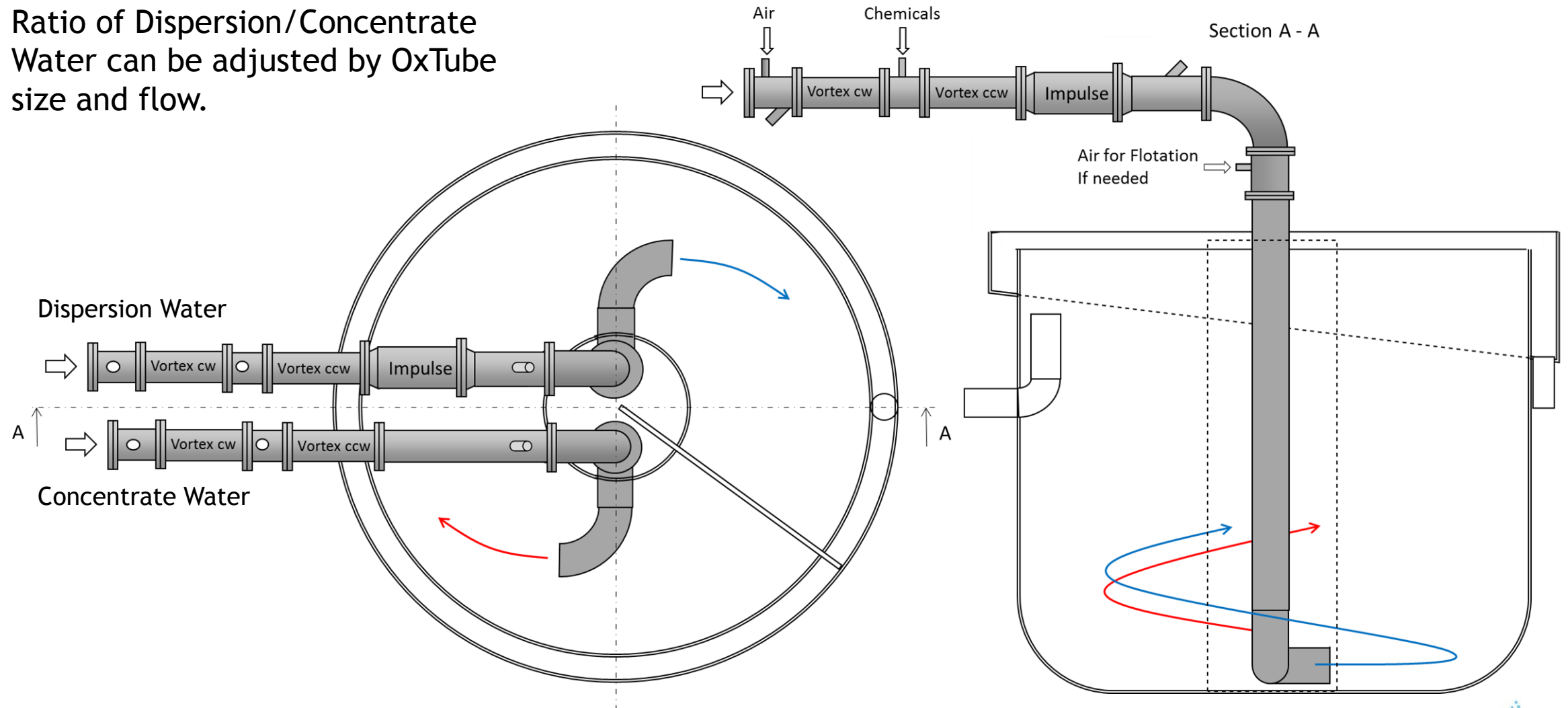
Vortex Flow Flotation is a new innovation of SansOx consisting of

- Customized OxTube for mixing and dissolving of air and coagulants
- Flotation vessel of the vortex flow
- Accurate Foam Scraper with height control
- Vortex Flow Generator after the OxTube
- Vortex Flow that doubles flocks and solids collection

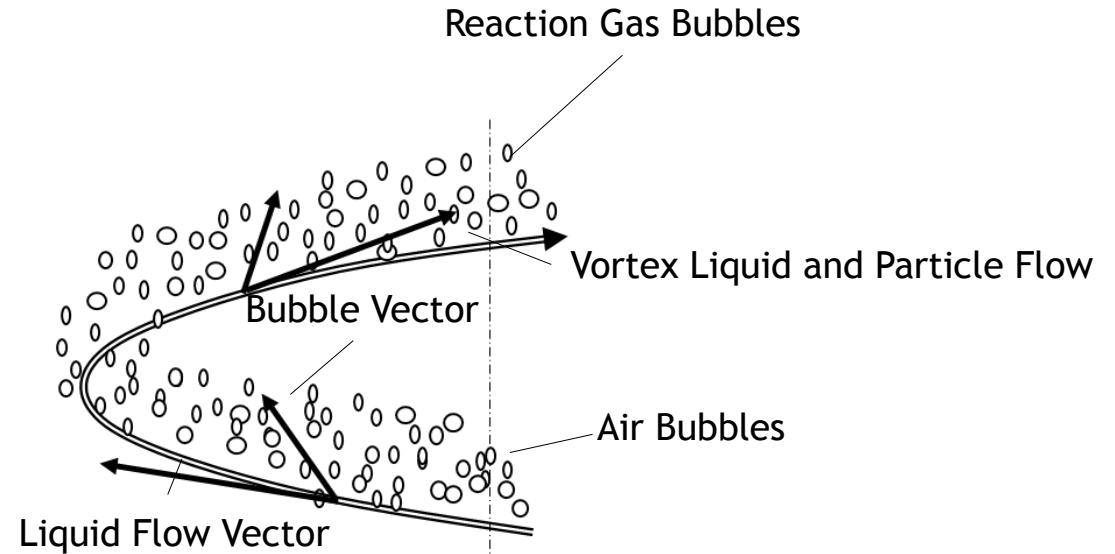
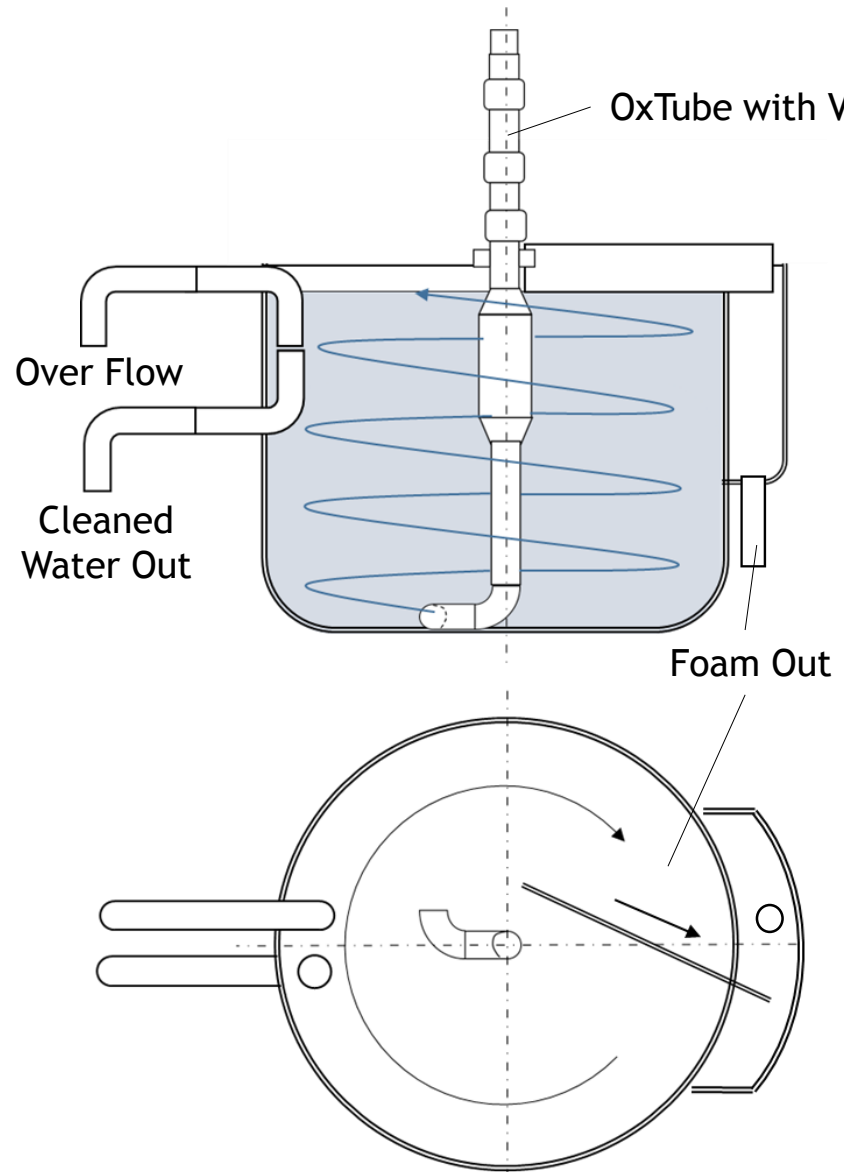


VoxFlotation for Concentrate Water

Ratio of Dispersion/Concentrate Water can be adjusted by OxTube size and flow.



VoxFlotation - Principle of the Vortex Flotation



- The treated liquid and solids flow in vortex from bottom to surface
- On the bottom the particles stick on air bubbles and are transferred cross the water flow to the surface by them.
- Reaction gases are formed all the way of the liquid flow.
- Free particles stick on the gas bubbles and are transferred cross the water flow to the surface.
- The flotation time is $\text{Cell Volume}/Q$

VoxFlotation - Performance of Vortex Flotation

- The liquid flows continuously through mixing, dissolving and flotation separation, less energy
- Chemicals are mixed and gases dissolved directly in to the liquid flow within seconds
- Liquid flow carries solids, and air and gas bubbles
- Spinning effect of gas bubbles and solids
- Lowered surface tension and viscosity of liquid
- Smooth flow of liquid, solids and gas bubbles
- High collision probability in the vortex flow
- Vortex flow provides longer induction time for tight attachment of solids to bubbles
- Flotation cell size is reduced significantly
- No moving elements in mixing/dissolving
- Less cleaning and also prevented bacteria growth
- Reduced maintenance costs

