

RESERVOIR
MAINTENANCE
SPECIALISTS



AQUAJETTA MIXING SYSTEM

AQUAJETTA MIXING SYSTEM

The 'Aquajetta' Mixer provides a simple solution to multiple water quality issues within storage tanks.

- Water needs to be moved around within a tank to promote blending of the new and old product.
- Additional chlorine is often necessary to boost disinfection residuals.
- Sampling points that reflect accurate results are required for on-site monitoring.

All of these issues can be addressed with the one mixing unit, in a cost effective and low maintenance environment. It is a jet boosted circulatory system that encourages the mixing of water within a tank, with all the controlling features external to the structure. This enables easy access, monitoring, and control of the unit in a safer and more time efficient manner.

The Aquajetta concept began as a WIOA PASS award winner in 2013. The team that designed and constructed this unit have decided to make the system available to other water utilities, due to its simplicity, value for money benefits and performance statistics.

The original Bonny Hills unit has been reduced in size and now has additional safety and monitoring features included. Best quality pipe fittings are used and pumps are interchangeable to suit different sized tanks.



There is a safety mechanism for 'no flow' situations and a diaphragm valve for fine tuning the chlorine infusion module.

Maintenance is safe and simple, as the unit is mounted externally and can be easily accessed within its secure storage box.

Chlorine is infused from tablets, which are topped up on a weekly basis under normal operating conditions. Personnel no longer have to climb up onto tanks and open hatches – it is all done at ground level. There is an ability to 'slug dose' with liquid product if required in special circumstances.

Additional options to this system are only limited to the users imagination, and the units will continue to evolve from client inputs and feedback. Each unit is a 'custom build' to suit each storage tank, so unlike other mixing units on the market, it is not a 'one unit suits all' situation.

Aquajetta offers value, simplicity and performance. It is also designed and built by the same people who install it, so quality outcomes are assured.



AQUAFACTS

Water within storage tanks needs to be constantly moved about and blended to maintain quality and disinfection residuals. Internal pipework configurations will not always achieve these outcomes, so additional mixing by mechanical means is desirable.

There are many options available, along with various claims of performance and outcomes.

The 'KIS principle' (keep it simple) is often overlooked in the process, but there are simple things that can be done to improve water quality and they can also be reasonably priced and easy to maintain.



RESERVOIR WATER QUALITY CASE STUDY: BONNY HILLS RESERVOIR



BONNY HILLS 13ML RESERVOIR

- Common inlet/outlet 450mm trunkmain
- Intermittent filling with a local motorised inlet valve
- Current demand <2ML/day
- Circulation of the reservoir is maintained across the entire volume of stored water (ie. no more dead spots)
- An effective and controlled chlorine dosing system is in place.
 No more 'short circuiting' problems related to manual slug dosing
- Elimination of significant WHS issues (ie. working at heights and manual chemical handling)

- Reduced labour and chemical costs as operators can complete testing and chlorination adjustments quickly (no longer required to climb to the entry hatch)
- Accurate sampling regime to ensure water quality across the entire reservoir
- Ability to introduce CO₂ dosing if required to lower water supply pH levels



M 0418 762 420 E david@aqualift.com.au W aqualift.com.au



M 0413 370 064 E sam@wateris.com.au W wateris.com.au



M 0438 803 806 E candrews@nextep.net.au W nextep.net.au