



Star of the Screen

Kumeu Film Studios (Auckland, New Zealand)

- CRYSTAL-CLEAR WATER CREATED FOR MOVIE STUDIO'S UNDERWATER DIVE TANK
- ACTORS NO LONGER EXPERIENCING RED EYES AFTER FILMING IN CHLORINE-FREE WATER
- SOFT HYDROXPURE SANITISATION PRESERVES COSTUMES AND DIVERS' WETSUITS

Setting: International screen production facility

The Lord of the Rings trilogy, The Piano, The Chronicles of Narnia, King Kong, The Last Samurai, Avatar - for a small island nation in the southwest of the Pacific Ocean, New Zealand has produced an incredible range of big budget movies that have found international success all around the world.

New to the scene is Kumeu Film Studios, a converted screen production complex just 25 minutes from central Auckland. Initially built around the

“ I had two executive producers looking at the tank two days ago and they were completely blown away by the clarity of the water. ”

says Screen Production Attraction Executive,
Jasmine Millet.

China-Hollywood co-produced action-adventure film MEG starring Jason Statham and Li Bingbing, the 27-hectare site (66.7 acres) now includes extensive stage, workshop and manufacture spaces, production offices, 12 hectares of forest, and two water tanks. These are the only water tanks of this size and type in New Zealand. The facility includes:

Underwater Dive Tank (indoor)

- Volume: 1.267 million litres (334,686 US gallons/278,684 Imp gallons)
- Diameter: 18m (59.5ft)
- Maximum depth: 4.9m (16ft)
- Stair access and 6.8m² (73ft²) platform just below water level for diver access
- State-of-the-art Hydroxypure/Ozone water treatment system that creates crystal-clear water with maximum temperature 33°C (91°F)



Kumeu Film Studios, 27 hectare site with and 1.267 million litre indoor and 2.5 million litre outdoor dive tank.



1.267 million litre indoor underwater dive tank. Hydroxypure creates crystal-clear, chlorine-free water.



Ocean Surface Tank's external wall and its Micron M5000 horizontal filters.

Ocean Surface Tank (outdoor)

- Volume: 2.5 million litres (660,430 US gallons/549,923 Imp gallons)
- Length: 36m- 54m (118 to 177ft)
- Width: 40m (131ft)
- Depth: 0.7m to pit of 3m (2.5ft and 10ft) with the base of the pit 17m² (55ft²) with a 9.6m² (31.5ft²) reinforced concrete foundation pad below the liner for attaching hardware
- Traditional chlorine treatment system with a maximum temperature 32°C (89°F)

Challenge: Creating healthy water for actors, clear conditions for filmmakers

Before filming MEG, American movie giant Warner Bros. Studios needed assurance that the underwater dive tank was able to create a blank canvas – a default position – for filmmakers, which meant the water needed to be as clear as possible.

“When shooting underwater shots, we are usually trying to match footage to cut into a sequence that is either shot on a Location or a Surface Tank, on a previous date or to be shot in the future,” says Steve Ingram, Special Effects Designer / Supervisor. “So, we need to be able to control the ‘underwater atmosphere’ as much as possible.”

The best place to start, he explains, is with crystal clear water, which does not irritate the actors’ eyes or skin.

“The lighting options and available image definition resulting from this water clarity usually deliver a better and more believable end look to the sequences. Post Production VFX work, if required, is usually a lot less complicated when you can remove a variable and often ‘swirling’ atmosphere out of the equation,” Steve explains.

“Along with the comfortable water temperature, easy access and multitude of ‘rigging points’ available, we are able to get the best shots possible in a very safe and efficient process.”



Outdoor dive tank with its multitude of rigging points.

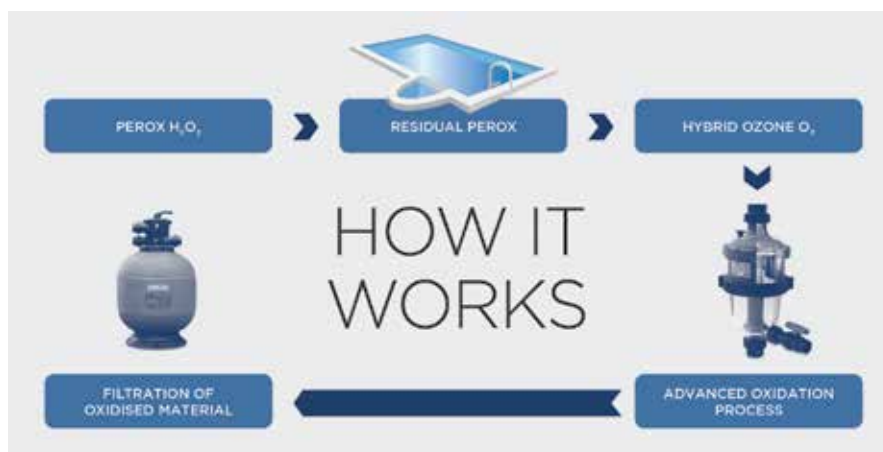


Waterco's Hydroxypure commercial system sanitising the 1.267 million litre Underwater dive tank.

Solution: A chlorine-free filtration system to preserve acting talent and filming equipment

Producing the same quality of water demanded by high-end hotels all over the world (which the studio says is a major selling point it uses when pitching to producers), Waterco's Hydroxypure has brought myriad benefits to the cast and crew.

"The actors have commented that the water feels soft on their skin and gentle on their eyes, unlike chlorinated water which causes red eyes," says Screen Production Attraction Executive, Jasmine Millet. "That is hugely beneficial for actors who need to be consistently under water for hours at a time without masks. And, unlike chlorinated pools, Hydroxypure doesn't bleach costumes or deteriorate divers' wetsuits.



The use of ozone and Perox in harmony increases active oxygen levels in the water. This synergy ensures the safety of water environments without creating harmful chemical by-products.

"We haven't emptied the tank since it was filled," Jasmine adds. "A chemist tests the water every week and it has remained clean and healthy with the Hydroxypure treatment system. We haven't had any instances at all where the water has triggered any concerns from a health and safety perspective."

Conclusion: Crystal clear water for "100% Pure New Zealand"

Jasmine says water clarity is "absolutely critical" for underwater filming, in terms of transparency, health and safety, and the ability to control the environment - which is now all possible thanks to Waterco's revolutionary Hydroxypure system.



Top view of the Underwater dive tank, demonstrating the water clarity of the Hydroxypure system.

“We are now on the radar of major international studios that are looking for facilities with water tanks,” she adds. “Thanks to the size of the underwater tank and quality of water, we now have the ability to compete with film and television projects from all over the world. Hydroxypure gives us that ultra-clear, pristine water.”

It’s so clear, that a new Viacom television series called Shannara, which recently filmed in the underwater tank, described the footage as “cinematic”.



Underwater filming for the Viacom television series, Shannara.

“They’re thrilled with the quality of the material they came away with,” says Jasmine. “Also, I had two executive producers looking at the tank two days ago and they were completely blown away by the clarity of the water.”

Hydroxypure, it seems, is bringing new meaning to Tourism New Zealand’s marketing campaign: “100% Pure New Zealand”.

https://www.youtube.com/watch?time_continue=10&v=13xxjHO6Fis