

COMPACT FREE STANDING LIME SATURATOR FOR LANDERS SHUTE WTP

CASE STUDY

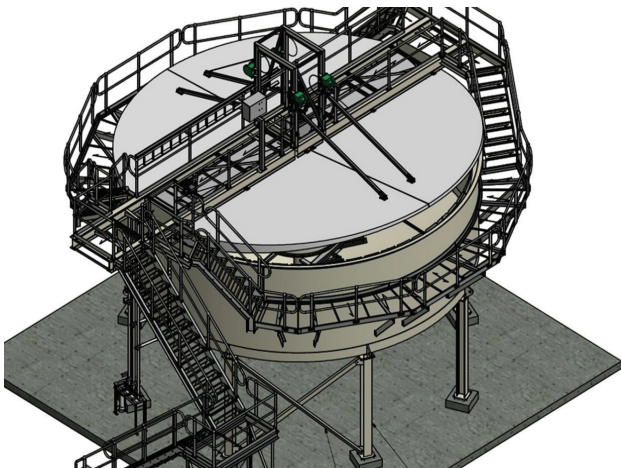


The Landers Shute WTP operated by SEQ Water was recently upgraded by Stirloch Constructions to include a new pre and post lime dosing system. A Hydroflux Epco Lime Saturator was included as part of the works.

The Hydroflux Epco Lime Saturator is a process unit, designed to make saturated lime water for control of the pH and alkalinity of water in the WTP.

The unit consists of a saturator-clarifier tank and weirs, a hopper, and a sludge rake. The unit includes an inlet and outlet, lime recirculation and slurry dosing, and spent lime solids sludge wasting. Sampling points are also provided.

The sludge rake operates by pushing lime solids along the bottom of the tank using 10 GR316 SS blades with neoprene squeegees.



The blades are angled so that sludge is pushed to the centre of the tank, where it can be recirculated or wasted.

Mixing of treated feed water occurs inside a baffle wall in the centre of the saturator. The treated water and lime slurry enters the baffle from a recirculation line, which also carries unused lime from the bottom of the sludge hopper

Being designed and fabricated in Australia, we were able to offer a quick turnaround on lead times, technical and site installation support.

Item	Value
Diameter	8,670mm
Height	5,500mm
Overflow Turbidity	<10 NTU 95%ile
Lime Utilisation	85%
Lime Feed Rate	Up to 107 kg/h
Recycle Rate	100%
Sludge Rake Speed	0.02—0.1 rpm