

HEAVY DUTY VEEMAX[®] CLARIFIER FOR MT MORGAN WTP LIME PROCESS

CASE STUDY



THE CLIENT

The Mt Morgan Mine WTP processes 6MLD of acid water from the sites tailings dam. The process includes for a lime dosing system and lime clarifier process.

OVERVIEW

A Hydroflux Epco VeeMax[®] Clarifier system was provided to process 36 L/s of water. A Veemax sludge scraper was selected due to high sludge concentration that is generated in this lime dosing process.

An energy dissipating inlet (EDI) supported by the centre column that is constructed out of GR304 stainless steel.

A flocculation well that is supported by the centre column that is constructed from a GR304 stainless steel frame and HDPE sheeting.

A centre drive unit comprises of a reduction gear motor, torque limiter, reduction gearbox and chain coupling.

The centre pivot assembly comprises a spherical roller thrust bearing and cast iron housing. This assembly supports the centre drive shaft, and the entire rotating scraper mechanism.

Mounted on the rotating centre column are two GR316 stainless steel scraper arms that extends from the centre column to the outer wall.

The sludge scrapers are designed with a Veemax[®] chevron pattern footprint.

A launder trough which follows the inner parameter of the tank.

There are over 330 Hydroflux Epco clarifier installations throughout the world.



Item	Value
No. of Units	2 x 11.16M diameter
Scraper Type	VeeMax [®]
Drive	Centre Drive
Application	Backwash water
Launder	316SS V-Notch