

METALS REMOVAL MODULE



The Metals Removal Module (MRM) is a custom-built water treatment system designed primarily to remove dissolved and particulate metals from extracted ground water (and other effluent streams) prior to being discharged to the environment. The MRM is capable of reducing metals concentrations to levels sufficient for treated water to be discharged to the most sensitive environments, including rivers and lakes.

While general media filtration can remove the bulk of particulate metals from water, the MRM's chemically-active media assists with the precipitation of highly soluble species, and polishes concentrations to meet the strictest criteria. Even hard-to-remove metals like manganese, copper, lead, arsenic and zinc can be brought into compliance.

While each MRM is optimised to process 15 L/s of raw water, it can be extended to process higher discharge rates, subject to water quality and analysis. In general, an MRM is set up in conjunction with additional water treatment modules such as clarifiers, feed tanks and sludge handling equipment. All materials used to build the water treatment system comply with Australian Standards.

TECHNICAL SPECIFICATIONS

Dimensions (mm)	6000L x 2400W x 2900H
Gross Weight	15000kg
Chemicals	Sodium Hydroxide, Sodium Hypochlorite, Flocculant, Polymer
Optimum Flow	15 L/s
Max. Flow	20-25 L/s
Max. Chemical	1000L
Max. Bund Capacity	1200L
Containment	Standard 20' shipping container
Operating System	32A 3PH, PLC and Graphical HMI

KEY FEATURES

- Fully automated and self-contained
- Web-based remote monitoring and adjustment
- Programmable Logic Controller (PLC) with Human Machine Interface (HMI) touchscreen
- Self-adjusting pumps
- Backwash cycle
- Insulated and ventilated
- Water pressure/level alarm
- Fully bunded chemical storage
- Minimal noise or vibration
- Safety features such as isolation switch, eye wash and chemical handling PPE

