

# CASE STUDY



**PROJECT** TRADE WASTEWATER TREATMENT FOR BATTERY MANUFACTURING PLANT

**PRODUCT** Gravity Clarification

**INDUSTRY** Industrial

**LOCATION** Pemulwuy, New South Wales

## BACKGROUND

SuperCharge Batteries generates wastewater from the battery manufacturing process line.

The wastewater needed to be treated to meet trade waste discharge requirements. This included heavy metal removal, pH adjustment and data logging of discharged effluent quality and volume.

## SOLUTION

MAK Water offered a turnkey custom solution, including:

### GRAVITY CLARIFICATION SYSTEM

- Fully automated custom system capable of treating up to 3,000 L/h of wastewater generated from the battery manufacturing process line
- Heavy metal removal via precipitation and clarification
- pH Adjustment for discharge compliance
- Custom programmable logic control (PLC) and instrumentation including data logging of discharged effluent quality and volume
- Automated waste/sludge handling and storage system

## RESULTS AND BENEFITS

- **Turnkey solution.** MAK Water designed and built a custom treatment system to meet the clients discharge requirements. This was a fully automated system with minimal operator input required
- **Compliance.** The treated water is trade waste compliant for site disposal to sewer
- **Lowest total operating cost.** By treating on site rather than having to truck waste off site for disposal, this solution has the lowest total operating cost.



*The completed gravity clarification system in the MAK Water workshop*



*The gravity clarification system installed on site at SuperCharge Batteries.*