

CASE STUDY



PROJECT WASHBAY UPGRADE FOR DEFENCE

PRODUCT Gravity Clarification (GC)

INDUSTRY Defence

LOCATION Canberra, ACT

BACKGROUND

The client required an upgrade to the existing washbay system at Royal Military College, Duntroon (RMC-D) in the ACT. The previous system was not adequately treating heavy and light vehicle washbay water. This resulted in a film forming on vehicles, overdosing of flocculant carrying over into the process, and oil being carried through the system.

These issues affected operational efficiency, increased rewash time, raised chemical consumption costs, and risked non-compliance with environmental and Defence standards.

SOLUTION

MAK Water worked closely with the client to upgrade the washbay system, ensuring compliance with OH&S and environmental guidelines.

The Gravity Clarification (GC) solution incorporated improved chemical dosing and optimised system performance while reusing existing equipment where possible to reduce capital expenditure (CAPEX).

MAK WATER KEY SOLUTIONS

- Gravity Clarification (GC) 3000 L/day treatment system
- Upgraded chemical dosing system including flocculant, polymer, acid and caustic
- Additional pumps and tanks installed to enhance waste management and process efficiency

RESULTS AND BENEFITS

- **Compliance.** Removed free floating oil and suspended solids from treated water, ensuring the system meets Defence and environmental requirements.
- **Time savings.** Reduced rewash frequency, improving operational efficiency for vehicle maintenance teams.
- **Reduced OPEX.** Lower chemical consumption through improved and controlled dosing.
- **Sustainability.** Improved water quality and reduced waste through MAK Water's smart, sustainable water solutions.



MAK Water Gravity Clarification (GC) system