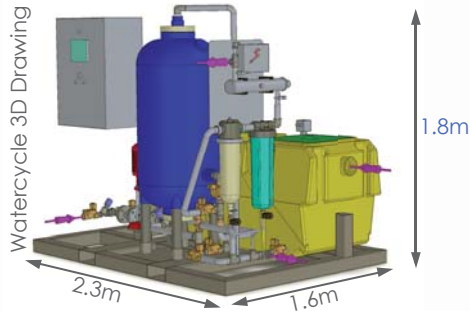


Save over 2.5 million litres of water per year. Zero discharge.

(based on a water consumption of 1.5 m³/hr)

Watercycle's wash water treatment and recycling modules comprise a number of specific purification technologies to simultaneously guarantee cost savings, recycling performance and high purity levels:



- o A reduction in the water bill of **over 80 %**
- o A **rapid** return on investment (2 to 5 years)
- o Wash **performance** maintained
- o **Absence** of foul smells
- o Occupies **limited** floor space (above ground: no loss of work space)
- o **Simple** installation (no buried equipment, no construction work necessary)
- o **Adaptable** treatment capacity (from 1 m³/h to 15 m³/hr)
- o **Easy** maintenance (automated control unit with touch screen)
- o **Low** maintenance costs (limited consumables)
- o Safety : **protect operational personnel and the environment against risks of bacteriological contamination**
- o **No fouling** of high-pressure nozzles

Wash Water **Pollution Control**

Oil and hydrocarbons are coalesced and biodegraded

COD reduction

BOD5 < 150 mg/l

Elimination of suspended matter: 1 micron microfiltration

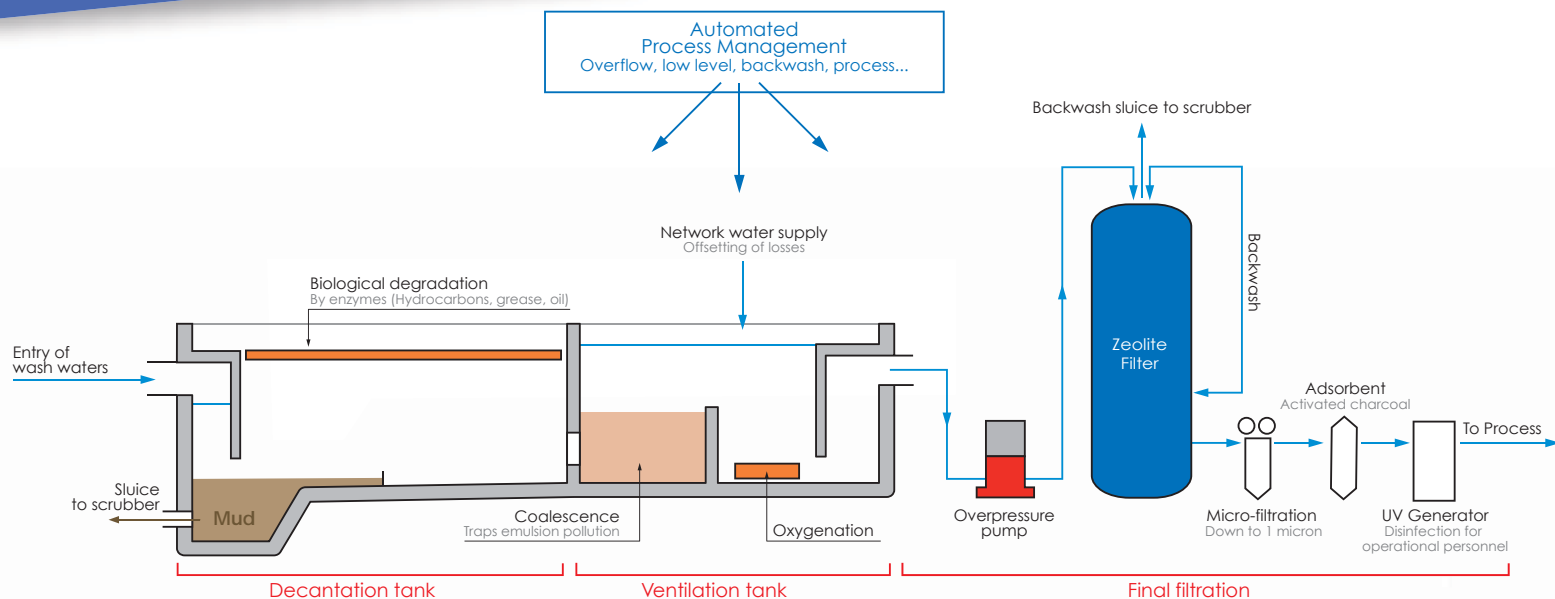
Phosphates and heavy metals eliminated by adsorption

6 < pH < 8

Conductivity < 200 µS



How it Works



Wash waters are collected in a recovery tank. After passage through a scrubber / oil separator (existing equipment) they are pumped to the adaptable compact module "Atlante". Finally, the waters are disinfected and released under pressure for re-use.



In summary:

Pre-treatment: Decantation Tank/Filtration Tank

Pre-treatment is critical to obtain good quality water. The module's pre-treatment system was developed specifically to treat wash waters. Its purpose is to eliminate oil and hydrocarbons whilst simultaneously reducing overall pollution (suspended matter, BOD5, COD, etc...).

Secondary Treatment: Zeolite Filter

Secondary treatment furthers the purification process started at the pre-treatment stage, specifically by the trapping of metals and phosphates by passage of the wash waters through zeolitic filter media. The latter display excellent adsorption properties of heavy metals, phosphates and other dissolved pollutants.

Tertiary Treatment (Part A): Activated Charcoal

Activated charcoal traps the majority of organic compounds and thus eliminates foul smells and reduces overall pollution.

Tertiary Treatment (Part B): Final Filtration

The module's tertiary treatment comprises a 1µm micro-filter.

Its purpose is to ensure the absence of any residual matter and thus protect downstream equipment (spraying nozzles, high pressure equipment, etc...).

Disinfection: UV Disinfection System

To prevent any risk of bacterial contamination for the operational personnel, a UV disinfection system is used at the very end of the treatment process.