

CASE STUDY

PROJECT	PRESSURE VESSEL REPLACEMENT PROJECT
PRODUCT	Duplex Granulated Activated Carbon (GAC) Filtration system
INDUSTRY	Food and Beverage
LOCATION	Western Australia



BACKGROUND

One of the largest bottlers of non-alcoholic ready-to-drink beverages in the Asia-Pacific region had reliability problems with its Water Treatment Plant (WTP). The pressure vessels filled with Granulated Activated Carbon (GAC) used to treat the incoming water for odour and taste had developed serious corrosion and required immediate replacement as they were becoming a serious risk to their core business.

MAK Water was asked to review the tanks, the historical corrosion issues and propose a solution, to replace the tanks in a way that provided the best possible lifespan for this type of tank.

SOLUTION

MAK Water provided a turnkey solution that enabled the works to be completed during a planned shutdown resulting in no disruption to the core activities of the business.

Highlights include: -

- Design and Manufacture of 2 x Duplex 2205 Carbon Vessels in compliance with AS1210
- Vessels manufactured using innovative corrosion prevention techniques to avoid future corrosion.
- Turn Key design solution enabled the successful removal and installation of new vessels during a planned shutdown
- Onsite tubing modification to allow for additional valves and a steam cooling tank.
- Innovative design that enables the carbon to be removed easily.

RESULTS AND BENEFITS

- **Turnkey solution.** Complete design, manufacture and installation package
- **Project Compliance.** MAK Water met all project requirements and specifications in the design and manufacture of the Duplex AS1210 compliant Vessels
- **Local.** The vessels were fabricated in Australia, providing superior build quality, welding certification and material traceability



AS1210 Compliant duplex 2205 Carbon Vessels



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