

CASE STUDY



PROJECT	DEMINERALISED WATER FOR POWER STATION
PRODUCT	Demineralised Water Reverse Osmosis
INDUSTRY	Manufacturing, Mining
LOCATION	Hamersley Ranges, Western Australia

BACKGROUND

The power plant supplying power to one of Australia's largest mining companies required demineralised water, with electrical conductivity of $<1 \mu\text{m/cm}$, for use in compressor washing, chilled water system makeup, and the fuel oil centrifuge.

As the power plant was in an isolated remote location a robust solution to suit the harsh environment was required MAK Water was asked to provide a plant with client-specific engineering and documentation standards.

SOLUTION

MAK Water offered a containerised two pass Reverse Osmosis (RO) plant with pre-RO carbon filtration and caustic dosing, and post-RO mixed bed ion-exchange polishing filtration for guaranteed long-term performance of the plant.

CONTAINERISED SOLUTION

- Ease of on-site installation
- Easily transportable
- Protection from harsh conditions

TWO PASS RO PLANT

- Robust design to ensure compliance with the treated water specification with varying feed water supply.
- Ion exchange resin for treated water polishing and pH stabilisation.

CLIENT-SPECIFIC ENGINEERING AND DOCUMENTATION

- Customised documentation package.
- Compliance with client-specific electrical and mechanical engineering standards.

RESULTS AND BENEFITS

- **Quick response.** The RO plant was designed and delivered in only 10 weeks.
- **After sales support.** Laboratory testing was provided to ensure treated water compliance, with the service and maintenance provided by MAK Water's local service office.



Containerised two pass reverse osmosis plant



Reverse osmosis plant on site at Solomon Hub