

# 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*