

CASE STUDY

PROJECT	STERILISATION WATER FOR HOSPITAL
PRODUCT	Brackish Water Reverse Osmosis (BWRO)
INDUSTRY	Infrastructure
LOCATION	Darwin, Northern Territory



BACKGROUND

The Palmerston Regional Hospital is a new 116-bed hospital in Darwin, jointly funded by the Australian and Northern Territory Governments. The hospital's Central Sterile Services Department (CSSD) requires water suitable for CSSD sterilisation, decontamination and washing of medical equipment.

The local company awarded the mechanical services package for the hospital selected MAK Water to design and manufacture a suitable water treatment plant. MAK Water worked closely with the client throughout the tender, design and delivery phases of the project, providing a technically compliant system to AS4187:2014, table 7.2 – final rinse, including endotoxin control.

SOLUTION

Skid mounted Brackish Water Reverse Osmosis (BWRO) plant to produce 10.8 m³/day of treated water, suitable for CSSD sterilisation, decontamination and washing purposes.

MAK WATER KEY SOLUTIONS

- Custom skid mounted plant with duty/standby (2 x 100%) RO trains
- Granular activated carbon filtration (GAC)
- Medical grade stainless steel cartridge filters
- UV sterilisation
- Duty/standby (2 x 100%) recirculation and distribution pumps
- Stainless steel treated water storage tank, 1,000L with heating and insulation
- Custom control system with Ethernet communications via Modbus/TCP
- WaterMark™ certification
- Onsite plant commissioning and operator training



Skid mounted BWRO plant prior to despatch

RESULTS AND BENEFITS

- **Compliant.** Meets required treated water quality (AS4187:2014, table 7.2 – final rinse) for CSSD sterilisation, decontamination and washing purposes
- **Compact Footprint.** Custom RO skid for site easy installation
- **Technical Support.** Expert advice and consultation throughout the tender, design and delivery phases
- **Plant Reliability.** Custom RO design and quality equipment will provide reliable operation with minimal maintenance.



Recirculation and distribution pump skid with SS tank