

# FRESHWATER

SYSTEMS AUSTRALIA

EST 1991



# ABOUT US



Freshwater Systems have developed a reputation for designing tailored water treatment plants since 1991. Over the years our technology has been fine-tuned to ensure hygienic high pure water systems are delivered to our customers. Having installed over 50 Reverse Osmosis Plants (RO) throughout many of Australia's Hospitals & Day Surgeries, Freshwater Systems is proud to be recognised as the industry leaders for Medical Water Treatment.

Equipment sourced & manufactured locally in South Australia, our custom built High Pure RO Plants are engineered to meet the requirements for AS4187:2014 & EN285 Final Rinse Water. Our Project Management & Design team will work with you to create tailored options for your CSSD requirements.

- Plant size
- Plant layout - to suit plant room dimensions
- Flow velocity
- Preferred disinfection method
- Programmable Heat Disinfection functions & circulating temperature
- Duplex RO Plant option for redundancy
- Duplex circulation Pump option
- Inline Thermal Protection valve option
- Remote Alert Station & HMI Monitoring Screen
- High Level Interface PLC with colour touch screen HMI
- Lease with buy back options
- Online and remote SCADA plant monitoring and control functions
- SMS & Email alerts
- Comprehensive Maintenance Program by fully qualified service technicians
- Auditing / Consultation services available

Supported by the Freshwater Systems Service Division, our highly qualified technicians are passionate about providing our customers with the highest level of service and support to ensure your system remains operating within the design parameters.

We can also provide '*Risk Management Strategy for Infection Control & Prevention*' as well as online plant monitoring support.

- Client focussed
- Complete hygienic engineering
- Manufacturing precision
- Value long term business relationships
- Customer based solutions
- Investment longevity
- 30 years of design & manufacturing experience

## WE HAVE

- Successfully completed more than 10,000 heat disinfections on high pure water PEX Loops
- Installed a combined 25 kilometers of high pure CSSD and Renal RO pipework throughout more than 30 sites Australia wide
- Completed more than 5,000 Hygienic water samples testing in accordance with AS4187 & EN285
- Designed, installed and currently service water treatment plants within the Largest Hospital in Australia - New Royal Adelaide Hospital.

**Final Rinse Water - Manual cleaning  
Manual Disinfection and Washer-Disinfectors**

Substance	Specifications
pH	5.5 - 8.0
Conductivity at 20°C	≤ 30µS/cm
Total hardness	≤ 10mg CaCO <sup>3</sup> /L
Chloride	≤ 10mg/L
Iron	≤ 0.2mg/L
Phosphates (molybdate reactive)	≤ 0.2mg/L
Silicates (molybdate reactive)	≤ 1.0mg/L
Total viable count (see Note)	≤ 100cfu/100mL
Endotoxin	≤ 0.25EU/mL

**Feed Water to a Dedicated Steam  
Generator - For Steam Sterilizers**

Substance	Specifications
Evaporative residue	≤ 10mg/L
Silicates (molybdate reactive)	≤ 1.0mg/L
Iron	≤ 0.2mg/L
Cadmium	≤ 0.005mg/L
Lead	≤ 0.05mg/L
Heavy metals, excluding Iron, cadmium, lead	≤ 0.1mg/L
Chloride	≤ 0.5mg/L
Phosphates (molybdate reactive)	≤ 0.5mg/L
Conductivity at 20°C	≤ 5µS/cm
pH	5 - 7.5
Appearance	Colourless, clear without sediment
Hardness	≤ 0.02mg/L equivalent to ≤ 2mg CaCO <sup>3</sup> /L



Central Sterile Services Department



Day Surgeries



Renal Dialysis



Endoscopy



Pathology



Dental



Intensive Care Unit



Cosmetic Surgeries



Ophthalmology



# OUR VALUED CUSTOMERS

- New Royal Adelaide Hospital
- New Calvary Hospital, Adelaide
- St Andrews Hospital
- Calvary Hospital, North Adelaide
- Lyell McEwin Hospital
- Noarlunga Hospital
- Memorial Hospital
- Northern Hospital
- Wallaroo Hospital
- Queen Elizabeth Hospital
- Murray Bridge Hospital
- Flinders Private Hospital
- Seaford Day Surgery
- Windsor Gardens Day Surgery
- Modbury Hospital
- Western Hospital
- Womens and Children's Hospital
- And More

