

# WHITewater

## HSDU/CSSD

PURIFIED WATER FOR HOSPITAL STERILE SERVICES

**Whitewater** provide water purification systems for Hospital Sterile Services (CSSD) for washer / disinfectors. The system provides the benefits of a secure and continuous supply of pre-heated water (65°C) minimising washer disinfection times, with daily hot disinfection to 85°C.

*Designed to meet HSE Code of Practice for Decontamination of RIMD, CFPP01-06 and EN ISO15883- 1&4.*



**New Feature**

The Whitewater CSSD unit also has the option to supply cold RO water for the other washer cycles. With this additional feature, a single unit can also provide water for both Sterile Services and Endoscopy, making valuable cost and space savings especially in new-build CSSD units.

### 1. Pre-treatment

Pre-treatment units including softeners and filters to remove hardness salts and suspended solids.

### 2. Reverse Osmosis

Reverse Osmosis and Ultrafiltration technology ensure a constant supply of purified water, low in conductivity, bacteria and endotoxins.

### 3. Heated storage tank

Purified water is stored at a constant 65°C to inhibit bacterial growth, providing pre-heated water to the disinfection unit. This minimises washer disinfection cycle times and ensures lower operating costs.

Heating is provided by steam or electric power and an automatic daily disinfection cycle to 85 °C ensures optimum disinfection levels.

### 4. Ultrafiltration

Stored water passes through an ultrafiltration membrane before use to provide maximum protection against bacteria and endotoxin.

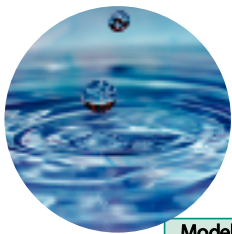
### 5. Distribution pipework system

Water is pumped at flowrates up to 80 litres per minute by the recirculating pump, meeting the water drawdown needs of simultaneous washers and sterilisers.

As low levels of bacteria and endotoxins are crucial, pipework is available either in 316L stainless steel or 'Clean Pex' a high pressure / temperature polyethylene material used regularly in medical and healthcare applications.



**# 24/7 on-call support. For clients who take out 12 month contracts and whose systems are regularly maintained, we offer a 24 hour emergency on-call service by the largest team of qualified and experienced technicians in Ireland.**



# WHITE WATER

CSSD

PURIFIED WATER FOR HOSPITAL STERILE SERVICES

## Purified Water Specification

Model	CSSD 300/300L	CSSD 500/500L	CSSD 800/300/300
Pure Water Production	300 l/hr @ 15°C	500 l/hr @ 15°C	800 l/hr @ 15°C
Loop Flowrate	30 l/min @ 4.5 bar	50 l/min @ 4.5 bar	HOT 30 l/min COLD 30 l/min @ 4.5 bar
Inorganic	<30 µS/cm	<30 µS/cm	<30 µS/cm
Bacteria	<10cfu/100ml	<10cfu/100ml	<10cfu/100ml
Endotoxin	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Particles	<0.05 micron	<0.05 micron	<0.05 micron

## Feedwater Requirements

Item	Measure	Range	Range	Range
Hardness	Total hardness mg/l as CaCO <sub>3</sub>	<400	<400	<400
Total Chlorine	Cl mg/l	<0.1	<0.1	<0.1
Fouling Index	SDI	<3	<3	<3
Iron / Manganese	Fe/Mn mg/l	<0.05	<0.05	<0.05
Conductivity	µS/cm	<700	<700	<700
Temperature		Recommended 15–20°C	Recommended 15–20°C	Recommended 15–20°C
Make-up Flowrate		10 l/min	15 l/min	25 l/min
Drain requirements (gravity fall with air gap) Maximum during sanitization		45 l/min	45 l/min	45 l/min
Feedwater Pressure		6 bar maximum 3 bar minimum	6 bar maximum 3 bar minimum	6 bar maximum 3 bar minimum

## Weights, Dimensions and Installation

Height	1840 mm	2000 mm	1900 mm
Depth	880 mm	1000 mm	880 mm
Width	1850 mm	1950 mm	2550 mm
Supply weight	280 kg	310 kg	400 kg
Operational weight	340 kg	390 kg	580 kg
Installation	Floor mounted*	Floor mounted*	Floor mounted*

## Electrical Requirements

\* safety wheels fitted as standard

Mains input	380V AC, 50 Hz	380V AC, 50 Hz	380V AC, 50 Hz
Systems control voltage (not including pumps & UV)	24V DC	24V DC	24V DC
Power consumption (peak demand)	21 kW	33 kW	41 kW
Electrical protection rating	25 amps	25 amps	25 amps
Noise level during recirculation	<50 dBA	<50 dBA	<50 dBA

## Whitewater CSSD – Fully Automatic Validated Hot Disinfection Programme

### Features and benefits

- Class 'A' air break tank on feedwater supply
- High efficiency reverse osmosis membrane
- Integral 300 ltr PW\* water reservoir with bacterial vent filter to ensure microbiological integrity
- Re-circulation pump provides instantaneous delivery flow
- Ultrafiltration membrane provides final security against microbiological and particulate contamination
- Operates quietly at very low noise levels
- Comprehensive micro-processor monitoring and control system
- Aseptic sample point to validate and verify product water quality
- Complete range of alarm systems which alert user to critical parameters
- Automatic fully programmable HOT disinfection programme



\* purified water

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quality in purity

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