## **EndoTherm Duo**

# **Compact Duplex RO System**



## Compact, reliable, cost effective duplex reverse osmosis water purification solutions for endoscopy and sterile services applications

The EndoTherm Duo is a range of duplex reverse osmosis (RO) systems that are designed to meet the water quality standards of HTM01-06, HTM01-01, ISO15883 and AS/NZ 4187.

EndoTherm Duo units can be set to operate at ambient or elevated temperatures (user adjustable) with automatic thermal sanitisation taking place out of hours. All models can be electric or steam heated. A combination of reverse osmosis, ultra-violet disinfection, sub-micron filtration and constant recirculation all work together to maintain good water quality at a range of dispense rates that can be matched to single or multiple decontamination equipment needs.

The full colour HMI (human machine interface) touch-screen monitor allows for secure access levels, simple maintenance procedures and displays real-time graphical data. Compact, pre-assembled and skid mounted, EndoTherm Duo units are fast and easy to install, commission and validate. Various service contract options are available as well as access to our remote digital monitoring programs.



<50 mg/l

<0.4 mg/l

<10 <0.05 mg/l <20°C 2.5-6.0 bar <1400 µS/cm <30 mg/l

#### **Features and Benefits**

- Ideal for single or multiple washers/autoclaves
- Steam heating option available
- Duplex high-efficiency RO systems on the same module for maximum resilience
- Prefabricated, skid mounted modular system means quick installation and less downtime
- Thermal sanitisation to >80°C automatically out of hours
- Water can recirculate at ambient or elevated temperatures to all points of use
- Designed to comply with HTM01-06, HTM01-01, ISO15883, EN285 and AS/NZ 4187 requirements
- Choice of high dispense rates for rapid filling and shorter cycles
- Distribution loops available in orbitally welded stainless steel or PEX pipework
- High capacity stainless steel tank to buffer demand to multiple washers
- Hygienic sample valve with easy access to validate and verify product water quality
- Upgradeable outputs up to 1200 lph to help future proof
- PLC controller with full colour, touch screen HMI for easy system programming
- Removable USB memory stick for data logging system performance and sanitisations
- Twin pass option available
- Remote monitoring options available
- Comprehensive after sales service and support backed up by national network of fully trained engineers

**Feed Water Quality - All models** 

Hardness (CaCO<sup>3</sup>)

Free Chlorine (Cl2)

Fouling Index (SDI)

#### **Technical Specification**

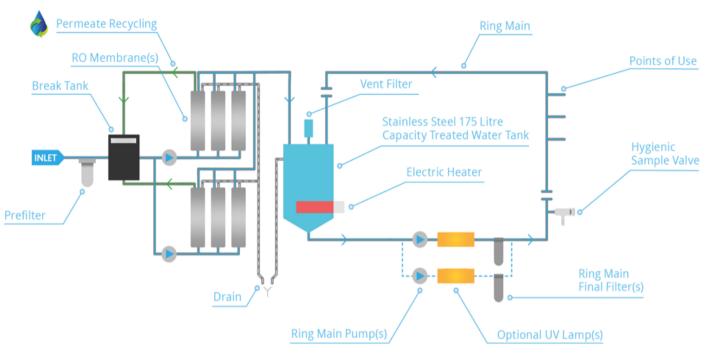
Treated Water Specification - All models					
Conductivity	<30 μS/cm				
Bacteria	<1 CFU/100ml				
Endotoxin	<0.25 EU/ml				
Particles	<0.2 μm				

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Particles	<0.2 μm		Iron/Manganese (Fe/Mn)	
			Temperature	
			Feedwater Pressure	
			Max Conductivity	
Manepo	<b>a</b>		Silica (SiO <sup>2</sup> )	





## **System Flow Diagram**



## **Product Specification**

EndoTherm Duo Model		ETD-300	ETD-600	ETD-900	ETD-1200			
Production Rate @ 15°C	l/hr	300	600	900	1200			
Max Dispense Rate	I/m	Up to 120						
Max RO Recovery Rate	%	75						
Dimensions: Depth	mm	830						
Dimensions: Width	mm	1360						
Dimensions: Height	mm	1840						
Shipping Weight	Kg	330	350	372	395			
Inlet Connection	BSP	1"						
Drainage Connection	min 32mm	Upstand to drain						
Ringmain Connection	inches IDF	1"						
Electrical Supply	-	3ph, 415V, 32A						
Max Power Consumption	kW	19						
Noise Level during Recirculation	dB	< 50						

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