



# Front Loading Priorclaves



100, 150 and 200 Litre Capacities

Large diameter chamber giving 20% more loading area than conventional models.

Quickseal 2 single action door closure system

Electrically Heated either 7kW (single phase 30A) or 10.5 kW (three phase 15A)

Direct steam heated models available

Steam generated within the chamber (electrically heated models)

Forced air cooling

Automatic timed freesteaming

Delayed start and media warming capacity

Conforms to BS2646-1993, BS5500 Cat.3, European PED 97/23/EC, EMC compliance tested and CE marked including MDD, amongst others

Supplied with two full width stainless steel shelves.

## Design

Operation up to 138°C – 2.4 Bar. The **TACTROL** microprocessor control system has staged illumination giving digital readouts of cycle status and the simple to set control panel features adjustable temperature and time that can be viewed simultaneously. Ideally suited for use in a wide range of applications:

**Sterilisation**- media preparation, liquids and diluent, waste, glassware, instruments, apparatus, health care

**Non-sterilisation**– food processing, plastics, accelerated curing, construction.

Extensively used within many industries, including: food, drink, dairy, pharmaceutical, agricultural, education, healthcare, research establishments and industry.

## Safety Features

Complies with current UK and EU safety regulations.

Full Insurance Approval for pressure vessel design and construction and 10 year pressure vessel warranty.

CE Marked under the Pressure Equipment Directive PD5500:2000 Cat 3, Certificate Number SS42059010-5 Rev 1.

The Quickseal II door is fitted with thermal and pressure locks preventing opening of the autoclave at load temperatures above 80°C and pressures above 0.2 Bar along with a special door gate mechanism, which cracks the gasket seal allowing any residual pressure to safely escape. The unit also features a low water level sensor, protecting against boil-dry conditions.

Protection against cross-infection by the unique **BioCote** anti-bacterial agent, which is effective against the growth of all bacteria and fungi including MRSA and is incorporated in the epoxy coating on all panels and frame members.

Conforms to the general requirements of BS2646 and CE Marked for BS EN61010-2-41, Low Voltage and Electromagnetic Compatibility Directives.

## Services Required

**Electrical Supply:** 230 volts, 50Hz, single phase rated at 30 amps per phase or 400 volts, 50 Hz, three phase rated at 15amps per phase with earth and neutral terminated at a suitably fused switched socket to EN60309 within 2 metres run of the rear of the Priorclave. For optimum performance 200L models should be connected to 3 phase supplies.

**Water Supply\*:** Electrically heated models - Manual fill. If the Automatic Waterfilling and or Vacuum options are included then a 15mm cold water supply terminated at a stopcock within 2 metres run of the rear of the Priorclave should be supplied.

**Drain Service:** A 35mm sealed drain with one untrapped 22mm entry and one 28mm untrapped entry, capable of withstanding steam at 138°C, with a constant fall to waste, vented at a high level outside of the building to satisfy the requirements of BS 2646 Part 2 1990. A separately trapped, 22mm drain should be provided for the Auto Water Fill tank if fitted. All drains should be provided at a low level within 2 metres run of the rear of the Priorclave.



**Steam Supply\*:** A ½ BSP steam supply regulated to 3 bar, via a 100 mesh strainer, fitted with a suitable condensate trap and isolating stopcock, terminated within 2 metres run of the rear of the Priorclave. Steam heated models only.

\* If specified



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## TACTROL 2 Control System

Tactrol 2 is a microprocessor based, purpose designed and built autoclave control system with very easy and fully variable setting of process time and temperature and graphic indication of cycle status. This sophisticated control system enables the simple setting of a large range of autoclave programs. Operation is fully automatic once process temperature and time have been set and the cycle is started.



### Load Sensed Process Timing

Guaranteed sterilisation times from a probe in the anticipated coolest part of the load.

### Automatic Freesteaming

Includes a venting period during heating, greatly improving temperature distribution and helping air removal.

Also available – Pulsed Freesteaming for improved waste load performance.(optional)

### Multi-Program Memory (Option)

Simply press program number required to restore all your settings. Five and ten program options available

### Accelerated Cooling

Powerful fans blow cold air over the autoclave vessel reducing cooling times to safe load temperatures. Delayed start selectable to reduce media volume loss.

### Media Warming

Forget early morning starts to melt media! The autoclave maintains the media overnight at a ready to pour' temperature.

### Vacuum (Options)

Pre-Cycle Vacuum to assist air removal. Vacuum Drying and Cooling options are also available.

### Process Printer (Option)

A full record of temperature and time is recorded at key stages of the cycle. Your details can be printed at the start of each printout, together with the autoclave serial and cycle number. Pressure and load temperature printing options are also available.



## Options and Accessories

A selection of options and accessories to help you to get the best from your Priorclave.

*For detailed advice about your specific requirements please contact our Sales Department.*

**Vacuum Air Removal:** This is a facility to assist in satisfactory sterilisation of difficult loads of waste products. Using a liquid ring vacuum pump with an evacuation capability down to approximately 100mb absolute, multiple vacuum stages can be programmed and are interspersed with heating stages to achieve steam penetration of the load. Used in conjunction with Tactrol pulsed freesteaming this system produces excellent and reliable results. Where a suitable water supply is not available diaphragm vacuum pumps may be specified.

**Vacuum Assisted Cooling:** Designed to rapidly cool plastic and small bottled waste loads, this cooling system (patent applied for) utilises the vacuum pump to rapidly reduce the pressure in the chamber. The reduction in pressure causes the fluids present in the waste load to evaporate, initiating a cooling action in the solid items in the load. The cooling phase of the cycle is thus typically reduced to approximately 5 to 10 minutes. \*Not suitable for bottled fluids where the contents are intended for further use.

**Post Cycle Drying:** At the end of the cycle the chamber walls are heated by externally mounted silicone mat contact heaters whilst a series of vacuum cycles are repeated providing the facility to dry a suitable load.

**Baskets and Containers:** A selection of baskets and stainless steel discard containers are available for individual models.

**Priorclave Loading Trolley:** Specially designed for Front Loading and Rectangular Section Priorclaves, the top stainless steel loading runners are adjustable to be level with the lower shelf of the autoclave. Large enough to accommodate a full autoclave load and fitted with swivel castors, lockable at the rear it can also be used in conjunction with the Priorclave Loading Cassette. Fitted with a device capable of retaining the Loading Cassette when on a 15° slope.

**Priorclave Loading Cassette:** The Loading Cassette is designed to be used to transfer the load from different areas of the laboratory to the Priorclave. The Loading Cassette is then inserted into the chamber of the Priorclave reducing the manual handling aspects to a minimum.



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Certificate Number 0373



# Technical Specifications

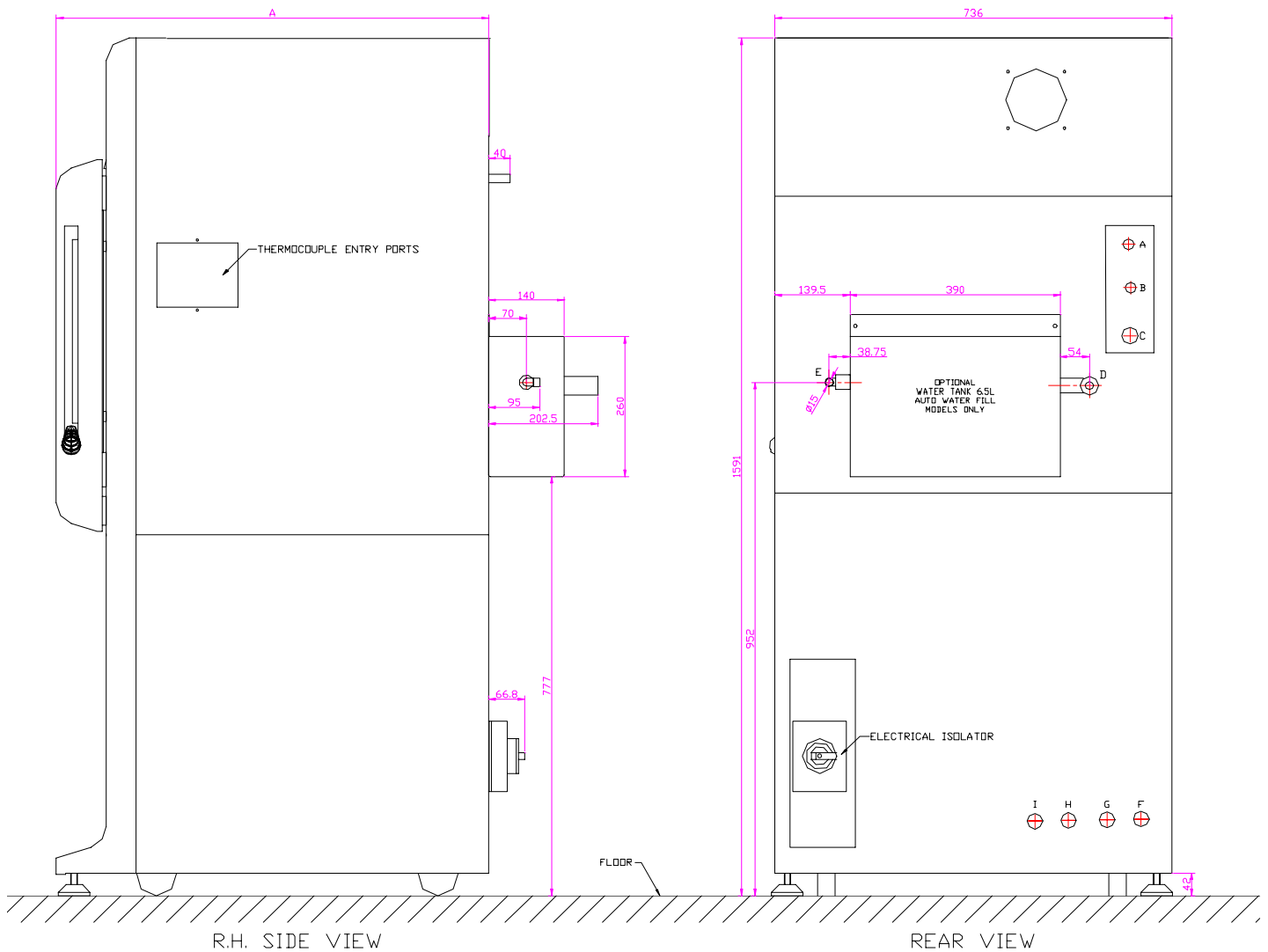


	H100	H150	H200
Chamber Material:	Polished grade 316 stainless steel		
Operating Range	Up to 138C. 2.4 Bar		
Working Capacity:	100 litres	150 Litres	200 litres
Chamber Dimensions:	500mm dia. x 540mm Deep	500mm dia. x 770mm Deep	500mm dia. x 1020mm Deep
Loading Height:	800mm		
External Dimensions:	735x930x1600mm (wxdxh)	735x1050x1600mm (wxdxh)	735x1350x1600mm (wxdxh)
Floor Weight:	Approx. 195 kG.	Approx. 215 kG.	Approx. 245 kG.
Minimum space for installation (to allow for connection to services and unrestricted door opening)	930x1615x1600mm (wxdxh)	930x1865x1600mm (wxdxh)	930x2175x1600mm (wxdxh)
Heat Input:	7 or 10.5 kW	7 or 10.5 kW	10.5 kW
<b>Packed Sizes:</b>			
Standard Packing	Bubble wrap and packing film.		
Packed Dimensions	930x1615x1600mm (wxdxh)	930x1865x1600mm (wxdxh)	930x2175x1600mm (wxdxh)
Packed Weight:	Approx. 195 kG.	Approx. 215 kG.	Approx. 245 kG.
<b>Export Packing</b>	Clipped ply case with ramp to safely remove the Priorclave		
Packed Dimensions	1140x920x1840mm (wxdxh)	1260x920x1840mm (wxdxh)	1140x920x1840mm (wxdxh)
Packed Weight (approx.):	245 Kg	300 Kg	375 Kg



# Installation Details

Inlet/Outlet	Autoclave Configuration	Use	Size	Position (to hole centres)		Notes
				From Floor (mm)	From Hand side (mm)	
A	Basic / Standard Model	Safety Valve	15mm	1290	65	Do <b>NOT</b> connect to drain
C	Basic / Standard Model	Vent /Steam Outlet	22mm	1150	65	
H/I	Drain Condenser	Drain condenser. Linked outlets	22mm	165	150	
H	Manual Drain Option	Autoclave Drain	15mm Stopcock	165	150	
D	Models with automatic waterfilling	Water fill tank inlet	15mm	952	152	Can be connected to treated water supply (if available). Water for autoclave vessel only.
E	Models with automatic waterfilling	Water fill tank Overflow	15mm	946	635	Run to drain separately from main autoclave outlets to avoid feedback.
B	Non-Vacuum Models with Air intake filter	Safety Valve	15mm	1220	65	Do <b>NOT</b> connect to drain
B	Steam Heated Models	Steam Inlet	15mm	1220	65	
F	Steam Heated without Drain Condenser	Drain/Vent	22mm	165	50	
A	Vacuum Models	Air Intake/Vacuum Break	15mm f/m Fitting	1290	65	No connection required
C	Vacuum Models	Safety Valve	15mm	1290	65	Do <b>NOT</b> connect to drain
F	Vacuum Models no Drain Condenser	Drain/Vent	22mm	165	50	
G	Vacuum Models no Drain Condenser	Water inlet	15mm	165	100	Untreated water
F	Vacuum Models with Drain Condenser	Water inlet	15mm	165	50	Untreated water
G	Vacuum Models with Drain Condenser	Vacuum Pump tank overflow	15mm	165	100	Run to drain separately from main autoclave outlets to avoid feedback.



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