



**PRIORCLAVE** AUTOCLAVES



# PRIORCLAVE PRODUCT RANGE

Our range covers autoclaves in capacities from 40 to 700 litres and above, operating to 140°C – 2.5 Bar

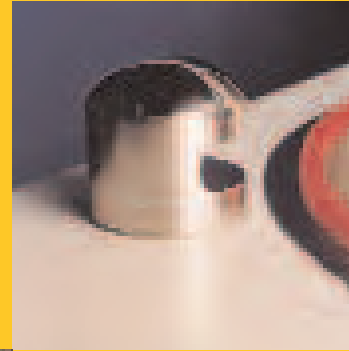
With our extensive in-house design and production facilities we can easily tailor our range to your particular requirements.



## OPTIONS AND ACCESSORIES

Together with our full list of control options the following are among the large range of accessories available to give you more from your Priorclave:

- Push-Button Waterfill – Easy refilling between cycles. (Standard with drying cycle option).
- Vacuum options (pre and post cycle) available on all models.



## CUSTOM DOUBLE DOOR AUTOCLAVES

Where a clean room or containment laboratory is being installed it is often an advantage to install a through-wall autoclave to ensure containment.

Where there is concern about bio-hazardous material in the autoclave a microbiological exhaust filter can be fitted.

Unfiltered condensate is returned to the autoclave for sterilisation.

- Printer (plain paper - non-thermal) to give a permanent and readable record of cycles.
- Air Intake Filter – filters air drawn into the autoclave. (Standard with drying cycle option).
- Serial Interface – for monitoring by or updating by computer.
- Self-Monitoring - **TACTROL**® continuously monitors itself for correct calibration.
- Recorders – independent monitoring of temperature and pressure.
- Waste Containers – for operator safety and protection of your autoclave with waste loads. These contain spillages whilst allowing good steam penetration.
- Loading trolleys and cassettes for front loading models.
- Load-Lite Lifting Hoist – helps out with heavy loads on top loading models.



# CONTROL SYSTEMS AND APPLICATIONS

## 'TACTROL® 2' microprocessor based autoclave control system

At the heart of every Priorclave is the highly successful TACTROL® microprocessor control system, specially developed for laboratory autoclaves. From simple cycles to fully featured multi-program operation with printed records, this unique and powerful control system allows unrivalled flexibility and monitoring.



By fully automating the autoclave process and including features to assist with autoclave management, TACTROL® allows you to continue with other tasks secure in the knowledge that autoclaving is proceeding safely and efficiently. Packed with self-monitoring systems, TACTROL® has pre-set actions for events such as power failure or low water levels. A number of features are built in allowing cycle optimisation for the diverse functions demanded by the modern laboratory. Control options are available for every autoclaving need.

TACTROL® is simple to use. Just set the temperature and time required, select any options needed and press start. For added security a setting lock is available. A tough, clear control panel with digital displays continuously provides information on status.

A full log of autoclave activity is held in the system and can be downloaded for diagnostic or monitoring purposes.

### Load Sensed Process Timing O

An internal probe placed in the anticipated coolest part of the load gives guaranteed sterilisation times. If a printer is fitted load temperature is included on the printed record.

### Automatic Freesteaming S

A venting period during heating, which greatly improves temperature distribution by encouraging air removal.

Also available – Pulsed Freesteaming – for improved waste load performance.

### Accelerated Cooling S

Powerful fans blow cold air over the autoclave vessel reducing cooling times to safe load temperatures. A delayed start can be set to protect loads sensitive to media volume loss.

### Media Warming S

At the end of the cycle the autoclave is kept warm to keep sterilised media at a 'ready to pour' temperature. When combined with the Delayed Start setting this can put an end to early morning starts to melt media!

### Vacuum Options O

#### Pre-Cycle Vacuum

A powerful vacuum pump draws a series of evacuations to ensure air removal from difficult loads. This is combined with Pulsed Freesteaming to achieve excellent steam penetration.

#### Post-Cycle Vacuum

**Vacuum Cooling** cycle to accelerate the cooling of waste loads to a safe door opening temperature.

**Vacuum Drying** cycle for fabric and wrapped loads using chamber wall heaters to reduce condensation onto the load.

### Multi-Program Memory O

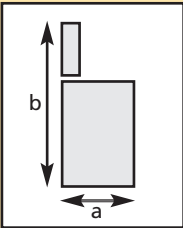
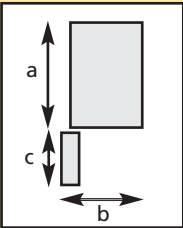
Simply press the program number required to restore all your settings. Five and ten program options are available.

### Process Printer O

Temperature and time are printed at key stages of the cycle. Paper and ink are used to give a clear, long lasting record unaffected by the hot conditions usually associated with autoclaves. 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.

S - Standard    O - Optional

# PRODUCT SPECIFICATIONS

Order Ref.	Loading Format		Loading Height (mm)		Minimum Installation axbxc(mm) (see diagram below)		Heater Power (Electrical models)	Weight (kg)
	Working Volume (Litres)		Working Dims. w x d x h (mm)		Outside Dims.# w x d x h (mm)			
<b>Compact Priorclaves (electrically heated only)</b>								
PS/MID/C40	40	Front	350dia x 420	N/A	520x610x640	660x580x560	3kW 13A	70
PS/MID/C40	40	Front	350dia x 420	N/A	695x610x640	660x755x560	3kW 13A	75
PS/MID/H60	60	Front	350dia x 625	N/A	520x815x640	865x580x560	3kW 13A	85
PS/MVA/H60	60	Front	350dia x 625	N/A	695x815x640	865x755x560	3kW 13A	90
PS/MID/C60	60	Top	350dia x 625	850	472x620x900	670 x 1395	3kW 13A	85
PS/MVA/C60	60	Top	350dia x 625	850	472x790x900	875 x 1395	3kW 13A	90
<b>Top Loading and Front Loading Priorclaves (electric or direct steam heating)</b> (For direct Steam Heated models substitute SV or SH for EV or EH in order ref.)								
PS/QCS/EV100	100	Top	500dia x500	755	660x840x840	980x1400	7kW 30A 1 Phase or 10.5kW 15A 3Phase	147
PS/QVA/EV100	100	Top	500dia x500	755	960x840x840	980x1400	10.5kW 15A 3Phase	157
PS/QCS/EV150	150	Top	500dia x720	935	660x840x1020	980x1640	7kW 30A 1 Phase or 10.5kW 15A 3Phase	165
PS/QVA/EV150	150	Top	500dia x720	935	960x840x1020	980x1640	10.5kW 15A 3Phase	175
PS/QCS/EH100	100	Front	500dia x535	860	740x905x1535	965x935x625	7kW 30A 1 Phase or 7kW 15A 3Phase	190
PS/QCS/EH150	150	Front	500dia x740	860	740x1135x1535	1325x935x625	7kW 30A 1 Phase or 10.5kW 15A 3Phase	208
PS/QCS/EH200	200	Front	500dia x1025	860	740x1385x1535	1565x935x625	7kW 30A 1 Phase or 10.5kW 15A 3Phase	236
PS/Q63/EH320	320	Front	630dia x1025	725	760x1310x1525	1480x990x760	18kW 30A 3Phase	300
<b>Rectangular Section (RSC) Priorclaves (electric or direct steam heating)</b> (For direct Steam Heated models substitute SH for EH in order ref.)								
PS/RSC/EH230	230	Front	580x600x*600	800	760x1025x1630	1225x960x760	21kW 30A 3 Phase	560
PS/RSC/EH285	285	Front	580x760x*600	800	760x1155x1630	1355x960 x760	21kW 30A 3 Phase	600
PS/RSC/EH350	350	Front	580x900x*600	800	760x1325x1630	1525x960 x760	21kW 30A 3 Phase	640
PS/RSC/EH450	450	Front	675x900x*755	800	855x1325x1785	1525x1055 x760	32.5kW 45A 3 Phase	770
PS/RSC/EH700	700	Front	675x1360x*755	800	855x1780x1785	1990x1055 x760	42kW 60A 3 Phase	950
<b>Rectangular Section Vertical Power Door Priorclaves (electric or direct steam heating)</b> (For direct Steam Heated models substitute SH for EH in order ref.)								
PS/RSV/EH230	232	Front	580x600x*600	950	900x1240x1880	1440x900	21kW 30A 3 Phase	960
PS/RSV/EH350	348	Front	580x900x*600	950	900x1540x1880	1740x900	21kW 30A 3 Phase	1060
PS/RSV/EH450	450	Front	675x900x*755	1045	1360x1685x2065	1885x1360	32.5kW 45A 3 Phase	1180
PS/RSV/EH700	700	Front	675x1360x*755	1045	1360x1690x2065	1890x1360	42kW 60A 3 Phase	1360
*(Steam heated models have an extra 45mm working height). Weight and some sizes may vary dependant on specific options fitted								
<b>Installation dimensions</b>								
To allow room for autoclave doors to open and for connection to services, please note the following dimensions								
								
			Side View		Plan View			
# Outside dimensions given <b>DO NOT</b> include easily removable items such as door handles and outlet pipes that could be moved or removed for transport.								
The outside dimensions represent the maximum size of the machines without radical alteration. For information when assessing whether further work is required to get an Autoclave into position the following dimensions should be considered: Pipes protruding at the back – up to 65mm; Water fill tank on RSC and front loading models at back – 140mm; RSC door handles (overlap at side) – 70mm.								
Care should be taken when certain other options are fitted such as exhaust filters, condensers, vacuum fill tanks on C40 and C60 models.								

## COMMITMENT TO EXCELLENCE

With years of experience in the design, manufacture and use of laboratory autoclaves, we at Priorclave are justifiably proud of our reputation as one of Europe's leading manufacturers.

### OUR COMMITMENT TO QUALITY

- Operation of an ISO9001:2000 Quality System.
- Full EMC Compliance Testing.
- Independently monitored approval of vessel design and welding
- Continued investment in new technology.
- Continued development of products, keeping quality conscious laboratories at the cutting edge of technology.
- Design of equipment that is reliable, hardwearing, easy to operate and good value for money.
- Continued use of the best materials available. For instance, our pressure vessels are only made from grade 316L stainless steel for its superior corrosion resistance over other grades. All vulnerable external panels are also in Stainless Steel (all Priorclave vessels are supplied with a 10-year warranty).
- Maintaining a dedicated Service & Technical Support Team.
- UKAS Accreditation as a Calibration Laboratory (Registration No: 0602)

Priorclaves are built and where appropriate, CE marked to:

- BS2646-1993
- BS5500 cat.3.
- EN61010-2-41.
- EN5008-1 / EN50082-1.
- HSE Note PM73.
- European Pressure Vessel Directive -97/23/EC.

### OUR COMMITMENT TO SAFETY

Autoclaves at working pressure can be dangerous, so for your protection Priorclaves include the following features:

- Pressure vessels manufactured in-house and tested to 3.94 bar, approximately 1.5 times the maximum working pressure of 2.5 Bar.
- Reliable and long lasting door seals.
- Regulation safety valves to BS6759 .
- Patented Door retention devices guarding against residual pressure
- Pressure interlocks on rapid opening door systems.
- Low surface temperatures.
- Non-tip shelves on front loading models.

#### • Thermal Interlocks

Serious accidents have occurred when removing liquids in glass bottles from autoclaves. Although the autoclave may be at a safe temperature the bottles may still be pressurised and could explode in contact with cooler air. To protect against this hazard safety standards require a device preventing access until the load is cooler than 80°C.

**All Priorclaves have thermal interlocks fitted with an override key for use at the operator's discretion on low risk loads.**



#### **Biocote® Anti-Microbial Surface Coating**

Unique to Priorclave, Biocote® provides a second line of defence to minimise the risk of cross contamination. Extensive validation has been carried out using independent laboratories, with data showing that Biocote® products inhibit bacteria related to organisms including E-Coli, MRSA and Salmonella. Biocote® is incorporated into the surfaces of all Priorclave models.

Silver is the active agent used in Biocote® technology due to its broad spectrum of anti-microbial properties and its proven ability to inhibit the growth of bacteria.



Certificate Number 6973

[www.priorclave.co.uk](http://www.priorclave.co.uk)

Priorclave® is a registered trade mark.



## AFTER SALES CARE

Priorclave operates a network of trained and certified technicians both in the UK and through accredited distributors throughout the world. We offer, in addition, a support service to help you get the very best from your Priorclave.

### TELEPHONE ASSISTANCE

Our technicians are on hand to assist with any autoclave problems. Outside office hours our contact line puts you directly in touch with one of our engineers. If we are unable to resolve the problem by telephone then a visit by an engineer is arranged.

### INSTALLATION AND COMMISSIONING

If required our technician can install your Priorclave to current standards and give operator training. Full commissioning and performance testing are also available. IQ/OQ/PQ can also be carried out.

### MAINTENANCE PLANS

A selection of plans is available:

**Standard:** Our technician calls on a regular basis (every six months but more or less frequently if required), carrying out a full service according to a multi-point checklist. Also includes free software upgrades and substantial discounts on spare parts and unscheduled call-outs.

**Standard Plus:** As above but with all parts (excluding consumables) included.

**All-Inclusive:** All parts (excluding consumables) and call outs are included.

### CALIBRATION SERVICES

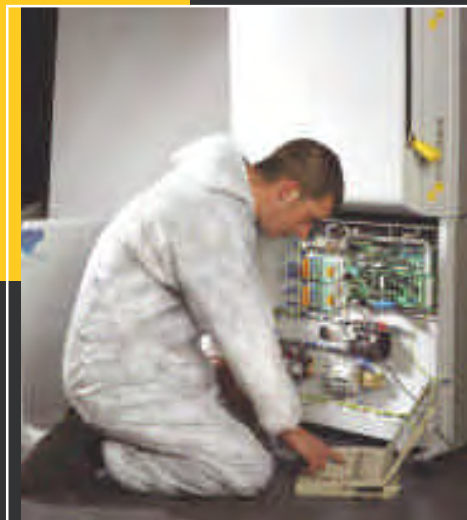
Priorclave is a UKAS accredited calibration laboratory and offers specialist autoclave calibration. This is usually carried out as part of a Maintenance Plan, but one off calibrations can easily be arranged.

### AUTOCLAVE PERFORMANCE QUALIFICATION

Our Technician can test the autoclave with your load and make adjustments for optimum performance. Highly recommended for vacuum and waste cycles. For more details please contact Priorclave Service.



Outside the UK contact your local distributor for details.



Priorclave Ltd  
129/131 Nathan Way, Woolwich, London, SE28 0AB  
United Kingdom.  
T : +44 (0)20 8316 6620 F : +44 (0)20 8855 0616  
E : sales@priorclave.co.uk  
[www.priorclave.co.uk](http://www.priorclave.co.uk)

# The Priorclave Family

## Compact and Standard Priorclaves



The Compact 40 Benchtop and Top Loading Compact 60 are the smallest Priorclaves. Available as standard or Vacuum models, these highly specified units are intended for the smaller laboratory. They also add greater flexibility to larger installations.



### TACTROL 2 Control System

Heart of the family, this powerful control system is fitted to every Priorclave. It features a simple user interface with a flexible capability to provide a reliable method to control the Priorclave.



### Standard Priorclaves

Top Loading or Front Loading to suit the application and available laboratory space. Top Loading Priorclaves are available as 100 or 150 litre capacity. Front Loading models are available as 100, 150, 200 or 240 litre models. They can be electrically heated, where they generate their own steam from heaters in the chamber, or steam heated where steam is generated remotely.



Priorclaves can be used for many, varied applications including as Pass Through models for Containment or Clean Room facilities.

Priorclaves comply with all relevant British or European Standards.



# The Priorclave Family

## Large Chamber Priorclaves



### Q63 Large Diameter Priorclaves

The Q63 is available in a 320 litre chamber capacity and combines a single action Quickseal 2 door with a 630mm diameter chamber. This provides a fast heating, cylindrical chamber with a relatively small footprint and high loading capacity. Available as either electrically or steam heated, gravity or vacuum cycle and with a full range of accessories to suit your specific application.

### Rectangular Chamber Swing Door

Available as 230, 285 or 350 litre chambers with 2 handwheel closure or 450 and 700 litre chambers with 3 handwheel closure. These Priorclaves have proven very popular as large capacity, small footprint autoclaves. The handwheel closure system provides a reliable, low maintenance closure system.



### Rectangular Chamber Power Door

Available in all five rectangular chamber sizes, the hydraulically operated Power Door features inherently safe closure mechanisms with a solid, non-moving door gasket. These Priorclaves are offered as Cabinet or Fascia Mounted versions to suit your application.



Unique to Priorclave autoclaves! This anti-microbial coating is effective against all fungi and bacteria.