

The Priorclave EH150 Stackable

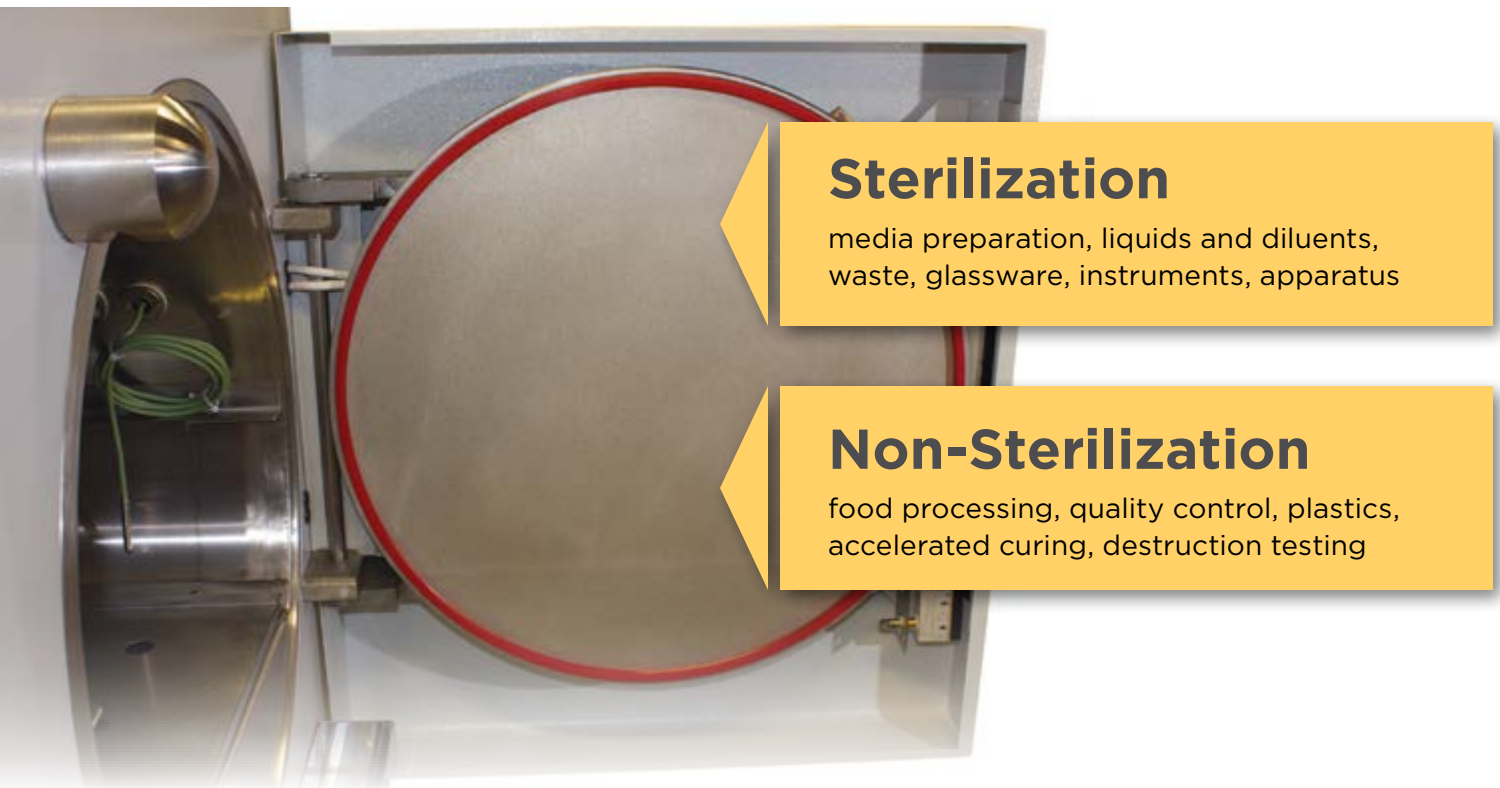
Dual 150L Front Loading Chambers
Electrically Heated Autoclave





General Information

The ideal solution for the autoclaving needs of many laboratories, the **Priorclave EH150 Stackable** is well suited for use in a wide range of applications:



Sterilization

media preparation, liquids and diluents, waste, glassware, instruments, apparatus

Non-Sterilization

food processing, quality control, plastics, accelerated curing, destruction testing

The **EH150 Stackable** is extensively used within many industries, including education, life sciences, pharmaceutical, agricultural, industrial, food and drink, dairy, and brewing.

Operating Range: Up to 138°C, 2.4 Bar (280°F, 34.8psi)

Working Dimensions: 496mm (19.5") diameter x 740mm (29.1") deep (upper and lower chambers)

Chamber Materials: Brushed grade 316L stainless steel

Door Materials: Burnished grade 316L stainless steel

Features

Priorclave sterilizers are built in the UK to a modular design enabling easy upgrading during their working life as your requirements change. Every electrically heated Priorclave is fitted with a Thermostatic Air Purge Valve, Low Water Cut Out, and electrically operated Vent Valve. All pipe to pipe joints are brazed with compression joints to specific components (stainless pipework is available). Priorclave autoclaves offer a 12 months parts and labor warranty and a 15 year pressure vessel warranty.

EH150 Stackable Standard Features:

- Dual Chamber Design (upper and lower chambers)
- Quickseal 2 Single Action Door Closure Systems
- Permission-based Door Release
- Easy-to-use Tactrol® 2 Control Systems
- Automatic Timed Freesteaming
- Assisted Load Cooling
- Media Warming and Delayed Start
- Chamber Pressure Gauges
- Thermocouple Entry and Test Ports
- 316L Stainless Steel Chambers and Doors
- Two full width stainless steel anti-tip Loading Shelves (per chamber)
- Caster mounted for ease of positioning and service
- Biomaster Antibacterial Surfaces
- Water Conservation





All Priorclave autoclaves comply with current US, Canada, UK, and EU safety regulations, and are manufactured under an ISO 9001:2008 quality management system. All pressure vessels are manufactured in-house and tested to 1.5 times their maximum working pressure. They have full Insurance approval for pressure vessel design and construction and are CE Marked under the Pressure Equipment Directive PD5500:2000 Cat 3, Certificate Number SS42059010-2 Rev 1. They also conform to the general requirements of BS2646 and are CE Marked for BS EN61010-2-41, Low Voltage and Electromagnetic Compatibility.

At Priorclave, the safety of your staff and students, comes first. Priorclave is the only manufacturer offering the sophisticated **Tactrol® 2 Control System** on every model – benchtop to double-ender. Program cycles are simple push-button and/or keyswitch activated. Program modifications are keyswitch and/or password protected, and interface directly with your PC. The Tactrol 2 controller has the unique ability to be as simple as it needs to be, or as sophisticated as your process demands. Everything is within your control, and no additional training is required when moving from one unit to another. The Quickseal 2 door, with **Permission-based Door Release**, is fitted with thermal and pressure locks preventing opening of the autoclave at load temperatures above 80°C (176°F) and pressures above 0.2 Bar (2.9 psi) (BS2646).

The door is also fitted with a **Redundant Safety Gate**, allowing potential residual pressure to safely escape before the door can be fully opened (in accordance with the UK Health and Safety Executive's note PM73). Fitted with a Pressure Safety Valve set to 2.5 Bar (36.3 psi) and a 150°C (302°F) thermal cut out (BS6759); selected external panels and surfaces are **Thermally Insulated**. All front loading models are fitted with non-tip shelves.





Priorclave is also the only manufacturer offering **Biomaster Protected® Antibacterial Surfaces**. All epoxy coated panels and frame members are treated with this revolutionary antimicrobial coating, providing a second line of defense to minimize the risk of cross contamination. Extensive validation has been carried out using independent laboratories, with data showing Biomaster inhibits bacteria, mold, and mildew. No other sterilizer manufacturer can offer this level of safety, both inside and out.

Tactrol® 2 Control System



At the heart of every Priorclave is the **Tactrol® 2 Control System**, specially developed for laboratory steam sterilizers. From simple cycles to fully featured multi-program operations with printed records (printer optional), this unique control system offers unrivaled flexibility.

By fully automating the autoclave process and including features to assist with autoclave management, Tactrol 2 allows you to continue with other tasks secure in the knowledge sterilization is carried out safely and efficiently. Packed with self-monitoring systems, Tactrol 2 has pre-set actions for events such as power failure and low water levels. A number of features are built-in, allowing cycle optimization for the diverse functions demanded by the modern laboratory. Tactrol 2 is simple to use: Just set the temperature and time required, select any options needed, and press Start. For added security, a three position Setting Lock Keyswitch is available. A control panel with brightly lit color digital displays, visible from across the room, continuously provides information on status.

Tactrol[®]2 Control System



◀ **Automatic Timed Freesteaming** **S**

Used to remove the air burden from difficult loads such as plastic waste.
Also available: Pulsed Freesteaming – for improved waste load performance.



◀ **Load Sensed Process Timing** **O**

Typically used for loads with containers larger than 1 liter, or for dense loads. Delays the start of the sterilizing timer until the probe reaches the desired sterilizing temperature.



◀ **Assisted Load Cooling** **S**

Powerful fans blow cold air over the autoclave vessel, reducing cooling times. 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 sterilized media at 'ready to pour' temperature. When combined with the Delayed Start setting, allows the media to be poured immediately at the start of the day.



◀ **Vacuum** **O**

Pre-Cycle Vacuum

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

Post-Cycle Vacuum

Vacuum Cooling accelerates the cooling of waste loads. Also available: Vacuum Drying - to provide the facility for drying a suitable load.



◀ **Multi-Program Memory** **O**

Can store complete programs in memory to be recalled at the touch of a button. Complete with three position Setting Lock Keyswitch allowing either no alteration of Temperature, Time, and Option Selection Settings, selection of programs only, or full access to all settings.

◀ **Process Printer** **O**

The Priorclave Tactrol Printer provides a printed record of each autoclave cycle – a log of chamber temperature at regular time intervals and at key points of the cycle. Cycle data recorded includes: Machine Serial Number, Owner Information, Pass/Fail, Fault Codes, and Cycle Number. Paper and ink are used to give a clear, long lasting record unaffected by the hot conditions usually associated with autoclaves.



S Standard

O Optional



Working Volume	Operating Range	Loading Format	Loading Height	Heating	Heat Input
150 liters (per chamber)	Up to 138°C, 2.4 Bar (280°F, 34.8 psi)	Front Loading (both chambers)	Lower: 305mm 12" Upper: 1229mm 48.4"	Electrical (both chambers)	10.5kW Three Phase (each chamber)

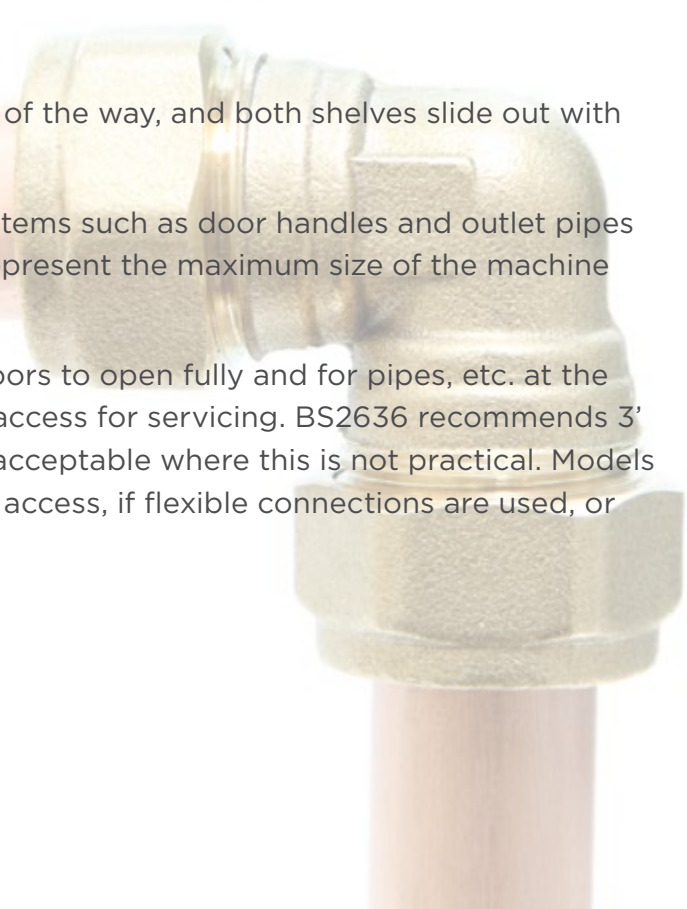
Working Dimensions diameter x depth	Bottom Shelf Dimensions w x d x h	Top Shelf Dimensions w x d x h
496mm x 740mm 19.5" x 29.1" (each chamber)	14.8"W x 29.1"D with 15.8" clearance (each chamber - upper shelf removed)	19.1"W x 29.1"D with 9.5" clearance (each chamber)

Outside Dimensions w x d x h	Floor Weight (unloaded)	Minimum Installation w x d x h (depth includes door swing)	Door Swing
937mm x 1354mm x 2002mm 36.9" x 53.3" x 78.8"	450Kg (992.1lbs)	1547mm x 2284mm x 2306mm 60.9" x 89.9" x 90.8"	625mm 24.6" (both chambers)

For access purposes, the door swings completely out of the way, and both shelves slide out with anti-tip stops. Both shelves are also removable.

External dimensions do not include easily removable items such as door handles and outlet pipes that could be moved or removed for transport, and represent the maximum size of the machine without radical alteration.

The given installation dimensions include space for doors to open fully and for pipes, etc. at the back. Consideration should also be given to allowing access for servicing. BS2636 recommends 3' around the autoclave, although a smaller gap can be acceptable where this is not practical. Models that are caster mounted can be pulled out for service access, if flexible connections are used, or alternative pipework positions can be specified.





Typical Utilities

Lower Chamber

Electrical Supply:

208 volts, 60 Hz, three phase rated at 30 amps per phase with earth and neutral terminated to within 2 meters (6.6') run of the rear of the Priorclave. (alternate electrical configurations available - 2 meter flexible connection preferred)

Water Supply:

A 15mm (1/2") soft cold water supply, pressurized to a minimum pressure of 1 Bar (14.5 psi) and terminated at a stopcock within 2 meters (6.6') run of the rear of the Priorclave. (2 meter flexible hose connection preferred)

Drain Service:

A 35mm sealed drain with one untrapped 22mm (3/4") entry, capable of withstanding effluent at 60°C (140°F), 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 (3/4") drain should be provided for the Automatic Water Fill tank and Manual Drain. All drains should be provided at a low level within 2 Meters (6.6') run of the rear of the Priorclave. (a sealed connection is preferred, but a floor sink is acceptable - 2 meter flexible hose connections preferred)

Upper Chamber

Electrical Supply:

208 volts, 60 Hz, three phase rated at 30 amps per phase with earth and neutral terminated to within 2 meters (6.6') run of the rear of the Priorclave. (alternate electrical configurations available - 2 meter flexible connection preferred)

Water Supply:

A 15mm (1/2") soft cold water supply, pressurized to a minimum pressure of 1 Bar (14.5 psi) and terminated at a stopcock within 2 meters (6.6') run of the rear of the Priorclave. (2 meter flexible hose connection preferred)

Drain Service:

A 35mm sealed drain with one untrapped 22mm (3/4") entry, capable of withstanding effluent at 60°C (140°F), 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 (3/4") drain should be provided for the Automatic Water Fill tank and Manual Drain. All drains should be provided at a low level within 2 Meters (6.6') run of the rear of the Priorclave. (a sealed connection is preferred, but a floor sink is acceptable - 2 meter flexible hose connections preferred)



Common Options & Accessories



- Tactrol 5 Program Memory
- Tactrol 10 Program Memory
- Tactrol 10 Program Memory Upgrade
- Tactrol Self-Monitoring System
- Setting Lock Keyswitch Facility
- Pulsed Free Steaming
- Load Sensed Process Timing
- Automatic Water Fill System
- Scale Prevention System
- Purified Water Level Sensor
- Stainless Steel Pipework
- Dual Electric & Steam Heating
- Clean Steam Generation
- Air Intake Filter System
- Exhaust Filtration System
- Air Ballast System - External Air Supply
- Other Hand Door
- Priorclave Tactrol Printer
- Load Temperature Indication
- Chamber Pressure Indication
- Armored Wandering Probe
- Serial Communication Package
- Combined Pre-Cycle Vacuum & Vacuum Cooling
- Post-Cycle Vacuum Drying
- Automatic Cycle Repeat
- Stainless Steel Discard Container
- False Floor for Discard Container
- Front Loading Trolley
- Loading Cassette
- Stainless Steel Loading Basket
- Stainless Steel Waste Container
- Drain Condenser
- 2 Years Spares Kit
- 3 Years Spares Kit
- IQ/OQ Documentation

Commitment to Excellence

After more than 25 years of experience in the design, manufacture, and service of laboratory autoclaves, Priorclave Ltd is proud of their reputation as one of Europe's leading manufacturers.



Priorclave now offers autoclaves that are ETL Listed and meet the requirements of the ASME Boiler & Pressure Vessel Code



Commitment to Quality

- Operation of an ISO 9001:2008 Quality System
- Full EMC Compliance Testing
- Independently monitored approval of vessel design and welding procedures to the requirements of the European Pressure Equipment Directive 97/23/EC
- 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, easy to operate, and good value for the money
- Continued use of the best materials available - our pressure vessels are only made from grade 316L stainless steel for its superior corrosion resistance
- Maintaining a dedicated Service and Technical Support Team
- UKAS Accreditation as a Calibration Laboratory (Registration No: 0602) for calibration and performance testing of autoclaves

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



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