

large steam sterilizers

# STERIDIUM

The SD series of sterilizers has been developed over the past 30 years to provide a highly reliable sliding door autoclave with the high performance and features required by hospitals, laboratories, pharmaceutical, biotechnology and scientific industries worldwide. The flexibility of design enables these autoclaves to be built to suit a wide variety of specifications and requirements from users who demand the best solution to meet their needs. A number of options provides the user with the choice of chamber size, door configurations, vacuum systems, steam generation, sterilizing cycles, recording systems, loading equipment and accessories.



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### High Temperature Steam Autoclaves

Sterilization of all medical and laboratory products, including liquids, at temperatures from 105°C - 135°C.

### Low Temperature Steam and Formaldehyde (LTSF)

Sterilization from 55°C - 80°C for items that are unable to withstand high temperatures.

### Medical and Laboratory Waste

Sterilization of solid and liquid waste for safe disposal.

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**High Temperature Steam Autoclaves**

Manufactured to the highest European standards (EN 285) for large steam sterilizers, the SD series incorporates a fully jacketed pressure vessel design that is certified to the European pressure equipment directive (PED) 97/23/EC.

The electro-polished chambers are manufactured from high quality stainless steel, in a choice of grades such as 304L, 316L, 316Ti or duplex stainless steel, and are designed for operating at pressures up to 2.65 bar and temperatures to 140°C.

Vertical sliding doors are operated manually, electrically or pneumatically. Double door pass-through configurations have safety interlocks between doors and the option of full controls on both sides.

Vacuum is created by means of either a liquid ring vacuum pump, or a water ejector driven by a centrifugal pump. Liquid ring vacuum pumps are fitted with a high efficiency tube condenser between the chamber drain and the pump to prevent overheating and cavitation of the pump, and resulting in a long service life.



**Microdigital Control Systems**

Every Steridium sterilizer is fitted with the latest state of the art microprocessor based control and monitoring system, with powerful software that provides fully automatic control and monitoring of the sterilizing process. A 180mm (7") vacuum fluorescent display gives a full indication of the status of the sterilizer, all alarm conditions, temperatures, pressures, messages, date and time.

Up to 20 process cycles can be installed on each sterilizer with each cycle user-programmable to suit all requirements.



Cycle records can be printed to a panel printer during a cycle, while Steridium's unique optional electronic data logging system can save up to 10,000 cycle records in memory for later downloading. Cycle records can never be lost due to printer failure, or lack of ribbon and paper.



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**Low Temperature Steam and Formaldehyde (LTSF) Sterilizers**

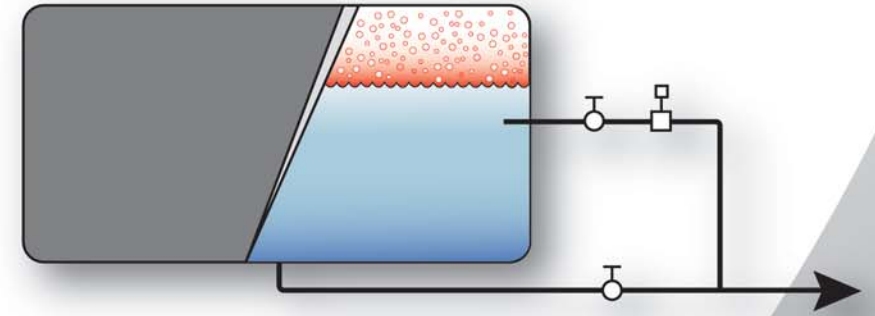
Heat sensitive goods, which may be damaged by the high temperatures found in standard steam sterilizers, can be sterilized using the low temperature steam & formaldehyde (LTSF) process. Dedicated LTSF sterilizers manufactured to the latest European standard EN14180, have standard sterilizing cycles in the range 50°C to 80°C. Combination units with both high and low temperature cycles provide the widest range of sterilization from 50°C to 135°C.

The LTSF process uses formaldehyde solutions as low as 2%, making the Steridium sterilizer the safest low temperature sterilizer to use and the least costly to operate. The load is completely aerated at the end of the cycle using Steridium's unique post-sterilization air pulsing process, enabling items to be used immediately without any further aeration.



**Medical and Laboratory Waste**

Steridium's pioneering work in the field of virus isolation steam sterilizers has resulted in the development of highly successful medical waste autoclaves. All product is disinfected and viruses destroyed prior to the release of air or vapour from the chamber during the sterilization process. Steridium's unique reverse-flow system ensures that even drain lines are sterilized before release of any contaminants into the drainage system.



**Steam Generators with Steridium's Proven Automatic Blowdown System**

The sterilizers require a reliable source of pressure regulated steam. When this is not available, steam generators can be supplied, either built-in to the sterilizer or as free-standing packages. Automatic level control and an independent low water level safety cutout provide full protection of the generator electric elements.

Although it is recommended that demineralised water be supplied as feed water for the steam generator, if this is not available the steam generator can be operated off normal potable (drinking) water supplies. The control system has a special function whereby the steam generator is automatically blown down to keep the level of contaminants within the generator down to acceptable levels which will not cause damage to the generator or autoclave chamber materials.

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## STERILIZING CYCLES

The following cycles can be installed on each machine, up to a limit of 20 cycles per machine. The cycles can easily be edited by an authorised person using the software supplied by Steridium. There is no need for any specialised programming knowledge to add new cycles or change existing cycles.

<b>MEDICAL CYCLES</b>	Packs (porous loads) @ 134°C
<b>High Temperature</b>	Packs (porous loads) @ 121°C
	Fluids @ 121°C
	Pouched instruments @ 134°C
	Open instruments (flash) @134°C
	Containers @ 134°C
	Containers @ 121°C
	Prions @ 134°C
	Prions @ 121°C
<b>Test Cycles</b>	Bowie & Dick Test @ 134°C
	Vacuum Leak Test
<b>Low temperature</b>	LTSF @ 50°C
Steam & Formaldehyde (LTSF)	LTSF @ 60°C
Other temperatures between 50°C and 80°C can be supplied on request.	LTSF @ 70°C
	LTSF @ 80°C
<b>Test Cycles</b>	LTSF cleaning cycle
	LTSF vacuum leak test
<b>WASTE CYCLES</b>	Solid waste @ 134°C
(Medical & Laboratory)	Liquid waste @ 121°C
<b>LABORATORY CYCLES</b>	Packs (porous loads) @ 134°C
<b>High Temperature</b>	Packs (porous loads) @ 121°C
	Fluids @ 121°C
	Metalware @ 134°C
	Plasticware @ 121°C
	Culture media @ 121°C
	Culture media @ 115°C
	Culture media @ 105°C
	Prions @ 134°C
	Prions @ 121°C
	Decontamination (pasteurising) @ 70°C
<b>Test Cycles</b>	Bowie & Dick Test @ 134°C
	Vacuum Leak Test



## CHAMBER CAPACITIES AND DIMENSIONS

There are three basic cross-sections of chamber:

1. 500mm diameter      2. 460mm x 460mm square      3. 660mm x 660mm square

The chambers can be manufactured to any specified depth – common sizes are shown below.

MODEL NUMBER	CHAMBER VOLUME (litre)	CHAMBER DIMENSIONS (mm)
SD 500 x 750	150	500 (diameter) x 750 (deep)
SD 500 x 1000	200	500 (diameter) x 1000 (deep)
SD 460 x 760	160	460 (w) x 460 (h) x 760 (d)
SD 460 x 950	200	460 (w) x 460 (h) x 950 (d)
SD 460 x 1200	250	460 (w) x 460 (h) x 1200 (d)
SD 460 x 1450	300	460 (w) x 460 (h) x 1450 (d)
SD 660 x 915	400	660 (w) x 660 (h) x 915 (d)
SD 660 x 1250	550	660 (w) x 660 (h) x 1250 (d)
SD 660 x 1500	650	660 (w) x 660 (h) x 1500 (d)
SD 660 x 1850	800	660 (w) x 660 (h) x 1850 (d)

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