

# Touchclave Systems-MP

## DIRECT STEAM/STEAM GENERATOR

LTE Touchclave Systems Autoclaves provide versatility, clear and easy to use operator controls, comprehensive data retrieval options, and excellent levels of sterility assurance.

Our MP range of general purpose rectangular chambered sterilizers are available in eight standard sizes and sixteen models from 435 to 1274 litres. Larger sized units up to 10,000 litres can also be provided. All models can be configured for either single entry or pass-through. All Touchclave Systems models are fitted with a wide selection of features as standard, all designed to ensure optimum performance. These include:



- Automatic sliding doors with safety edge and auto-retract system. Floating door seals are employed as standard
- Pre/post vacuum system which employs a high efficiency liquid ring vacuum pump
- Air ballast system for fast and safe processing of fluids
- Water jacket for exceptional cooling efficiency
- Steam jacket for optimum drying performance
- 8-program user-friendly touchscreen control system (expandable to 20 programs if required - see page 11 for details)
- Internal data archiving with 5000 cycle capacity- see page 11 for details
- Thermal or impact printer which provides all cycle details and operational data

Touchclave Systems MP models are all designed to work from the customers central steam supply. Alternatively they can be supplied with electrically heated integral or stand alone steam generators.

Touchclave Systems are available with a wide range of options, allowing you to build up the machine specification to meet your individual needs. For example all models can be configured for high security applications which usually involves the fitting of effluent retention and a bio seal if pass-through. Where there is a clean steam requirement, Touchclave Systems sterilizers can be supplied with polished chambers, stainless steel pipework and clean steam generators.



# Touchclave Systems-MP Technical Information

## TECHNICAL AND ORDERING INFORMATION

All Touchclave Systems-MP models include a thermal printer, pre/post vacuum (<50mbarA) and air ballast as standard.

All models are designed for direct steam. Steam generators are detailed below if required.

## MODELS AND OPTIONS/ACCESSORIES

Catalogue No.	Chamber litres	Door Movement	Chamber dims, mm HWD	Overall dims, mm HWD*	Weight, kg
<b>Single Entry Models</b>					
UCF15	435	Vertical	660 x 660 x 1000	1900 x 1270 x 2000	875
UCF20	545	Vertical	660 x 660 x 1250	1900 x 1270 x 2350	950
SCF21	636	Horizontal	965 x 660 x 1000	1860 x 1890 x 1400	950
UCF26	740	Vertical	660 x 660 x 1700	1865 x 1270 x 2510	1150
SCF28	860	Horizontal	965 x 660 x 1350	1860 x 1890 x 1600	1200
UCF31	870	Vertical	660 x 660 x 2000	1865 x 1270 x 2810	1350
SCF36	1052	Horizontal	1100 x 660 x 1450	1860 x 1890 x 1900	1400
<b>Pass-Through (dual door) Models</b>					
2UCF20	545	Vertical	660 x 660 x 1250	1900 x 2250 x 1800	950
2SCF21	636	Horizontal	965 x 660 x 1000	1860 x 1890 x 1600	950
2UCF26	740	Vertical	660 x 660 x 1700	1865 x 1480 x 2030	1150
2SCF28	860	Horizontal	965 x 660 x 1350	1860 x 1890 x 1600	1200
2UCF31	870	Vertical	660 x 660 x 2000	1865 x 1480 x 2330	1350
2SCF36	1052	Horizontal	1100 x 660 x 1450	1860 x 1890 x 2000	1400

Operating Range - 105 to 137°C (0-2.3bar)

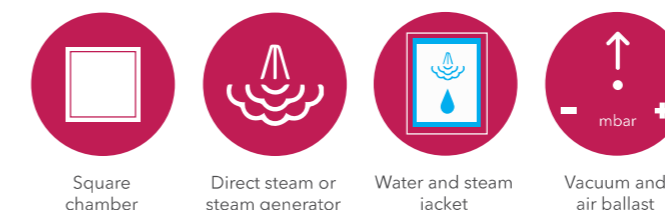
\* All external dimensions are approximate. Systems-MP models can usually be adapted to meet site-specific conditions.

**A wide range of accessories and options can be fitted to Touchclave Systems Autoclaves, some of which are detailed below:**

**Loading Equipment** - LTE offers a wide range of loading equipment, from standard carriage/loading trolleys, through to Remeda semi and fully automatic loading systems. Our Remeda system can also be tailored to retro-fit on to all brands of autoclave.

**Steam Generators** - Dependant on size, quantity and duty, LTE offers a wide range of electrically heated or gas-fired generators. In addition, clean generators are available on all models. Contact LTE for further details and pricing.

**Recorders** - A wide range of recording options are available. This includes independent graphic recorders, or LTE's auto-comparison system, which compares machine and independent data, and provides a single printout, with any anomalies highlighted. Additionally, various 21CFR11 compliant options are also available.



## Popular Options Explained

When choosing your autoclave, careful consideration needs to be given to the options you may need in order to optimise the autoclave's performance and safety. Below, we briefly explain the purpose of the more popular options.

**VACUUM.** Provides efficient air removal at the beginning of the cycle, ensuring that steam will penetrate deep into the load and not be affected by trapped air pockets. Vacuum air removal is considerably faster than gravity systems. During the cooling stage, vacuum can be used to help dissipate heat from the load and in some cases can aid in the removal of some moisture from the load - standard on Touchclave Systems-MP models.

**AIR BALLAST.** Fluid loads, especially sealed container, normally need to be cooled slowly in order to prevent breakage or volume loss. Air ballast provides an over pressure in the chamber during cooling which allows the fluids to be cooled faster and with a greatly reduced risk of breakage or volume loss - standard on Touchclave Systems-MP models.

**WATER JACKET COOLING SYSTEM.** Speeds up the cooling stage of the sterilization cycle - standard on all Touchclave-Lab 'K' Series and Systems-MP models.

**STEAM JACKET.** This feature is standard on Touchclave Systems-MP models and can be added to Touchclave-Lab 'K' Series models when fitted with vacuum. The steam jacket keeps the chamber hot in between cycles, and assists during the drying stage by flashing-off residual water in or around the load. This options is required where dry loads are required.

**MODEM LINK.** This is a useful feature which allows real time information to be viewed by our technical and service team, thus minimizing potential down time.

**EXHAUST CONDENSATE UNIT.** A re-circulating exhaust condensate unit is fitted on all Touchclave Systems-MP and Touchclave Lab 'K' models, enabling discharge water temperatures to be kept below 70°C to avoid damage to plastic pipes and the environment. On vacuum models this feature also serves to protect the vacuum pump from live steam. Condensate units can be optionally fitted to Touchclave 'F' models.

**EFFLUENT RETENTION.** Used when processing potential or known P3 pathogens. Provides operator safety by filtering all non-condensable gases through a 0.2 micron filter prior to exhaust, whilst returning liquids to the chamber for sterilization, ensuring that nothing is exhausted without first being either filtered or sterilized.

## Control System

Touchclave-Lab and Systems MP sterilizers are equipped with a control system which incorporates a powerful PLC combined with an easy to use touch-screen through which all commands, real-time cycle data, program data and alarms are inputted and displayed. The screen allows users to see the cycle status easily - even from a distance.

This versatile system gives users a choice of selecting from a menu of load-specific cycles or developing/editing their own cycle profile. 8 cycles can be stored into the memory as standard, and optional memory expansion is available to increase the number of available cycles to 20.

To aid traceability there is a facility to input operator ID and Batch information at this stage. There is also a facility to program a delayed cycle start, which is useful for maximising the use of the sterilizer.

A multi-level password system which prevents unauthorized access to control and service screens without suitable clearance.

A range of printers and recorders are available for those who require a hard copy of cycle data in addition to the data archiving.

Touchclave Touch Screen Systems incorporate a self-diagnostic system which will highlight any abnormality in the cycle. As an option, a modem can be fitted to the control system which will allow our technical team to view real-time cycle data from a remote location, enabling us in many cases to advise quickly on operational issues, thus minimising possible down-time.

### DATA ARCHIVING

All Touchclave-Lab and Systems-MP models are equipped with automatic electronic data archiving. This comprises of an internal data storage facility which allows up to 5000 cycles to be stored on a single flash-card.

As a further enhancement, a remote cycle data archiving facility via USB, ethernet or WIFI, can be added so that all cycle data, including any fault or alarm conditions, can be downloaded to a PC and permanently recorded. All archive data is 'checksum' protected.

