

# INTRODUCTION

## LEADING SPECIALISTS IN LABORATORY AND MEDICAL STERILIZATION AND DECONTAMINATION SOLUTIONS

Established in 1947, LTE Scientific is a UK-based ISO9001 accredited manufacturer of sterilization, decontamination and temperature controlled equipment for the life science and medical sectors.

We have a proud heritage of delivering high quality, reliable products and delivering market leading service and after-sale care.

Our life science autoclaves, designed for sterilizing all types of laboratory-ware and discard are supplied with cylindrical or rectangular chambers and are available in capacities from 40-litres to over 1000-litres. Our bespoke service allows for chamber sizes up to 6000-litres.

As pioneers in the sterilization field, we are industry leaders when it comes to innovation and progression.

Our wide offering of ovens, incubators, cooled incubators and drying cabinets are all familiar sights in many laboratories around the world, providing reliable and accurate performance over a wide range of applications.

Our environmental rooms provide a bespoke solution for a wide range of temperature, humidity and light control applications, such as stability testing, incubation, packaging testing. We offer a full and free consultation service.

We are exclusive UK distributors of KEN Hygiene Systems and are the sole provider of their IQ washer-disinfectors.

Hopefully this brochure will give you a flavour of what we can offer, but if you have any further questions please do not hesitate to contact us.

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# A STRAIGHTFORWARD GUIDE TO CHOOSING YOUR AUTOCLAVE...

LTE offers a wide range of Laboratory Autoclaves for general purpose sterilizing applications, enabling customers to choose a model which best suits their application, and their volume and budgetary requirements.



Choosing the right autoclave and, more importantly, the options that can (or should) be fitted to it is extremely important and varies depending on application and throughput. You need to ensure that your autoclave is optimised for the load types you wish to process. To help you to make the right choice, we have produced this simple guide which cuts through all the jargon, tells you exactly what features each LTE range has, what the options are, and when those options should be applied.

The types and sizes of autoclave in each model range are shown below.

Types and Sizes	Touchclave-R	Touchclave-K	TC Systems-MP
Chamber profile	Round	Rectangular	Rectangular
Chamber size (litres):			
Front loading models	40, 60, 120, 160	150, 200, 300, 360, 450	435, 545, 636, 796, 1052
Top loading models	60, 120, 160	--	--
Steam source	In-chamber Water Heater	Fitted Generator or Direct Supply	Fitted Generator or Direct Supply

To further refine the choice of autoclave, the following table shows for each of the three ranges some of the features which are standard or which may be ordered as additional options, depending on the application.

Features and Options	Touchclave-R	Touchclave-K	TC Systems-MP
Touchscreen Control System	■	■	■
Door system			
Sliding	☒	■	■
Pneumatic seal	■	■	■
Dual doors for pass-through	☒	☐ 300L+	☐
Single action	■	☒	☒
8 Cycle Programs	■	■	■
Storage and Retrieval of Cycle Data			
Internal Data Archiving	☐	■	■
Remote Data Archiving	☐	☐	☐
Data Printer	☐	☐	■
Cooling System	■	■	■
Pre/Post Vacuum System	☐	☐	■
Air Ballast (to avoid volume loss or breakage in liquid loads)	■	☐	■
Load Activated Process Timer	■	■	■
SPF Barrier	☒	☐	☐
Category 3 Effluent Retention & Filter	☐	☐	☐
Steam Jacket (for full drying of the load when vacuum is fitted)	☒	☐	☐
Condensate Unit (to cool water discharge)	☐	■	■
Automatic Water Fill	☐	☒	☒
Automatic Drain	☐	☒	☒

**KEY** ■ Standard ☐ Optional ☒ Not available/applicable

To assist in specifying the most suitable autoclave for a particular application, the table below lists some typical sterilization applications, showing the models which are suitable and the features and options which are recommended for each application.

Applications	Suitable models	Recommended	Comment
Media and fluids Fluid discard	All	Air Ballast	Especially recommended for sealed fluids
Plastic and glassware Tubing, pipette tips Plastic and mixed discard	All	Pre/Post Vacuum Steam Jacket (for drying)	Steam Jacket not available on Touchclave-R
Porous loads Clothing Wrapped instruments	Touchclave-K TC Systems-MP	Pre/Post Vacuum Steam Jacket	Vacuum is essential for this application. Steam jacket will dry the load more effectively
Unwrapped instruments	All	Pre/Post vacuum Steam jacket (for drying)	Steam Jacket not available on Touchclave-R
High security applications (PL3, BS3, Cat3, Cat4)	All	Pre/Post Vacuum Cat.3 Effluent Retention	Cat.3 Effluent Retention is essential for this application

# TOUCHCLAVE-R

## IN-CHAMBER HEATING

Available in 40, 60, 120 and 160-litre capacities, with a choice of front or top loading.

Ideal for many laboratory sterilization applications, the Touchclave-R range is ideal for installation in laboratories which do not have access to a drain or water supply, due to the submerged in-chamber heater.

Equipped with features not normally seen on this type of sterilizer, Touchclave-R provides unrivalled performance and versatility as standard.

Touchclave-R models can also be modified to suit specific requirements such as operating from customers steam supplies or being fitted with an auto drain/fill system.

### KEY FEATURES:

- No-action 'push-n-seal' door with pneumatic seal and locking with safety switch
- 8-program Touchscreen control system
- Compact design
- 316L stainless steel pressure vessel
- Built-in air ballast system for faster processing of liquid loads
- Load-sensed process timer
- Fan cooling system
- Operating temperatures from 105°C to 137°C
- Water level Sensors to prevent operation if there is insufficient water.



Model	Capacity (litres)	Loading	Chamber Dims Dia x D (mm)	Overall Dims HWD (mm)	Weight (kg)	Shelves/positions
TCR/40/H	40	Front	350 x 415	725 x 600 x 775	120	1/1
TCR/60/H	60	Front	350 x 625	1400 x 625 x 1150	205	1/1
TCR/60/V	60	Top	350 x 625	1100 x 725 x 700	210	1/1
TCR/120/H	120	Front	500 x 610	1600 x 725 x 1350	260	2/2
TCR/120/V	120	Top	500 x 610	1100 x 725 x 700	265	1/1
TCR/160/H	160	Front	500 x 825	1600 x 725 x 1350	290	2/2
TCR/160/V	160	Top	500 x 825	1200 x 925 x 825	295	1/1

**MODELS**

Capacity/Loading	Standard	Pre/Post Vacuum System	Pre/Post Vacuum System, Boosted Heater
40-litre Front Loading	TCR/40/H1	TCR/40/H5	TCR/40/H5B
60-litre Front Loading	TCR/60/H1	TCR/60/H5	TCR/60/H5B
60-litre Top Loading	TCR/60/V1	TCR/60/V5	TCR/60/V5B
120-litre Front Loading	TCR/120/H1	TCR/120/H5	TCR/120/H5B
120-litre Top Loading	TCR/120/V1	TCR/120/V5	TCR/120/V5B
160-litre Front Loading	TCR/160/H1	TCR/160/H5	TCR/160/H5B
160-litre Top Loading	TCR/160/V1	TCR/160/V5	TCR/160/V5B

**OPTIONS AND ACCESSORIES**

Cat. No	Description
TC/TDP/02	Thermal data printer
TC/IDA/01	Internal Data Archiving*
TC/AWF/01	Automatic water fill*
TC/ADD/01	Automatic drain for chamber water*
TC/CON/02	Air cooled condensate unit* (included on vacuum models)
TC/FIL/01	Cat. 3 effluent retention upgrade (including 0.2micron exhaust filter)*
TC/KWF/01	Media keep warm facility*
TC/HST/01	Electric hoist for all top loading models*
TC/VOL/--	Conversion to 60Hz electrical supply (non-vacuum models)*
TC/MOR/--	Morrison discard box
TC/BAS/--	Basket

Items marked \* are factory fit options