The Touchclave-Lab 'K' Series is LTE's top-line range of mid-sized rectangular chambered general purpose autoclaves, available in 150, 200 or 300-litre capacities, with a 300-litre pass-through version also available.

## Touchclave-Lab 'K' Series

A wide range of features are included in the 'K' Series as standard to enhance machine performance and cycle efficiency. These include:

- 8-program touchscreen control system see page 17 for details
- Internal data archiving see page 17 for details
- Water jacketed chamber for exceptional cooling efficiency
- Water conservation system and exhaust condensate
- Load-sensed process timer
- Pneumatically operated door lock and sealing system
- Integral silent air compressor

In addition, a wide range of options are available for the Touchclave-Lab range to suit individual customer requirements. See pages 12-13 to see what other options you may need.

'K' Series models are designed to operate using either a steam generator situated beneath the chamber, or via the customers own direct steam supply. This arrangement maximises the usable chamber volume and provides a clean, unencumbered chamber, free from heaters and water.

Unless the door is properly closed and locked, the cycle cannot be started. At the end of the cycle, the door will not be released until both temperature and pressure have reached safe pre-set levels.

All models incorporate an easy-glide vertical sliding door and all models (except the pass-through version) have been designed to fit through as standard width door.



Designed to offer a rectangular chamber and a high level of standard features at a more affordable price, our Touchclave-Lab 'F' Series represents excellent value for money.

## Touchclave-Lab 'F' Series

The 'F' Series is available in 150, 200 or 300-litre capacities and boasts the following standard features.

- 8-program touchscreen control system see page 17 for details
- Internal data archiving see page 17 for details
- Pneumatically operated door lock and sealing system
- Load-sensed process timer
- Integral silent air compressor

In addition, a wide range of options are available for the Touchclave-Lab range to suit individual customer requirements. See page 12-13 to see what other options you may need.

Submerged heaters within the chamber generate steam. The chamber water can be topped up periodically, either manually or automatically.

Sensors within the chamber prevent the cycle from starting or continuing if there is insufficient water.

Unless the door is properly closed and locked, the cycle cannot be started. At the end of the cycle, the door will not be released until both temperature and pressure have reached safe pre-set levels.

All models incorporate an easy-glide vertical sliding door and all models have been designed to fit through as standard width door.



# Touchclave-Lab Technical Information

### Technical and Ordering Information

Model	Chamber litres	Loading	Steam Generation	Chamber dims, mm HWD	Overall dims, mm HWD	Weight, kg	Shelves/ positions
TC/150/F	150	Front	In-Chamber	600 x 500 x 500	1815 x 720 x 1100	370	2/4
TC/150/KE	150	Front	Integral Steam Generator	600 x 500 x 500	1815 x 720 x 1100	400	2/4
TC/150/KS	150	Front	Direct Steam Supply	600 x 500 x 500	1815 x 720 x 1100	360	2/4
TC/200/F	200	Front	In-Chamber	600 x 500 x 660	1815 x 720 x 1200	450	2/4
TC/200/KE	200	Front	Integral Steam Generator	600 x 500 x 660	1815 x 720 x 1200	480	2/4
TC/200/KS	200	Front	Direct Steam Supply	600 x 500 x 660	1815 x 720 x 1200	440	2/4
TC/300/F	300	Front	In-Chamber	600 x 500 x 1000	1815 x 720 x 1350	620	2/4^
TC/300/KE	300	Front	Integral Steam Generator	600 x 500 x 1000	1815 x 720 x 1350	650	2/4^
TC/300/KS	300	Front	Direct Steam Supply	600 x 500 x 1000	1815 x 720 x 1350	610	2/4^

<sup>^</sup> Shelves on these models are fitted with a no-tip auto-stop function and can be pulled out upto half-way

### Models and Options/Accessories

#### K Models

	150-litres		200-litres		300-litres	
Capacity/Steam Generation Method	Integral steam generator	Direct steam	Integral steam generator	Direct steam	Integral steam generator	Direct steam
Standard	TC/150/KE1	TC/150/KS6	TC/200/KE1	TC/200/KS6	TC/300/KE1	TC/300/KS6
Enhancement Packages						
Pre/post vacuum system (50mbar) and (for KE models) constant standby steam generator	TC/150/KE3	TC/150/KS7	TC/200/KE3	TC/200/KS7	TC/300/KE3	TC/300/KS7
Pre/post vacuum system (50mbarA) with steam jacket and (for KE models) constant standby steam generator	TC/150/KE5	TC/150/KS9	TC/200/KE5	TC/200/KS9	TC/300/KE5	TC/300/KS9

#### F Models

Capacity/Steam	150-litres	200-litres	300-litres		
Generation Method	In-Chamber Heaters				
Standard	TC/150/F1	TC/200/F1	TC/300/F1		
Enhancement Packages					
Standard-Plus (includes automatic water fill and condensate unit)	TC/150/F7	TC/200/F7	TC/300/F7		
Standard Plus with pre/post vacuum system (50mbarA)	TC/150/F6	TC/200/F6	TC/300/F6		
Standard Plus with water jacket	TC/150/F4	TC/200/F4	TC/300/F4		
Standard-Plus with pre/post vacuum system (50mbarA) and water jacket	TC/150/F2	TC/200/F2	TC/300/F2		

Model	Accessories
TC/TDP/01	Thermal data printer
TC/INK/01	Ink data printer
TC/RDA/01	Remote data archiving with RS232 connection (PC to be supplied by others)*
TC/RDA/02	Remote data archiving with RS485 connection (PC to be supplied by others)*
TC/ADD/01	Automatic drain for chamber water * (F Models fitted with Standard Plus option only)
TC/FIL/01	Cat. 3 effluent retention upgrade (including 0.2micron exhaust filter)*
TC/KWF/01	Media keep warm facility* (F Models only)
TC/AIR/01	Air Ballast (using customers compressed air supply)*
TC/AIR/02	Air Ballast (with uprated internal air compressor and receiver)*
TC/AFP/01	Upgrade of standard probe to armour-flex probe
TC/MEM/01	Increased Cycle Memory (20 programs)*
TC/MOD/01	Modem Link*
TC/CSG/K1	Constant standby steam generator for non-vacuum KE150*
TC/CSG/K2	Constant standby steam generator for non-vacuum KE200*
TC/KSG/K3	Constant standby steam generator for non-vacuum KE300*
TC/VOL/	Conversion to 60Hz electrical supply (non-vacuum models)* - Add 05 for K models and 03 for F models
TC/VOL/	Conversion to 60hz electrical supply (vacuum models)* - Add 06 for K models and 04 for F models
TC/ROG/01	Modified steam generator for RO/De-mineralised water feed* (KE Models only)
TC/SSP/02	Stainless steel primary pipework (orbitally welded, tri-clover fittings)*
TC/PAS/01	Pass-through chamber *(K300 models only)
TC/MOR/01	Morrison discard box size 1 (230 x 430 x 230mm HWD)
TC/MOR/02	Morrison discard box size 2 (230 x 430 x 315mm HWD)
TC/BAS/01	Basket size 1 (230 x 430 x 230mm HWD)
TC/BAS/02	Basket size 2 (230 x 430 x 315mm HWD)

#### Touchclave-Lab Site Services

#### Water

Potable water with a maximum hardness of 50ppm  ${\rm CaCO_3}$  is acceptable. Otherwise check with LTE for suitability. For automatic water fill/permanently piped versions, connection is via a 15mm diameter water inlet.

#### Drain

For 'F' models fitted with auto-drain and/or vacuum, and all 'K' models a 100mm drain is required. A drain is not required on standard 'F' models although we would always recommend connection where possible. See site services sheet for full details.

#### Electrical

See Table Below. Prices based on 220/240V (1-Phase) and 380/440V (3-Phase), 50Hz. For other voltages/frequencies, see options or check with LTE.

	Power Requirements		
	Non-Vacuum Models	Vacuum Models	
TC/150/F	3-Phase, 10.5kW, 20A/phase N+E	3-Phase, 14.25kW, 25A/phase	
TC/150/KE	3-Phase, 15kW, 25A/phase N+E	3-Phase, 30kW, 50A/phase N+E	
TC/200/F	3-Phase, 15kW, 25A/phase N+E	3-Phase, 19.5kW, 30A/phase N+E	
TC/200/KE	3-Phase, 15kW, 25A/phase N+E	3-Phase, 30kW, 50A/phase N+E	
TC/300/F	3-Phase, 22.5kW, 35A/phase N+E	3-Phase, 28.5kW, 45A/phase N+E	
TC/300/KE	3-Phase, 30kW, 45A/phase N+E	3-Phase, 39kW, 63A/phase N+E	
All KS Models	1-Phase, 13A	3-Phase, 16A/phase N+E	

Items marked \* are factory fit options

A range of other options can be ordered through our sales office including loading and carriage trolleys, stainless steel panel-work and chart recorders



Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.