

Sapphire E

Specification for Sapphire 550, 660 & 770E.



Design Features

- 330, 440, 550, 660 & 770 litre options.
- MP25 Controller
- Square Chamber
- Automatic mechanically hoisted sliding door.
- Fixed Seal
- Space-saving design
- Integral drip tray under door
- Accelerated water cooling by means of a water jacket.

Optional Accessories

- Loading Trolley
- Range of cycle recording systems
- Drain Line Condensor for plastic drains
- Scale prevention systems
- Vacuum air removal system
- Waste Discard system
- Air Ballasting option
- Additional shelves & baskets
- Steam Jacket drying option

Capacities and Dimensions

All measurements are in MM unless stated otherwise

Model	Sapphire 550	Sapphire 660	Sapphire 770
Autoclave Weight	850 kg	950 kg	1050 kg
Export case size	1140w x 2200h x 1690d	1140w x 2200h x 2500d	1140w x 2200h x 2500d
Overall Dimensions	980w x 1930h x 1530d	980w x 1930h x 1750d	980w x 1930h x 1900d
Chamber Dimensions	670w x 670h x 1099d	670w x 670h x 1274d	670w x 670h x 1455d
Chamber Usable Capacity	550 litres	660 litres	770 litres
Steam Boiler Capacity	40 litres	40 litres	40 litres



Safe Design Operating Limits

Model	Sapphire 550	Sapphire 660	Sapphire 770
Max working temperature	138° C	138° C	138° C
Min working temperature	7° C	7° C	7° C
Min ambient temperature	11° C	11° C	11° C
Max ambient temperature	28° C	28° C	28° C
Max hydraulic pressure	4.14 Bar	4.14 Bar	4.14 bar
Max working pressure	2.62 Bar	2.62 Bar	2.62 Bar
Max working vacuum	Minus 1 Bar	Minus 1 Bar	Minus 1 Bar
Boiler hydraulic pressure	6 Bar	6 Bar	6 Bar
Boiler working pressure	4 Bar	4 Bar	4 Bar

Site Requirements

Electrical Site Requirement:	Switched RCD Required		
Model	Sapphire 550	Sapphire 660	Sapphire 770
Drain requirement	150°C 35mmØ copper	150°C 35mmØ copper	150°C 35mmØ copper
Voltage	415 Volts	415 Volts	415 Volts
Phase requirement	3ph/N 50/60 hz	3ph/N 50/60 hz	3ph/N 50/60 hz
Power consumption	24kw	24kw	24kw
Fuse rating	45amp	45amp	45amp

Option Requirements

- Air supply at 38psi 7cfm for air ballasting option
- Steam Jacket drying option requires liquid ring vacuum.

General Requirements

- Air supply at 100psi 2cfm for pneumatic sliding door
- Sodium Chloride within water supply MUST NOT EXCEED a level greater than 500 parts per million.
- Use regular mains water only. DO NOT use RO or distilled water.
- Boiler & Cooling Jacket requires a header tank of 45 litres placed between one and four metres above the autoclave.
- Drain requires a 35Ømm copper pipe, vented to atmosphere.

Complying Standards

- PED Cat. 3 Module B+C1 Notified Body Royal & Sun Alliance No 0040.
- Harmonized Standards Applied: EMC BS EN 61326.
- Community Directives Applied: Pressure Equipment Directive: 97/23/EC
- Designed in accordance with BS5500, BS2646 part 1 En1919-2-41
- Chamber & Door constructed of stainless steel BS1501-321 S31 & BS 1501-316 S31

“The Sapphire is our flag ship autoclave, powerful, unique, reliable and state of the art, this new autoclave is ideally suited for heavy duty work where capacity and reliability are key.”

Information is subject to change to suit different options added. The information in this sheet is correct as of 6th September 2013, please contact us if you have any queries. E & OE.

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