

Sapphire DE

Specification for Sapphire 550, 660 & 770 Double Ended "Pass Through" Models.



Design Features

- 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.
- Double door

Optional Accessories

- Loading Trolley
- Range of cycle recording systems
- Drain Line Condenser 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	900 kg	1000 kg	1100kg
Export case size	1140w x 2200h x 1910d	1140w x 2200h x 2000d	1140w x 2200h x 500d
Overall Dimensions	980w x 1930h x 1695d	980w x 1930h x 1910d	980w x 1930h x 2100d
Chamber Dimensions	670w x 670h x 1099d	670w x 670h x 1274d	670wl 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 (Electric 'E' Models)

Model	Sapphire 550	Sapphire 660	Sapphire 770
Electrical Site Requirement:	Switched RCD Required		
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

Site Requirements (Direct Steam 'DS' Models)

Model	Sapphire 550	Sapphire 660	Sapphire 770
Electrical Site Requirement:	Switched RCD Required		
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	1.2kw	1.2kw	1.2kw
Fuse rating	6amp	6amp	6amp

Option Requirements

- Cooling Jacket / Drain line condenser option requires a header tank of 45 litres placed between one and four metres above the autoclave
- Air supply at 38psi 7cfm for air ballasting option
- Steam Jacket drying option requires liquid ring vacuum.

General Requirements

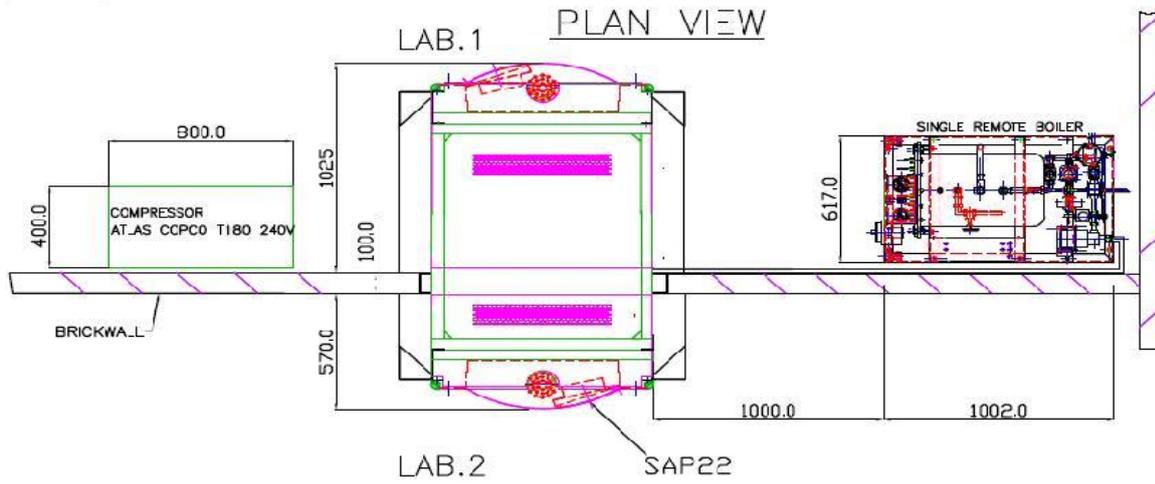
- Air supply at 100psi 2cfm for pneumatic sliding door (+13amps for DS machines).
- Sodium Chloride within water supply MUST NOT EXCEED a level greater than 500 parts per million.
- Direct Steam Machines will require a steam supply of 38psi, 24kw (75lbs of steam per hour).



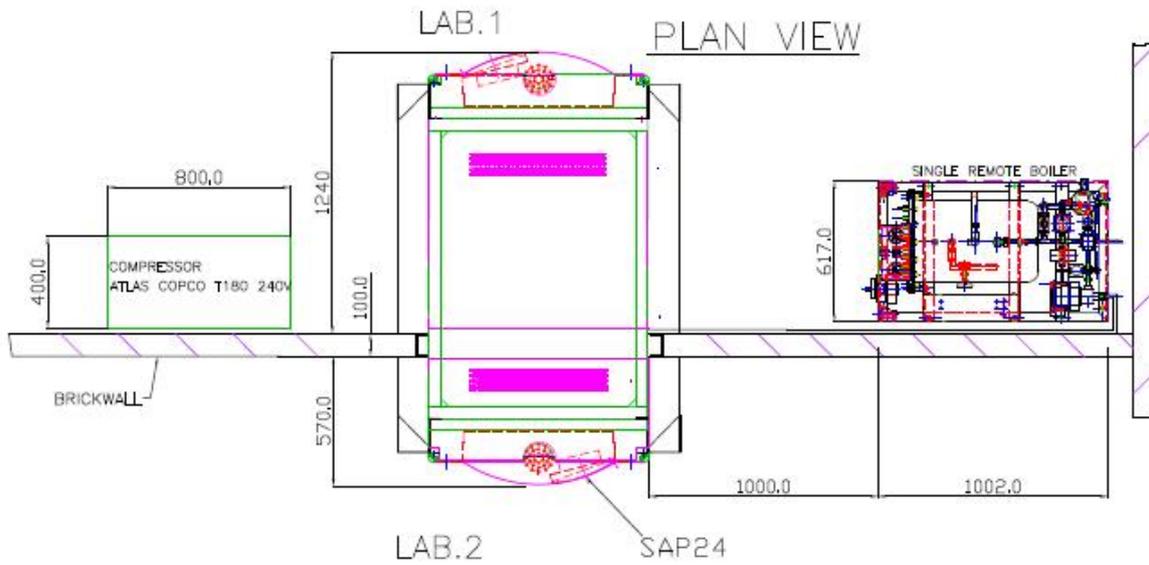
Shown here are both sides of a double ended autoclave installation.

“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.”

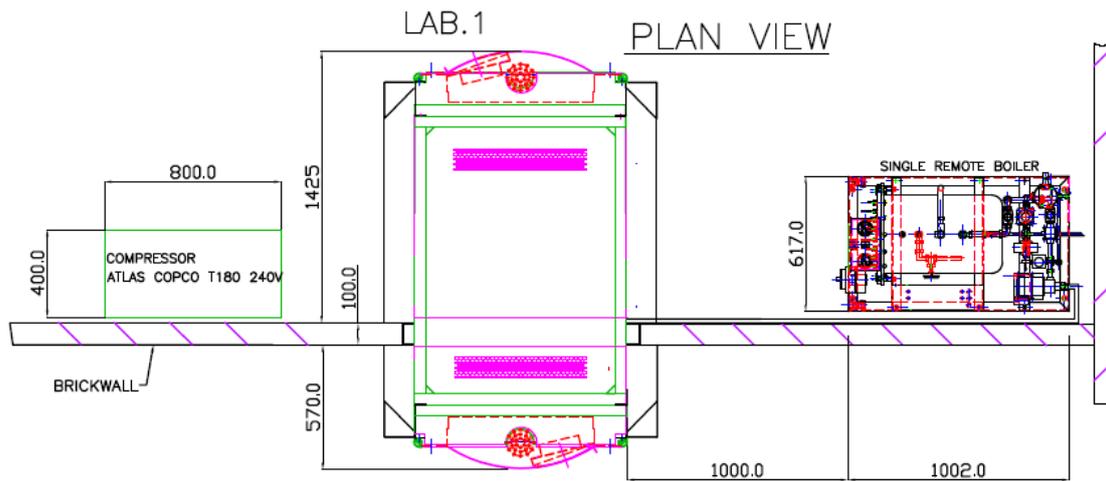
Installation Schematic Sapphire 550DE



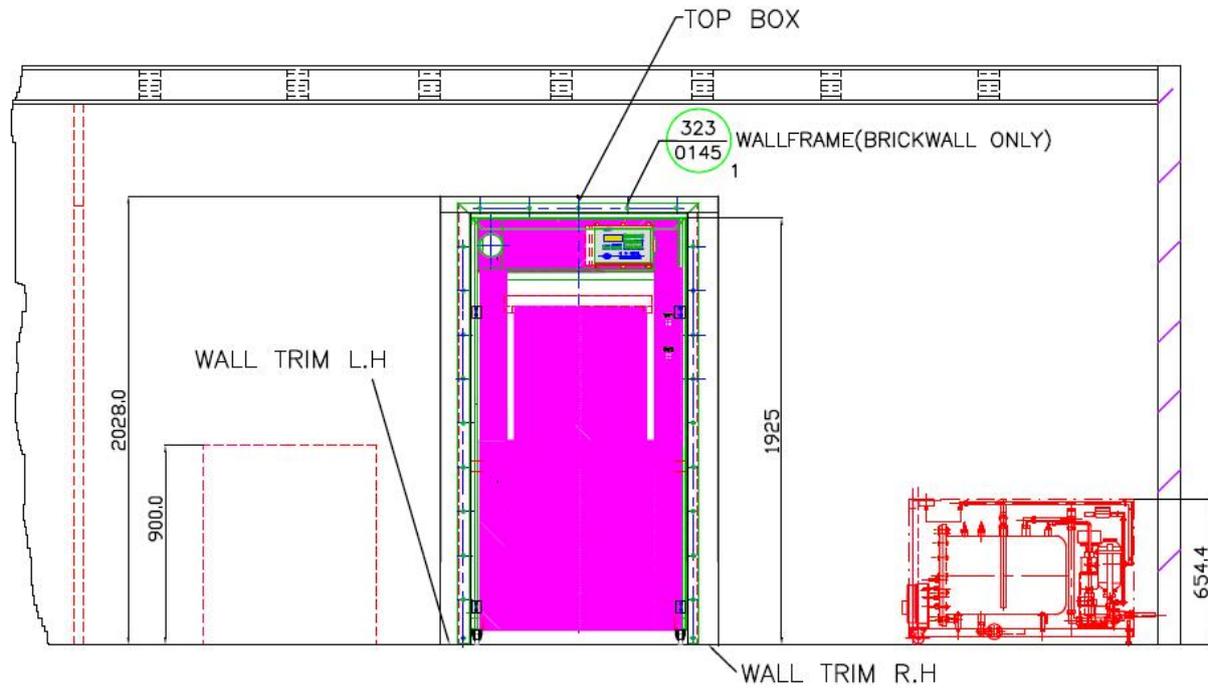
Installation Schematic Sapphire 660DE



Installation Schematic Sapphire 770DE



Example of double ended Sapphire in situe front view.



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

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.



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