

# Sapphire DS

Specification for Sapphire 330 & 440DS.



## 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 Condenser for plastic drains
- Scale prevention systems
- Vacuum air removal system
- Waste Discard system
- Air Ballasting option
- Additional shelves & baskets
- Steam Jacket drying option
- Integrated Backup Steam Generator

## Capacities and Dimensions

All measurements are in MM unless stated otherwise

Model	Sapphire 330	Sapphire 440
Autoclave Weight	650 kg	750 kg
Export case size	1140w x 2200h x 1690d	1140w x 2200h x 1690d
Overall Dimensions	980w x 1930h x 1530d	980w x 1930h x 1530d
Chamber Dimensions	670w x 670h x 745d	670w x 670h x 936d
Chamber Usable Capacity	330 litres	440 litres



## Safe Design Operating Limits

Model	Sapphire 330	Sapphire 440
Max working temperature	138° C	138° C
Min working temperature	7° C	7° C
Min ambient temperature	11° C	11° C
Max ambient temperature	28° C	28° C
Max hydraulic pressure	4.14 Bar	4.14 Bar
Max working pressure	2.62 Bar	2.62 Bar
Max working vacuum	Minus 1 Bar	Minus 1 Bar

## Site Requirements

Electrical Site Requirement:	Switched RCD Required	
Model	<b>Sapphire 330</b>	<b>Sapphire 440</b>
Mains Steam Supply	55lb p/h @2.67 Bar	70lb p/h @2.67 Bar
Drain requirement	150°C 35mmØ copper	150°C 35mmØ copper
Voltage	415 Volts	415 Volts
Phase requirement	3ph/N 50/60 hz	3ph/N 50/60 hz
Power consumption	1kw	1kw
Fuse rating	6amp	6amp

## 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 500parts per million.
- Use regular mains water only. DO NOT use RO or distilled water.
- 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.
- Steam Supply required: (330)18kw, 55lb p/h / (440) 24kw, 70lb p/h @ 2.67 Bar / 38 PSI

## Complying Standards

- PED Cat. 2 Module A1 Notified Body Royal & Sun Alliance No 0040. (Sapphire 330)
- PED Cat. 3 Module B+C1 Notified Body Royal & Sun Alliance No 0040. (Sapphire 440)
- 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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