

# Double Door SQUARE Autoclave Range

250 – 1200 litre models

*Fitted with steam generator as standard*

Astell's Double Door range of SQUARE autoclaves are ideal for high-containment type facilities that may be handling dangerous pathogens and microorganisms, and/or where a specific area or 'clean room' are isolated. The Double Door range offers the capability to specify a pass-through machine in various sizes with options for heating, loading and door specifications. The Double Door range is highly customisable and by choosing from the many options available it is possible to sterilize almost anything (subject to configuration).

**Features include:**

- 5.7" colour touchscreen controller
- 5 standard chamber sizes available
- Choice of two heating methods: Direct steam or steam generator
- Automatic door operation
- Full range of options and accessories (see overleaf for details)
- Custom built units available to meet your exact requirements



*Image shown features optional custom glove box attachment for illustration purposes.*

## Specifications

Models listed below are a representative selection. Please contact us for the full range of available sizes and options.

Model no.	Volume (litres)	Doors	Steam generator	Chamber dimensions W x H x D (mm)	Overall dimensions W x H x D (mm)
AVD250	250	2	24kW	500 x 500 x 1000	1300 x 2000 x 1395
AVD360	360	2	24kW	600 x 600 x 1000	1500 x 2000 x 1285
AVD490	490	2	48kW	700 x 700 x 1000	1500 x 2000 x 1300
SVD875	875	2	72kW	700 x 1000 x 1250	2000 x 2000 x 1650
SVD1200	1200	2	72kW	600 x 1000 x 2000	2000 x 2000 x 1395

*(Overall dimensions may vary with the configuration and addition of certain options)*

## Standard safety features

Double Door SQUARE range autoclaves are fitted with the following built-in safety features as standard:

- Over temperature protection, a cooling lock, a safety valve test program and emergency stop button
- The door mechanism is safety linked meaning a cycle cannot start until the door is properly closed; or opened until the pressure and temperature within the chamber is at a safe level
- The door seal is steam and vacuum resistant, and will seal effectively without trapping or entrapment of 'foreign' material
- Doors are thermally insulated to prevent the surface temperature presenting a potential hazard to operators
- Water conservation re-circulation system minimising water usage

**Advanced options** (Selection of these options may alter the power supply requirements listed below)



**Integral Steam Generator Option**

Available as 24kW, 48kW or 72kW integral steam generator. This option helps to improve cycle times by increasing the efficiency of steam production and also includes automatic water filling as standard, removing the requirement of manually filling the machine with water between sterilization cycles (a mains water supply is therefore required for this option). Astell Ref: 24KWSG, 48KWSG or 72KWSG.



**Advanced Vacuum Option**

A vacuum option is essential for porous type loads (e.g. wrapped instruments and fabrics) or other cycles where air pockets could easily become trapped within the load. The AVC001 option is Astell's advanced pulsar vacuum, which when used in conjunction with the integral steam generator and a heated jacket enables the dry output of all loads. Astell Ref: AVC001.



**External Jacket Option**

Requiring a steam generator or direct steam, the external jacket option effectively adds an additional layer to the outside of the autoclave chamber. This can then be independently heated by the steam generator to enhance the drying process at the end of the cycle, or it can be flooded with water during cooling to aid faster cooling times. Astell Ref: AAQ302 (AAQ302C for cooling).

**Additional options**

Integral data printer	Ref: AAR130
Load Sensed Process Timing	Ref: AAR014
FDA 21 CFR part 11 controller software	Ref: CFR021
Remote maintenance/diagnosis	Ref: RDM101
Ethernet interface	Ref: AAR122
IQ/OQ documentation	Ref: IQ/OQ
Internal convection cooling	Ref: AAP102
Air ballast (requires compressed air)	Ref: AVC004
Integral air compressor (Req. for Vacuum units)	Ref: AAQ503
SPF seal (for double door machines only)	Ref: AVQ007

Drain Cooling	Ref: AAN420
Category III (BSL-3) compliance	Ref: AVQ006
Morrison discard container (W:300 x H:300 x D:300mm)	Ref: AAQ300
Additional shelf	Ref: AAQ801
Water softeners	Ref: AAW002
Blow down vessel	Ref: AAB001
Loading systems	Ref: AAQ600/2
Stainless steel pipework (primary)	Ref: AAS001
Stainless steel pipework (full)	Ref: SPL422

**Installation requirements**

**Power requirements:**

The power requirements for the standard machines listed in the Specifications table are 415 V, 3 Phase, with Neutral and Earth. Requirements can vary depending on the configuration and options selected. For additional details of exact power requirements please contact us.

**Water and drainage requirements:**

A cold water supply of 2-6 Bar minimum, 4 litres/min is required. Max temperature 25°C, Max flow rate 20 litres/min. Requirements vary for RO/de-ionised/hard water. Drainage: Free venting, non-manifolded drain (54mm diameter) capable of withstanding temperatures up to 100°C.



Touchscreen controller



Stainless steel pipework (optional)



Pressure gauge



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