

Square Section Autoclaves

| 125 - 3000+ | Litres

Designed to meet your sterilization needs, whether in the Healthcare, Pharmaceutical or Laboratory Sectors, Astell's square section autoclaves are supplied in a range of sizes to suit a wide variety of applications.



Automatic Upwards Closing

Standard features

- Door specifications:
- Fully contained for safety, with space saving sliding action
- Manual or Automatic
- Vertical Sliding or Side Sliding
- Single or Double Door
- Clamping system available
- 5.7" Full Colour Touchscreen
- PLC Controller
- Water conservation system standard
- Vacuum option available
- Jacket cooling (where required)
- Fluid cooling lock
- Exhaust cooling
- Delayed Start
- Integral compressor available
- Integral or stand alone Steam generator options
- Stainless Steel panelwork
- Extensive range of options and accessories

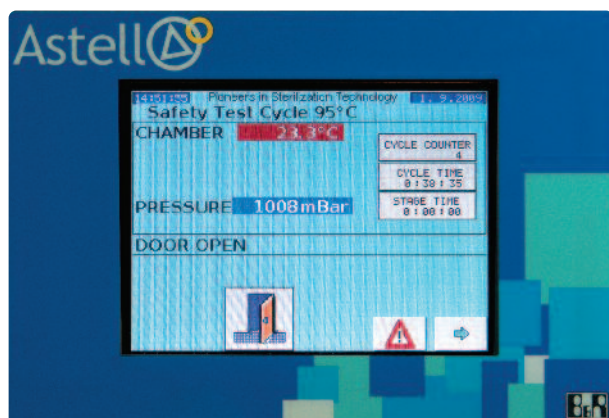
Square Section Autoclaves

125 - 3000+ Litres

With chamber sizes ranging from 125 litres to 3000 litres, and with many options available, the standard configurations will satisfy the majority of eventualities. However, if your requirement is for a chamber of 'non-standard' dimensions (e.g. to accept a particular load), we are happy to accommodate you.

Our Square Section units can be manufactured for connection to an in-house steam supply, or can be fitted with an integral steam generator. For larger units with high volume steam requirements, we can offer our stand-alone steam generator, which we manufacture in 3 sizes (with power requirements of 48kW, 72kW or 96kW).

The new Logi control system



The New Logi control systems are an advance in sterilization control technology, bringing together years of unrivalled experience, to produce a user friendly, fully automatic control system, to meet and exceed the expectations of the most demanding laboratories and centres of sterilization.

The controller consists of a wipe clean touch screen measuring 122mm x 94mm and is based on an industrial PLC controller, combined with a number of analogue and digital input/output modules. The controller software has been developed by Astell for the precision control of autoclaves.

- Full Colour Touch Screen
- Icon Driven
- Password Protected Security System
- Multiple Access Levels
- Simple Cycle Selection
- Optional RS232 Interface / Port allowing connection to other peripheral devices such as a printer
- Operator Interface
- Enables continual monitoring
- Individual analogue channels are displayed
- Temperature / Pressure etc
- Continuous Data Archiving
- Self-Help Tutorial



Safety Features:

- A cycle cannot start until the door/s are closed and locked
- Steam/heating cannot be applied to the chamber unless the door/s are closed and locked
- The door/s release is interlocked with the chamber air break valve to ensure all residual pressure has completely and effectively vented to atmosphere before the door/s can be opened
- The doors will retain their positions in the event of failure of any of the services
- The door seal is steam and vacuum resistant, and will seal effectively without trapping or entrapment of 'foreign' material
- The doors are thermally insulated to prevent the surface temperature presenting a hazard to operators. The surface temperature will not exceed IEC61010 requirements.

Safety interlocks are provided, and are achieved by hardware, separate from and additional to the control system. All interlocks are configured to fail safe and to provide a signal to the control system to indicate that normal operation has been prevented, and to terminate the current cycle

The interlock system is designed so that its function can be tested during routine maintenance. Safety related interlocks are either hard wired or piped. The following safety interlocks are provided:

- If the door/s not closed, the steam supply to the chamber will be turned off and remain turned off
- If the pressure in the chamber exceeds 0.15 bar the door/s remain locked.

Square Section Technical Details

Please note that below are examples only. Astell can manufacture units up to 3000 litres in a wide variety of configurations. Please contact us with your precise requirements.

Manual Single Door Units – Non Vacuum

Reference	Doors	Heating Type	Power Supply	Chamber Litres	Internal Chamber Dims w x h x d	Overall Dims w x h x d
MNS125G	1	Integral Generator	415V 3ph N 24kW	125	500 x 500 x 500	780 x 1750 x 1200
MNS216G	1	Integral Generator	415V 3ph N 24kW	216	600 x 600 x 600	880 x 1750 x 1300
MNS360G	1	Integral Generator	415V 3ph N 24kW	360	600 x 600 x 1000	880 x 1750 x 1700

N.B. For Direct Steam units Reference suffix becomes D (i.e. MNS125G becomes MNS125D). Power requirements for Direct Steam are 415V 3ph N 4kW

Manual Single Door Units – With Vacuum

Reference	Doors	Heating Type	Power Supply	Chamber Litres	Internal Chamber Dims w x h x d	Overall Dims w x h x d
MVS125G	1	Integral Generator	415V 3ph N 24kW	125	500 x 500 x 500	780 x 1750 x 1200
MVS216G	1	Integral Generator	415V 3ph N 24kW	216	600 x 600 x 600	880 x 1750 x 1300
MVS360G	1	Integral Generator	415V 3ph N 24kW	360	600 x 600 x 1000	880 x 1750 x 1700

N.B. For Direct Steam units Reference suffix becomes D (i.e. MVS125G becomes MVS125D). Power requirements for Direct Steam are 415V 3ph N 4kW

Automatic Single Upwards Sliding Door Units – with Vacuum

Reference	Doors	Heating Type	Power Supply	Chamber Litres	Internal Chamber Dims w x h x d	Overall Dims w x h x d
AVS125G	1	Integral Generator	415V 3ph N 28kW	125	500 x 500 x 500	1100 x 2000 x 1300
AVS216G	1	Integral Generator	415V 3ph N 28kW	216	600 x 600 x 600	1250 x 2000 x 1400
AVS360G	1	Integral Generator	415V 3ph N 28kW*	360	600 x 600 x 1000	1250 x 2000 x 1700
AVS490G	1	Integral Generator	415V 3ph N 50kW	490	700 x 700 x 1000	1250 x 2000 x 1700

N.B. For Direct Steam Units Reference suffix becomes D (i.e. AVS125G becomes AVS125D). Power requirements for Direct Steam are 415V 3ph N 4kW

* Or 50kW, depending on loads being processed.

Automatic Double Upwards Sliding Door Units – with Vacuum

Reference	Doors	Heating Type	Power Supply	Chamber Litres	Internal Chamber Dims w x h x d	Overall Dims w x h x d
AVD216D	2	Direct Steam	415V 3ph N 4kW	250	500 x 500 x 1000	1250 x 2000 x 1300
AVD360G	2	Integral Generator	415V 3ph N 28kW*	360	600 x 600 x 1000	1500 x 2000 x 1300
AVD360D	2	Direct Steam	415V 3ph N 4kW	360	600 x 600 x 1000	1500 x 2000 x 1300
AVD490G	2	Integral Generator	415V 3ph N 50kW	490	700 x 700 x 1000	1500 x 2000 x 1300
AVD490D	2	Direct Steam	415V 3ph N 4kW	490	700 x 700 x 1000	1500 x 2000 x 1300

* Or 50kW, depending on loads being processed.

Automatic Sideways Sliding Door Units – with Vacuum

Reference	Doors	Heating Type	Power Supply	Chamber Litres	Internal Chamber Dims w x h x d	Overall Dims w x h x d
SVS600G	1	External Generator (supplied)	415V 3ph N 4kW (Generator 48kW)	600	600 x 1000 x 1000	2000 x 2000 x 1500*
SVS875G	1	External Generator (supplied)	415V 3ph N 4kW (Generator 72kW)	875	700 x 1000 x 1250	2000 x 2000 x 1750*
SVS1400G	1	External Generator (supplied)	415V 3ph N 4kW (Generator 100kW)	1400	700 x 1000 x 2000	2000 x 2000 x 2500*
SVD600G	2	External Generator (supplied)	415V 3ph N 4kW (Generator 48kW)	600	600 x 1000 x 1000	2000 x 2000 x 1500*
SVD875G	2	External Generator (supplied)	415V 3ph N 4kW (Generator 72kW)	875	700 x 1000 x 1250	2000 x 2000 x 1750*
SVS1400G	2	External Generator (supplied)	415V 3ph N 4kW (Generator 100kW)	1400	700 x 1000 x 2000	2000 x 2000 x 2500*

N.B. For Direct Steam Units Reference suffix becomes D (i.e. SVS600G becomes SVS600D). Power requirements for Direct Steam are 415V 3ph N 4kW

* Overall Dimensions of separate, stand-alone steam generator (if required): 800mm x 2000mm x 1150mm (w x h x d)



Manual Upwards Closing

Installation

Power: -3 phase 380-440v (phase-phase) 50 or 60Hz.
For use on 3 phase power supplies of 200-240v (phase-phase) please specify option AAN110 at time of order.
NB. A neutral line and protective earth are required for all electrically heated units.

Water: A cold water supply of 2 to 6 bar is required.
Max Temp. 25°C, Max flow rate 20L/Min.

Compressed air: If 6 bar dry-oil free compressed air is not available on site. Air compressor option AAQ503 must be specified at time of order.

Drainage: Free venting Non Manifoldd drain (54mm dia) capable of withstanding temperatures up to 100°C

Direct Steam Heated Models

Steam: A supply of Dry saturated steam at 4.0bar is required for direct steam models

Please contact our service department for details of Installation, Commissioning and Validation +44 (0)208 309 2000 - email service@astell.com

Additional options available

Reference	Description
AAQ302	Full Heated Jacket
AVC004	Air Ballast
AAN014	Load Sensed Process Timing
AVQ007	SPF Seal
AVC005	Category III Compliance - Vacuum Models
AAP102	Internal Convection Fan Cooling
AAQ503	Integral Air Compressor
AAR130	Integral Data Printer
AAR500	Sterilization Datalogger
AAR120	RS232 Interface
AAR122	Ethernet Interface
ADA100	Deluge Cooling
AAP006	Assisted Air Cooling
AAP102	Internal Convection Fan Cooling
IQ/OQ	Document Package
SPL285	Blow Down Vessel
AAW001/AAW002	Water Softener
AAQ300	Discard Container 300x300x300mm
AAQ801	Additional Shelf & Runner
AAQ600	Loading System 1 External Trolley & 1 Internal Truck
AAQ602	Loading System 2 External Trolleys & 1 Internal Truck

Standards Compliance

ISO9001: 2008
ISO13485: 2003

Pressure Equipment Directive (EN/97/23/EC)
Medical Devices Directive (93/42/EC & 2007/47/EC)

ISO 17025:2005 (UKAS)
IEC 61010



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