

Front Loading Autoclave Range

120, 153, 247, 290, 344 litre models

Fitted with heaters in chamber as standard

Astell's front loading 'Swiftlock' autoclave range is available in five sizes and is factory fitted with a large number of features as standard, making it suitable for sterilizing liquids (media), discard, glassware and other instruments. These features include:

- A 5.7" colour touchscreen with integrated USB data port
- A delayed start and a media holdwarm feature for greater control over when you want to sterilize
- Safety: over-temperature protection, an external pressure gauge, a cooling lock, a safety valve test program and an emergency stop button
- A validation port, drain valve and an electropolished stainless steel chamber
- Safe and easy loading, plus Astell's unique 'Swiftlock' door closure system
- Timed/Pulsed Freesteaming
- Full range of options and accessories (see overleaf for details)



Specifications

| Model no. | Steam source | Volume (litres) | Power supply | Chamber diam. x depth (mm) | Usable chamber depth (mm) | Overall dimensions W x H x D (mm) |
|-----------|-----------------------------------|-----------------|---------------------------|----------------------------|---------------------------|-----------------------------------|
| ASB260 | Heaters in Chamber | 120 | Single or 3 Phase, 7/10kW | 454 x 740 | 633 | 685 x 1320 x 1100 |
| ASB270 | | 153 | | 454 x 945 | 862 | 685 x 1320 x 1310 |
| ASB280 | | 247 | 3 Phase, 13kW | 600 x 876 | 734 | 900 x 1405 x 1370 |
| ASB290 | | 290 | 3 Phase, 16kW | 600 x 1024 | 886 | 900 x 1405 x 1370 |
| ASB300 | | 344 | | 600 x 1217 | 1086 | 900 x 1405 x 1570 |
| ASB260 | Integral Steam Generator (option) | 120 | 3 Phase, 18kW | 454 x 740 | 633 | 685 x 1320 x 1500 |
| ASB270 | | 153 | | 454 x 945 | 862 | 685 x 1320 x 1500 |
| ASB280 | | 247 | | 600 x 876 | 734 | 900 x 1405 x 1750 |
| ASB290 | | 290 | | 600 x 1024 | 886 | 900 x 1405 x 1750 |
| ASB300 | | 344 | | 600 x 1217 | 1086 | 900 x 1405 x 1750 |

(Power consumption/dimensions may vary with the addition of certain options)

Bottle capacity

Below is a table identifying the number of Duran bottles it is possible to fit in to the chamber of each model using the standard base shelf. The number in brackets indicates quantity of extra bottles with the addition of a centre shelf (optional extra).

| Model no. | 500ml | 1000ml | 2000ml |
|-----------|----------|---------|--------|
| ASB260 | 24 | 18 | 8 |
| ASB270 | 33 | 23 | 11 |
| ASB280 | 41 (+9) | 28 (+4) | 15 |
| ASB290 | 50 (+11) | 32 (+4) | 18 |
| ASB300 | 63 (+14) | 42 (+6) | 23 |



Advanced options (Selection of these options alters the power supply requirements listed in the Specifications table)



Integral Steam Generator Option

The standard heaters in chamber are replaced with a 16kW/24kW 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: 16KWSG or 24KWSG



Advanced and Simple Vacuum Options

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. Available in 2 derivatives, 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. Alternatively, the AVC002 vacuum utilises the standard heaters in the base of the chamber with simple pre-vacuum air removal and post vacuum cooling to effectively sterilize porous type loads and 'difficult' discard loads, but without any drying capability.
Astell Ref: AVC001 or AVC002



External Jacket Option

Requiring a steam generator or direct steam option (and normally in conjunction with the AVC001 vacuum option), 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: AJP100 or AJP152

Additional options

| | | | |
|--|-------------|--|-----------------|
| Load Sensed Process Timing | Ref: AAR014 | Internal convection cooling | Ref: AAP102 |
| Pulsar Freesteaming | Ref: AAN009 | Drain Cooling (heaters in chamber model only) | Ref: AAN420 |
| Integral data printer | Ref: AAR130 | Category III (BSL-3) compliance | Ref: AVQ006 |
| FDA 21 CFR part 11 controller software | Ref: CFR021 | Morrison discard container (W:280 x H:290 x D:330mm) | Ref: AAN300 |
| Remote maintenance/diagnosis | Ref: RDM101 | Container tray (W:279 x H:127 x D:279mm) | Ref: AAN080 |
| Ethernet interface | Ref: AAR122 | Additional shelf kit (for ASB260/ASB270) | Ref: AAN316 |
| IQ/OQ documentation | Ref: IQ/OQ | Additional shelf kit (for ASB280/ASB290/ASB300) | Ref: AAN318 |
| Assisted air cooling/non jacketed | Ref: AAP006 | Water softener (compact) | Ref: AAW002 |
| Advanced water cooling | Ref: AAP100 | Integral air compressor (req. for Vacuum units) | Ref: AAQ503/525 |
| Autodrain (heaters in chamber models only) | Ref: AAP018 | Blow down vessel (steam gen. only) | Ref: AAB001 |
| Autofill (heaters in chamber models only) | Ref: AAP019 | Direct Steam model | Ref: Various |
| Air ballast (requires compressed air) | Ref: AVC004 | | |

Options capacity

| Part name | Part ref. | Dimensions W x H x D (mm) | ASB260 | ASB270 | ASB280 | ASB290 | ASB300 |
|--|-----------|------------------------------|--------|--------|--------|--------|--------|
| Morrison discard container | AAN300 | 280 x 290 x 330 | 1 | 3 | 2 | 3 | 3 |
| Container tray | AAN080 | 279 x 127 x 279 | 2 | 3 | 2 | 3 | 3 |
| Container tray (capacity with middle shelf – optional extra) | | | 4 | 6 | 6 | 9 | 9 |
| Container tray (capacity with middle & upper shelf – extras) | | | – | – | 6 | 12 | 12 |

Installation requirements

Power requirements:

The power requirements for the standard machines are listed in the Specifications table, however these can vary depending on the options selected. Options that affect the power requirement are **Integral Steam Generator** and **Advanced and Simple Vacuum**. For details on the exact power requirements on these options please contact us. *N.B. A Neutral line and protective Earth are required for all electrically heated units.*

Water and drainage requirements:

A cold water supply of 2-6 Bar minimum, 4 litres/min is required for the 'Autofill', vacuum and water cooling options. Max temperature 25°C, Max flow rate 20 litres/min. Requirements vary for RO/de-ionised/hard water. Drainage: Free venting, non-manifolded drain (35mm diameter) capable of withstanding temperatures up to 100°C.



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