



# **Benchtop Autoclaves / Steam Sterilisers**

Our Benchtop autoclaves are small units designed to provide routine sterilisation functions while preserving valuable lab space. They use high pressure, vacuum enviroment, heated steam to sterilise a variety of liquids, media, instruments, glassware, plasticware and other commonly used in laboratories.

These autoclaves feature a compact, space-saving design with a surprisingly large 20L or 24L sterilization chamber, and fully automatic operation with a quick start button. With a safety inner door lock, our benchtop autoclaves are safe, convenient and affordable units that meet all of your sterilisation needs.

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#### **High Efficiency:**

- Digital adjustable timer with 16 memory programmable cycles
- Status indicator to monitor entire process
- Independent drying system is easy for the operator to set the time from o min. ~ 99 min.
- Use high quality components to ensure longer life of operation

## **High safety protection**

- Double door locking safety device: it prevents door from opening while chamber is pressurized over 0.28kg/cm<sup>2</sup>
- Emergency protection system: the autoclave can be stopped anytime and be restarted while in safe condition.
- Safety indicator light: Door open warning sensor with indicator light. Water sensor and indicator light to alarm low water level

## High friendly convenience interface

- Single touch operation to start a sterilization cycle
- LED display to count down to the end of cycle
- LED display to inform the total sterilization cycle has performed
- Digital display to show the sterilization stage (dL/oA/Ed) and error code(E1-E9) clearly

# **Specification**

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# **Benchtop Autoclave AB-200 Series**

The AB-200 front loading 'Benchtop' autoclave range is available in three sizes, 16l, 18l and 23l. A 5.7" colour touchscreen with integrated USB data port. It can store up to 2000 data cycles Sterilisation data which can be transferred to computer / printer. The chamber/pressure vessel is designed with electropolished stainless steel. The pressure vessel ensures the absolute minimum amount of water is used during a sterilization cycle, which not only means comparably low power consumption, but also very quick heating and cooling.

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- Electropolished stainless steel chamber
- Simple pre-post vacuum option available
- Adjustable time and temperature
- Exterior is designed with fully molded ABS plastic
- New Tabletop Water tank design
- Pressure, mechanical, electronic door lock system, completely cut off hidden danger.
- Double temperature monitoring system, analyse and compare the different temperature of the tank, to guarantee and control every heating stage accurately.
- Adopt high analytical pressure sensor, the pressure can accurate to 0.001 bar, in the mean time we add sampling system to improve the accuracy of information.
- Circular heating reaches minimum temperature difference. Pressure-prevention and corruption-resistance makes it highly reliable. Alloy heating loop protects against damage by no-water heating.
- High efficiency double pump, low noise, vacuum ability can reach -0.92 bar, double head ensure the balance during working and stable vacuum state in the chamber.
- Raise 10 times temperature controlling precision system, can accurate to 0.1°C.
- Stable ULKA water pump
- Pass by all kinds of bacteria test, come with B&D testing system, vacuum testing system, Helix testing system, can examine every parameter index, to guarantee the validity of sterilization.
- Original fuzzy control system driven by steam generator adopts 0WM(pulse with modulation), able to discriminate the fine differences in temperature allowances and to adjust the modulated waves correspondingly thus making temperature rise at the same speed each time
- High quality CEME valve
- Built-in USB interface

## **Specification**

| Model                        | AB-216              | AB-218 | AB-223           |  |
|------------------------------|---------------------|--------|------------------|--|
| Sterilizing chamber volume   | 141 171             |        | 231              |  |
| Chamber<br>Dimensions(L*D*H) | Ф 250х270 Ф 250х350 |        | Ф250Х490         |  |
| External Dimensions(L*D*H)   | 480 x480 x420 mm    |        | 480 x690 x420 mm |  |
| Power Consumption            | 1600W               | 1800W  | 2200W            |  |



| Insulation Class            | class B  |   |                      |  |  |  |
|-----------------------------|--|---|----------------------|--|--|--|
| Display                     | LCD  |   |                      |  |  |  |
| Interface                   | USB or External Printer  |   |                      |  |  |  |
| Control Accuracy            | Temper   | Temperature 0.1 °C, Pressure 0.001 bar  |                      |  |  |  |
| Sterilization level         |  | Class B   |                      |  |  |  |
| Sterilization temperature   |  | 121°C,134°C   |                      |  |  |  |
| Special sterilization       | HIV/AIDS, hepa   | atitis b (HBV), mad cow v   | virus and spore.     |  |  |  |
| Drying procedure            | A st   | rong negative vacuum dr   | ying                 |  |  |  |
| Operation interface         |  | Adopt the operation of the new interface LCD screen can display temperature and pressure time running state, fault alarm information, etc |                      |  |  |  |
| Test system                 | Bowie & Dick Stea  | ım penetration test, Vacu   | ıum test, Helix test |  |  |  |
| Control accuracy            | Tempe  | erature 0.1°C, pressure 0   | .1 Kpa.              |  |  |  |
| Sterilization data          | External U   | SB connection , (printer  | is optional)         |  |  |  |
| Multiple safety             | Interlock protection device: Safety valve, Pressure interlock, door alarm, automatic breakdown check. Over temperature and pressure protected. |   |                      |  |  |  |
| Water system                | Internal open water tank, easy to clear.   |   |                      |  |  |  |
| Sterilization Configuration | Activ  | Activities tray rack, match 3 pallets   |                      |  |  |  |
| Working Temperature         |  | 134C  |                      |  |  |  |
| Working Pressure            |  | 2.1bar  |                      |  |  |  |
| Warm Up Time                |  | 0 - 7min  |                      |  |  |  |
| Pump down Time              |  | 10min   |                      |  |  |  |
| Air Intake Time             |  | 4min  |                      |  |  |  |
| Working Time                |  | 6min  |                      |  |  |  |
| Drying Time                 |  | 18min   |                      |  |  |  |
| Quick Drying Time           |  | 9min  |                      |  |  |  |
| Total Time                  |  | 40min   |                      |  |  |  |
| Security                    | Safety valve, pressure system, mechanical and electric lock. Self-diagnosis, pressure-protection device, heating-exceeding                     |   |                      |  |  |  |
| Test Programmers            | Н  | Helix/BD Test; Vacuum Test  |                      |  |  |  |
| Drying Progress             | Three times pulsation v  | Three times pulsation vacuum, temperature less than 0.2% after finish.  |                      |  |  |  |
| External Dimensions         | 616x460x420  | 616x460x420   | 616*460*420          |  |  |  |
| Net Weight (kg)             | 42.5   | 47  | 53                   |  |  |  |



| Shipping Dimensions     | 655x545x450 655x545x450 |              | 750X545X450  |  |
|-------------------------|-------------------------|--------------|--------------|--|
| Gross Weight (kg)       | 50.5                    | 55           | 62           |  |
| Electrical Requirements | 220V 50/60Hz            | 220V 50/60Hz | 220V 50/60Hz |  |
| Catalogue No.           | 58005052                | 58005102     | 58005152     |  |

# **Technical**

| Model                         | AB-216 AB-218  |                          | AB-223           |  |  |
|-------------------------------|--|--------------------------|------------------|--|--|
| Sterilizing chamber volume    | 141 171  |                          | 231              |  |  |
| Chamber<br>Dimensions(L*D*H)  | Ф 250х270  | Φ 250x270 Φ 250x350      |                  |  |  |
| External<br>Dimensions(L*D*H) | 480 x480 x420 mm   | 480 x530 x420 mm         | 480 x690 x420 mm |  |  |
| Power Consumption             | 1600W  | 1800W                    | 2200W            |  |  |
| Insulation Class              |  | class B                  |                  |  |  |
| Display                       |  | LCD                      |                  |  |  |
| Interface                     |  | USB or External Printer  |                  |  |  |
| Control Accuracy              | Temper   | ature 0.1°C, Pressure 0. | 001 bar          |  |  |
| Sterilization level           |  | Class B                  |                  |  |  |
| Sterilization temperature     | 121℃,134℃  |                          |                  |  |  |
| Special sterilization         | HIV/AIDS, hepatitis b (HBV), mad cow virus and spore.  |                          |                  |  |  |
| Drying procedure              | A strong negative vacuum drying  |                          |                  |  |  |
| Operation interface           | Adopt the operation of the new interface LCD screen can display temperature and pressure time running state, fault alarm information, etc      |                          |                  |  |  |
| Test system                   | Bowie & Dick Steam penetration test, Vacuum test, Helix test   |                          |                  |  |  |
| Control accuracy              | Tempe  | rature 0.1°C, pressure 0 | .1 Kpa.          |  |  |
| Sterilization data            | External USB connection , (printer is optional)  |                          |                  |  |  |
| Multiple safety               | Interlock protection device: Safety valve, Pressure interlock, door alarm, automatic breakdown check. Over temperature and pressure protected. |                          |                  |  |  |
| Water system                  | Internal open water tank, easy to clear.   |                          |                  |  |  |
| Sterilization Configuration   | Activities tray rack, match 3 pallets  |                          |                  |  |  |
| Working Temperature           | 134C   |                          |                  |  |  |
| Working Pressure              | 2.1bar   |                          |                  |  |  |
| Warm Up Time                  | 0 - 7min   |                          |                  |  |  |



| Pump down Time          | 10min  |             |             |  |  |
|-------------------------|--|-------------|-------------|--|--|
| Air Intake Time         |  | 4min        |             |  |  |
| Working Time            |  | 6min        |             |  |  |
| Drying Time             |  | 18min       |             |  |  |
| Quick Drying Time       |  | 9min        |             |  |  |
| Total Time              |  | 40min       |             |  |  |
| Security                | Safety valve, pressure system, mechanical and electric lock. Self-<br>diagnosis, pressure-protection device, heating-exceeding |             |             |  |  |
| Test Programmers        | Helix/BD Test; Vacuum Test   |             |             |  |  |
| Drying Progress         | Three times pulsation vacuum, temperature less than 0.2% after finish.   |             |             |  |  |
| External Dimensions     | 616x460x420  | 616x460x420 | 616*460*420 |  |  |
| Net Weight (kg)         | 42.5 47 53   |             |             |  |  |
| Shipping Dimensions     | 655x545x450 655x545x450 750X545X450  |             |             |  |  |
| Gross Weight (kg)       | 50.5 55 62   |             |             |  |  |
| Electrical Requirements | 220V 50/60Hz 220V 50/60Hz 220V 50/60Hz   |             |             |  |  |
| Catalogue No.           | 58005052   | 58005102    | 58005152    |  |  |



# **Pulse Vacuum Tabletop Autoclave AB-400 Series**

**B**ased on the new class B of international EN-13060, with 3 pulsating vacuum. Vacuum up to-0.9 Bar (-0.09Mpa). Suitable to sterilize wrap, unwrap, solid, porous, hollow device.

# **Description**

**B**ased on the new class B of international EN-13060, with 3 pulsating vacuum. Vacuum up to-0.9 Bar (-0.09Mpa). Suitable to sterilize wrap, unwrap, solid, porous, hollow device.

- Standard Class B with three times vacuum and drying, the remaining temperature of sterilized instrument is less than 0.2%.
- LCD display working status, touch keys.
- The vacuum data can reach -0.8bar, it fits various instrument, including package, unpackaged, solid, hollow, multi-apertures and inset pipes. It makes sure the instrument can be sterilized completely.
- Fully computer controlled LCD display bright show. The interface is modularized panel for easy operation.
- It is installed with BOWIE&DICK which measures the penetration of water steam.
- It has vacuum text which can make sure the ability of texting vacuuming.
- Fast and independent steam generator.
- Built-in mini printer which can record the sterilizer information.
- Safety valve Safety lock door system Pressure or temperature overload protection, Alarm system.
- Can inactivate HIV, HBV, mad cow virus and bacillus.
- Advanced 16-bit microprocessor, easy to operate. Most suitable for the Dept of Stomatology, Ophthalmology, Surgery and Lab.
- With BD test, Helix and vacuum test procedures.
- The jet type of steam generator, ensure the efficient sterilizing..
- Alarm system for waste water tank, avoid the waste water to enter the sterilizing circulation,.
- Precise digital display and advanced self-test system ensure you to get the working data freely.
- Double door-locking system, guarantees the operation and security.
- Optional inbuilt mini-printer or USB connector to record the process of sterilizing.
- The new design of water tank on top for easy maintenance.

## **Specification**

| Model                      | AB-412                    | AB-418      | AB-424      | AB-435      | AB-450      |
|----------------------------|---------------------------|-------------|-------------|-------------|-------------|
| Sterilising chamber volume | 12L                       | 18L         | 24L         | 35L         | 50L         |
| Chamber Dimensions         | ф200×370 mm               | ф250×360 mm | φ250×470 mm | ф300×500 mm | ф340×550 mm |
| Working pressure           |                           | 0.22 Mpa    |             |             |             |
| Working temperature        |                           |             | 134 ℃       |             |             |
| Temperature Range          |                           | 105-134 ℃   |             |             |             |
| Timer                      |                           | 0-99 min    |             |             |             |
| Heat average               | ≤ ±1 °C                   |             |             |             |             |
| Power                      | 1.8KW 2KW 2KW 2.7KW 2.7KW |             |             |             |             |
| Dimension(mm)              | 560×470×400               | 560×470×400 | 675×470×400 | 730×550×510 | 770×600×540 |
| Net Weight (kg)            | 43                        | 47          | 53          | 93          | 106         |



| Shipping Package<br>Dimensions (mm) | 655×560×495 | 655×560×495 | 765×560×495 | 810×680×650 | 880×730×700 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Gross Weight (kg)                   | 48          | 52          | 58          | 115         | 130         |
| Electrical Requirements             |             |             |             |             |             |
| Catalogue No.                       |             |             |             |             |             |

# **Technical**

| Model                               | AB-412   | AB-418      | AB-424      | AB-435      | AB-450      |
|-------------------------------------|--|-------------|-------------|-------------|-------------|
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| Working temperature                 |  |             | 134 °C      |             |             |
| Temperature Range                   |  |             | 105-134 ℃   |             |             |
| Timer                               |  |             | 0-99 min    |             |             |
| Heat average                        |  |             | ≤±1°C       |             |             |
| Power                               | 1.8KW  | 2KW         | 2KW         | 2.7KW       | 2.7KW       |
| Dimension(mm)                       | 560×470×400  | 560×470×400 | 675×470×400 | 730×550×510 | 770×600×540 |
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| Gross Weight (kg)                   | 48   | 52          | 58          | 115         | 130         |
| Electrical Requirements             |  |             |             |             |             |
| Catalogue No.                       |  |             |             |             |             |



# **Laboratory Autoclave AB-500 Series**

