

> Bench-Top Steam Sterilizer
> Medium Steam Sterilizers
> Large Steam Sterilizers

# LARGE STEAM STERILIZERS **BS Series**

- Easy to use-one touch operation.
- Large capacity-from110 liters up to 12 STUs.
- **Highly customizable**-with a wide range of accessories and options.
- Fast and economicalsterilization cycles from 30 minutes with advanced water and energy saving systems.
- **Best solution**-for hospital CSSDs, pharmaceutical and biotechnological applications.



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# **High-tech in sterilization**

# LARGE STEAM STERILIZERS **BS** Series

The BS large steam sterilizer family consists of fully automatic pre- and post-vacuum sterilizers, designed with the highest quality to cover a large field of applications for hospital central processing departments, as well as pharmaceutical and bio-technological industries. All components used have been selected with proper attention, meeting the highest quality standards from known leading companies with the most advanced technologies around the World.

Currently, we are selling our products exclusively in Pakistan. However, we have a strong vision and determination to expand our reach globally in the future, InshaAllah.

## Construction

The construction of these autoclaves is modern, ensuring reliable operation, incorporating high tech features and behind its success is a team of multi-disciplinary engineers, who developed sterilization equipment on OEM basis for leading manufacturers around the world, for more than 20 years.

### Chamber

The vessel is a double full jacketed square chamber, made of corrosion resistant stainless steel 316L, which conforms to ISO 9001:2015, ISO 13485:2016, ISO 14001:2016, and JIS standards.. The autoclave's



#### Doors

The autoclave can be supplied with two pneumatically operated vertical sliding door(s). The automatic vertical sliding door's movement stops immediately if it is obstructed and goes back to the opened position. Special safety features prevent the door from opening when the chamber is pressurized or when the temperature is high. In double door units both doors cannot





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be opened at the same time, and clean side door only opens, after a sterilization cycle has been successfully completed.

#### Internal steam generator

The BS steam sterilizers use steam under pressure as the sterilizing agent for wrapped or unwrapped goods such as fabrics, surgical instruments, utensils, and other heat and moisture stable materials at temperatures from 121°C to 134°C. The autoclaves can be equipped with internal steam generator to enable faster cycles with efficient energy consumption, and to eliminate the dependence on an external steam source and its steam quality. The air removal is done by a powerful vacuum system, using a liquid ring vacuum pump and a condenser, heat

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exchanger. All autoclaves are supplied with a water saving system as standard to reduce the amount of water during the sterilization cycles.

## Certified

Through the numerous safety features, the BS steam sterilizers meet the highest standards and requirements for quality, safety and operation (ISO 9001:2015, ISO 13485:2016, ISO 14001:2016, and JIS (Japanese Industrial Standard).

## Microprocessor controlled steam sterilizer

A microprocessor based control system; state of the art Freescale technology automatically controls all operations. The system includes a digital color touchscreen LCD display, communication, self and remote diagnosis and PC connection for external documentation and printing, ensuring a reliable, safe and userfriendly operation.

The displayed information is available for users in a variety of languages.

## The cycles

Azteca A Series offer 7 preset cycles, 5 sterilization cycles and 2 test cycles to assure a proper sterility level. Up to totally 20 cycles can be custom designed according to the users' needs.

The design of all internal and external components together with the self-diagnostic system ensure easy maintenance, resulting in reliable service and performance and satisfied operators.

### Solution for CSSD's

Within the health-care services, sterilization of medical supplies is an essential issue in the



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battle against the advance of many infectious diseases. In order to improve the quality of this supply, international standards have been developed, which specify the requirements for the equipment, and procedures in the sterilization departments in health care facilities.

Blue Star Health Crae BS autoclaves provide the best solution for hospital's central sterile supply departments (CSSD), clinics, as well as pharmaceutical and biotechnological industries. With a range of accessories these autoclaves can be easily customized according to the customer's requirements.

# Main Structural Features

**SIDE PANELS** – The BS Series sterilizers can be purchased as a standalone unit for free standing installation with stainless steel side panels, which cover the sides of the unit in order to protect the sterilizer's components from the dust.

**DOOR** – The door system is automatic and the sterilizer is equipped with one or two vertical sliding door(s), provided with a pneumatic locking mechanism, activated by an air- operated valve, and safety pin preventing the opening of the door when the chamber is pressurized.

LOADING/UNLOADING SHELF RACK - It is available to placing the instruments inside the chamber. The shelf rack has 1 fixed shelf on the bottom and 1 shelf, which can be placed in 2 levels.

LOADING/UNLOADING CART - It is necessary for placing the shelf rack into the sterilizer's chamber. The cart comes with locking system to the chamber for easier loading and unloading and breakable wheels. For double door models 2 carts are suggested.



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**CHAMBER** – The vessel is a double full jacketed square chamber, made of corrosion-resistant sandblasted stainless steel 316L. It has large capacity from 110-880 Liters. Sterilization temperatures between: 121°C and 134°C

**CONTROL SYSTEM** – The system includes a 7" digital touch-screen LCD display, communication, self and remote diagnosis and PC connection for external documentation and printing. The displayed information is available for users in a variety of languages. In case bigger display is needed the 10 "LCD display option is available. BS Series offers different cycles: sterilization cycles, and test cycle. Sterilization cycles: - Flash 134 °C / Unwrapped 134 °C / Wrapped 134 °C / Prion 134 °C / Porous 121 °C. Test cycles: Vacuum test

STEAM GENERATOR - The BS Series can be equipped with a built-in electrical steam generators. The steam generator, made of stainless steel, enables steam to always be ready for operation, and thus contributes to very fast cycles with low energy consumption.

BUILT-IN INK PRINTER - The unit supplied with an integrated ink printer. Each cycle can be documented by the printer which records the preset and actual parameters of the cycle: the selected cycle, cycle parameters, date, time, temperature, pressure, errors, etc. The last 60 cycles' data is automatically stored in memory, and can be re-printed. Thermal printer can be supplied upon request.

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# Accesories



Thermal Printer (Optional) - For inkless cycle recording, instead of the standard supplied builtin ink printer, thermal printer can be supplied upon request. Each cycle is documented by the integrated printer which records the preset and actual parameters of the cycle: the selected sterilization or test cycle, cycle parameters, date, time, temperature, pressure, errors, etc.



SD card (Optional) - Sterilization cycles' data can be collected online on a SD Card through an optional SD Card Slot. Collected data can be downloaded into a computer equipped with proprietary PC Software.



Steam generator - The BS steam sterilizers can be equipped with a built-in steam generator, when central steam source is not available. The steam generator is made of steel. The large capacity of the heaters enables steam to always be ready for operation, and thus contributes to a very fast cycle.



Biohazard shield – On request, BS Series can be equipped with a biohazard shield. This solution should be chosen when there is a risk of any biohazard contamination.



7" LCD display – The BS steam sterilizers can be supplied with 7 "color graphic touch- screen display.



Reverse osmosis system (Optional) (water softener / water purifier) - A Reverse Osmosis system shall be used to improve the quality of the water used to generate steam in the electric steam generator and to secure fully automatic operation. The use of mineral-free water will contribute to better performance and longer life of the autoclave's chamber.



Air compressor (Optional) – An electrically operated air compressor can be supplied if there is a lack of available compressed air. The air is used to operate the pneumatic valves and the door(s).

ensures efficiency and consistency in sterilization processes.

cooling and an additional PT100 temperature probe.

steel side panels.

autoclave's chamber.

locking system and braking wheels.

baskets, available in various sizes.





Delta PLC - Advanced Automation for Sterilization A robust and versatile automation solution designed for precise control, real-time monitoring, and accurate logging of sterilization cycles in autoclaves. With a user-friendly interface and reliable performance, it

Slow exhaust cycle – For sterilizing liquids according to ISO 13485:2016, with natural

Side panels - The BS steam sterilizers can be supplied as a stand-alone unit with stainless

Loading/unloading shelf rack - Stainless steel shelf rack for placing instruments inside the

Loading/unloading cart (Optional) - Stainless steel loading/unloading cart with

Stainless Steel Products for CSSD (Optional) - We also manufacture a complete range of stainless steel items for CSSD, including furniture, sterilization containers, and wire mesh

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## LARGE STEAM STERILIZERS **BS Series**

# **TECHNICAL SPECIFICATIONS**

Model BS	BS-110B-2	BS-150B-2	BS-250B-2	BS-350B-2	BS-450B-2	BS-500B-2	BS-600B-2
Doors(s)	Double						
Inner chamber dimensions W x H x D (mm)	500 x 500 x 800	550 x 550 x 850	600 x 600 x 1000	600 x 600 x 1100	610 x 610 x 1067	700 x 700 x 1200	800 x 800 x 1200
Chamber volume	110L	150L	250L	350L	400L	500L	600L
External dimensions W x H x D (mm)	1500 x 1000 x 1200	1600 x 1100 x 1300	1700 x 1200 x 1300	1750 x 1250 x 1350	1854 x 1270 x 1372	1854 x 1270 x 1372	2000 x 1400 x 1500
Approximate weight	350 - 450 kg	450 - 600 kg	600 - 800 kg	750 - 900 kg	850 - 1000 kg	1000 - 1200 kg	1200 - 1400 kg
Power supply	3 ph. 380-400 V, 50/60 Hz						
Power of steam generator	12KW	18KW	21KW	27KW	27KW	36KW	45KW
Available sterilization cycles	Flash 134°C / Unwrapped 134°C / Wrapped 134°C / Prion 134°C / Porous 121°C						
Available test cycles	Vacuum test						
Touch-screen display	LCD 7" Color Graphic - (10" optional)						
Cover	Stainless steel						
Doors(s) type	Automatic vertical sliding door(s)						

\* We manufacture products according to the client's requirements, customizing designs to meet their specific needs.

\* Adjustable to different voltage systems

Blue Star Health Care reserves the right to modify the products without any notice

# **After Sales Service**

Our Service Department stands out for its expert after-sales support-we don't just sell steam sterilizers; we ensure they perform at their best. With genuine parts and a skilled team, we provide quick troubleshooting, reliable repairs, and ongoing maintenance. If you need assistance, our experts are always ready to help. Our commitment to excellence sets us apart.



# About us

Blue Star Health Care is a leading manufacturing company based in Pakistan, specializing in sterilization and infection control solutions. With a strong focus on innovation and green technology, we develop and produce high-quality sterilizers, sterilization containers, wire baskets, and CSSD furniture to meet the needs of various sectors including hospitals, clinics, and dental offices.

Our products are designed with the latest technology to ensure optimal performance in infection control, offering reliable, efficient, and environmentally friendly solutions. As a company committed to advancing healthcare standards, we are focused on providing integrated sterilizer & shredders that contribute to a clean and sterile environment.

Currently serving the local market in Pakistan, we are poised for global expansion, aiming to fulfill the growing demand for sustainable sterilization solutions worldwide.

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## Who are we?

**Blue Star Health Care** is a Pakistan-based manufacturing company specializing in CSSD equipment, including Low Temperature Plasma Sterilizers, Washer Disinfectors, and Steam Sterilizers. With a strong focus on R&D, we provide high-quality sterilization solutions to ensure infection control in healthcare settings. Our growing international presence is backed by a well-established market in Pakistan, with plans to expand into over 80 countries worldwide.

#### Blue Star health Care

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ISO 9001, ISO 13485 and ISO 14001 certified company with CE certified products

