

Technical parameters

Model	BIST-WD-S500	BIST-WD-H500	BIST-WD-S1000	BIST-WD-H1000
Water yield ( Kg/H )	500	500	1000	1000
Outlet water temperature ( °C )	About 40	About 40	About 40	About 40
Overall dimension ( L×W×H ) mm	1306×940×1800	1050×850×1600	1306×940×1800	1050×850×1600
Weight ( Kg )	350	150	370	170Kg
Water tank size ( Φ×H ) mm	Φ600×1000	Φ800×1750	Φ600×1000	Φ1000×2140
Storage water ( L )	200	500	200	1000
Energy requirements				
Steam condumption ( Kg/H )	30	30	60	60
Pressure of steam source ( MPa )	0.3 ~ 0.5	0.3~0.5	0.3~0.5	0.3~0.5
Flow rate of compressed air ( L/min )	60	60	60	60
Source of compressed air ( MPa )	0.5 ~ 0.7	0.5~0.7	0.5~0.7	0.5~0.7
Pressure of water source ( MPa )	0.1 ~ 0.3	0.1~0.3	0.1~0.3	0.1~0.3
Water quality ( mmol/L )	Hardness < 0.03	Hardness<0.03	Hardness<0.03	Hardness<0.03
Water cosumption ( Kg/h )	500	500	1000	1000
Power supply ( V/Hz/KW )	220/50/0.5 380/50/0.55	20/50/0.5 380/50/0.55	220/50/0.5 380/50/0.55	220/50/0.5 380/50/0.55



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BIST-WD Series Animal Drinking  
Water Online Sterilization Equipment



## Revolutionary Innovation For Animal Drinking Water

Laboratory animals drinking water is an important potential factor that affect the quality of laboratory animals. The way of producing water of traditional sterile has a big risk, for example, the resistance bacteria filtration membrane is damaged or replacement is not timely, the pipeline is easy to pollution, ultraviolet disinfection is unreliable.

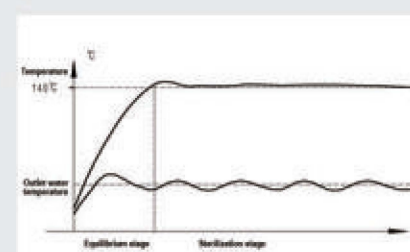
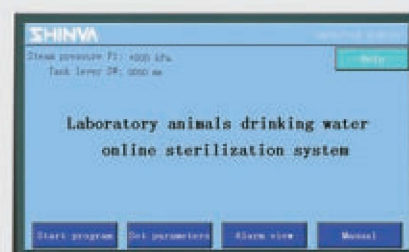
BIST-WD series online sterilization equipment of animals drinking water uses super-high temperature sterilization technology. The sterility assurance value is  $F_0 > 12$ , which can kill all microorganisms and spores. The equipment can achieve thoroughly sterilize for animals drinking water. It continuous produces water, and as used with the open, which meets the needs of the vast majority of animal rooms. It has the characteristics that sterilization reliable, high efficiency producing water, small footprint, easy to operate and reducing energy consumption.

### The most secure and reliable aseptic water solution

#### Working principle

High temperature have obvious lethal effect on microorganisms, laboratory animal drinking water online sterilization equipment is mainly using high temperature to make living microorganisma and spore degeneration or solidification, thus make the microbiological and spore death, to achieve the sterilization purposes.

- Sterilization temperature: sterilization temperature is assured to eliminate all kinds of virus, the most critical factors in pathogens, BIST - WD series drinking water sterilization system is with 140 °C as sterilization temperature.
- Sterilization time: in order to ensure the reliability and continuity of drinking water, BIST-WD series of drinking water sterilization system can be in the 10S to kill microorganisms in vivo and spore at 140 degrees.



#### F0 value concept:

Under the wet and heat sterilization, the reference temperature at 121 °C, with fat thermophilic bacillus as microbial indicator bacteria, the fungus at 121 °C, the Z value is 10 °C, T for certain sterilization temperature, are:

$$F_0 = \int_{t_1}^{t_2} 10^{(T-121)/10} dt$$

Where the temperature sterilization effects are converted into the equivalent value of sterilization under 121 °C. So called F0 standard sterilization time (min).

- Reliable sterilization  
Using ultra high temperature sterilization technology, principle of sterilization and technology mature, safe and reliable, low operating cost.
- Large produce a water yield  
Immediate sterilization, continuous producing water, as used with open, fast processing speed, and meeting the needs of the vast majority of animal rooms.
- Online sterilization  
Timing of water pipeline cleaning and disinfection, to avoid contamination.
- No dead angle design  
No dead Angle and blind pipe design, no dead Anglesin cleaning and sanitation.
- Water cycle design  
Water has been in circulation flow state, avoid secondary pollution.
- Low energy consumption  
The equipment can saves steam more than 80% than the high-temperature sterilization, and saves water about more than 50% than traditional water machine.
- High degree of automation  
Fully automatic running, touch screen operation, the work-flow and temperature, pressure and time during working can be dynamic displayed without human intervention.
- High safty  
Multiple alarm protection function: overpressure and over temperature alarm, etc., ensure the safety of equipment operation.
- High stability  
The main control members and valve members are all selected form international brands, which greatly improves the stability and reliability of equipment.
- Water quality verifiable  
Equipment with a sampling port is easy to sample for water and to monitor biological.
- Lower requirements of utilities  
The drainage system has been through effective cooling process, reduced pollutions to the environment.
- Sterilization parameters is printable and recorded  
Equipped with a printer can print and record the process parameters during the sterilization process and Sterilization process data, which is easy to archive management.

