

## DW-GF Series Vertical Autoclave

### Safety

- **1. Triple protection for lack of water**

The bottom of the sterilization chamber is equipped with three different dry burning protection devices: liquid expansion type, copper temperature sensing type, and electric ion type (water level sensor), to avoid misjudgment caused by a single method.

- **2. Saturated steam monitoring**

The system automatically monitors the purge out of cold air to ensure the pure steam environment.

- **3. Humanized design**

The lid and bench corners are covered with insulation to avoid getting scald.

- **4. Auto trouble shooting**

System will monitor the working status, and will cut the power, send out alarm, and report the error information once any abnormal situation detected.

- **5. Electrical protection**

Prevention for over current, short circuit and electricity leakage.

- **6. Cooling LOCK open temperature**

Each program can set different lid OPEN temperatures, especially for liquid program, so as to prevent user from opening lid and causing burns when the articles are still in a high temperature state.

- **7. Evenly distributed interlock**

Evenly distributed interlock device is safer and more reliable than ordinary interlocking devices.

- **8. Real time monitor**

System will monitor the lid locking, pressure and temperature status on a real time basis to guarantee the safe and successful work of the autoclave.

- **9. Double protection for over pressure**

Mechanical pressure gauge and electric sensing system, once pressure is abnormal, system will cut power, release the pressure and send out alarm.

- **10. Safety test function**

Regular testing of system security and safety protection measures is possible.

- **11. Temperature monitor**

Power cut and alarming sent, if there is temperature is too high or temperature rising is abnormal.

- **12. One button to open**

Press slightly to close, one button to open (if not safe inside, can not open).



Slightly press the lid



Interlock sensor



One button to open



Slightly lift up

## Advanced

### ◆ Touch screen

7-inch color LCD touch screen with Chinese /English choice , supporting glove wearing or pen touch sensing operation.

### ◆ 6 level of exhaust speed control (DA,DF,DR only)

After sterilization,you can choose different exhaust speed, and you can adjust it freely at any time of exhausting.

### ◆ 5 level access permission

The operation permissions for instruments are divided into five levels, with each level of user having an independent password and multiple IDs that can be assigned. Each level of user has limited access to certain usage permissions.

### ◆ F0 value caculation

F0 value is automatic caculated, can print out by micro-printer.

### ◆ Biosafety function(DWS,DRS only)

Use a 0.2 μm PTFE filter packed in a housing to ensure that no biohazard aerosols, microorganisms and viruses are passing out through the filter during exhausting, so as to make sure the biology safety of the lab.

### ◆ Dedorization(DX only)

A unique odor treatment system that can absorb odors and remove smell generated during the sterilization process, ensuring fresh laboratory air.

### ◆ Auto water fill(only for DF、 DR models)

Equipped with automatic water feeding function, standard is with 28L water tank at the back to store water, option is direct water supply by pipe connection from water source while manufacturing.

### ◆ Data reading and curve conversion

Provide USB interface for easy reading or storage of sterilization data. The sterilization data is converted into curves for easy data analysis.

### ◆ Auto drainage/Auto cleaning(option)

Added with a water pump, press the drainage button to start drainage, or set it to timed automatic drainage, Automatic cleaning can be set to regular cleaning or cleaning after each sterilization cycle.

### ◆ Sterilization record storage

Built in large capacity memory, can store 999 sterilization cycles and can be queried, printed or exported for easy traceability management.

### ◆ Air inlet filter(DR,DX only)

Filtration is higher than 99.99% in particlewith diameter of 0.2 um.

### ◆ Drying(DR only)

Fully automatic drying: Equipped with an air pump and a 0.2um air filter, it automatically starts drying after sterilization. After sterilization, clean air will be put in to replace the wet air inside, so as to improve drying efficiency (Fully automatic drying is an option for DR only).

### ◆ Monitor of exhaust filter(DWS,DRS only)

Exhaust filter is put inside a pressure resistant housing (stainless steel material) with an extra PT100 temperature sensor to monitor the temperature, so as to make sure the filter and housing are also being sterilized thoroughly,and will not.

### ◆ Condenser(Option)

Equipped with a professional condenser, the steam generated during the sterilization process is converted into water through the condenser, achieving zero discharge of water vapor/mist.

## Intelligent

### App control(Option)

Download the APP software on your mobile phone,which can monitor the sterilization process in real-time.  
Query historical data, alarm information, etc

### Program memory storage system

User can set their own program, and saved in systemm.

### Saturated steam monitoring

The system automatically monitors the purge out ofcold air to ensure the pure steam environment

### Calibration port

Offer temp.and pressure interface, together with the 30 adapter joints, can insert max 15 sensors one time to do the calibration work

### Special software for drug packaging materials

The product meets the 2020 Chinese Pharmacopoeia or EP10.2 standards

Intelligent

## Humanization

### 1. Just right depth

Conforming to ergonomics, the chamber depths of 29/54/88/120/150L Chamber are 394/726/733/658/819(mm) making it easy to take and place samples and maintain the instrument.

### 2. Front water tank

Front water tank, easy to plug in and out.

## Specifications

	Standard		DW-GF54DA	DW-GF88DA	DW-GF120DA	DW-GF150DA	DW-GF175DA
Model	Auto water fill	DW-GF29DA	DW-GF54DF	DW-GF88DF	DW-GF120DF	DW-GF150DF	DW-GF175DF
	Auto drying		DW-GF54DR	DW-GF88DR	DW-GF120DR	DW-GF150DR	DW-GF175DR
	Dedorization		DW-GF54DX	DW-GF88DX	DW-GF120DX	DW-GF150DX	DW-GF175DX
Capacity(L)		29	54	88	120	150	175
Outer dimension (Dia*H)(mm)(mm)		460x570x925	DA:460x570x1050	DA:565x650x1066	DA:665x790x1040	DA:665x790x1140	DA:660x794x1260
			DF:460x820x1050	DF:565x950x1066	DF:665x1090x1040	DF:665x1090x1140	DF:660x1090x1260
			DR:460x570x1050	DR:565x950x1066	DR:665x1090x1040	DR:665x1090x1140	DR:660x1090x1260
			DX:460x720x1050	DX:565x800x1066	DX:665x940x1040	DX:665x940x1140	DX:660x940x1260
Chamber dimension (Dia*H)(mm)		Φ320x394	φ320x726	φ400x733	φ500x658	Φ500x808	Φ500x936
Rated power(W)		2300	2600	4600(option 2900)	4600	6000	6000
Sus304 basket size(pcs)		(Φ300x265) x1	(Φ300x205) x3	(Φ370x280) x2	(Φ480x250) x2	(Φ480x205) x3	(Φ480x250) x3
Working environment		220V±10% 16A 50HZ/60HZ		220V±10% 32A 50HZ/60HZ		380VAV/16A	
Temperature display accuracy		0.1℃					
Working environment		5℃~40℃,Relative humidity not greater than 85%					
Chamber material		SUS304 steel(option SUS316L)					
Sterilization temp.range		105℃~138℃					
Lid open way		One button open Interlock sensor					
Sterilization time range		1~6000 min					
Melting temp.		60℃~115℃					
Melting time		1~6000 min					
Warming temp.		45℃~79℃					
Warming time		1~9999 min					
Exhaust speed control		Fully automatic internal discharging with 6 levels choice					
Memory function		60 program saved in system,999 cycles saved by USB					
Appointment timer range		Auto start up appointment)0~15 days					
Pressure gauge		-0.1~0.5MPa					
Pressure valve set pressure		0.29MPa					
Cooling lock OPEN temp.range		40℃~99℃ for solid,waste,agar,self-defined,40℃~80℃ for liquid					
Sterilization mode		Liquid,liquid with warming,solid,wrapped instrument,fabric,rubber,fast,waste,agar,self-defined					
Drying(DR、 DP only)		Drying time:1~300min Drying temp.:80~160℃					
Controller		"Inspiration II"smart microcomputer controller					
Cooling way		Fast cooling fan					
Safety device		"evenly distributed"interlock device,electric double inter lock,lid closing checking,dry scorch protection, safety valve, water level sensor,over temperature/pressure protection,temperature/pressure monitor, electricity safety(over current/short circuit/leakage),cooling lock,anti-scald lid and bench corner, automatic troubleshooting					
Biosafety function		Option for 0.2um biosafety filter(basic model+S)					

Note:Baskets can also be customized,as well as melting and warming temperature range.



**DW-GFDA Standard**  
DW-GF29DA/DW-GF54DA/  
DW-GF88DA/DW-GF120DA/  
DW-GF150DA/DW-GF175DA



**DW-GFDF Automatic water fill**  
DW-GF54DF/DW-GF88DF/  
DW-GF120DF/DW-GF150DF/  
DW-GF175DF



**DW-GFDR Drying**  
DW-GF54DR/DW-GF88DR/  
DW-GF120DR/DW-GF150DR/  
DW-GF175DR



**DW-GFDX Dedorization(smell remove)**  
DW-GF54DX/DW-GF88DX/  
DW-GF120DX/DW-GF150DX/  
DW-GF175DX

Model	DW-GFDA	DW-GFDF	DW-GFDR	DW-GFDX
6 level exhaust speed control	Standard	Standard	Standard	-
Auto water fill	-	Standard	Standard	-
Drying	-	-	Standard	-
Dedorization	-	-	-	Standard
Access permission	5 level	5 level	5 level	5 level
S Biosafety function	GFDAS only	GFDAS only	GFDAS only	-
Exhaust air monitor	GFDAS only	GFDAS only	GFDAS only	-
Fast cooling fan	Standard	Standard	Standard	Standard 2 pcs
Sterilization record	Standard	Standard	Standard	Standard
USB port	Standard	Standard	Standard	Standard
Micro-printer	Option	Option	Option	Option
Condensor	Option	Option	Option	Standard
SUS316L steel	Option	Option	Option	Option
Pharma package testing program	Option	Option	Option	Option
Air inlet filter	-	-	Standard	Standard
Display system	LCD	LCD	LCD	LCD
Load thermometer(Floating PT100 sensor)	Option	Option	Option	Option
Printing set (printer+digital pressure sensor)	Option	Option	Option	Option
Auto drainage	Option	Option	Option	Option
APP control/Remote control	Option	Option	Option	Option
Steam collecting way	Internal	Internal	Internal	Internal
Auto cleaning	-	Option	Option	-

Note:Requirements for sterilization water:distilled water (conductivity not less than 3μ S/cm)  
When configured as an S biosafety type,a condenser is standard

## Spare parts option

Printing set:printer+digital pressure sensor:can print temp. and pressure in data and flow chart way



**Micro printer**  
To print temp.,time  
and FO value



**Digital pressure  
sensor**



**Tray**



**Stainless steel  
bucket**



**Load thermometer**  
Floating PT100 sensor



**Adjust foot**



**I0/00/PO  
(30)adapter joint**