GR Vertical Autoclave



Product Features

- **Calibration interface**
  Offer temp.and pressure interface,together with the 3Q adapter joints,can insert max 15 sensors one time to do the calibration work
- **Agar program**
  Can heat up,melt,warm the agar or used as chamber preheating function
- **Program Memory storage system**
  User can set their own program,and saved in system
- **Waste program**
  Special waste program to sterilize the waste thoroughly
- **Option forall model**
  Special waste program to sterilize the waste thoroughly
- **Humanized permission management**
  The management of the autoclave is classified into 3 levels,user-administrator-engineer,to make sure proper proper usage
- **Saturated steam monitoring**
  The system automatically monitors the purge out of cold air to ensure the pure steam environment
- **Air filter (only for SR models)**
  Filtration is higher than 99.99%in particle with diameter of 0.2μm for air inlet
- **SUS316L Stainless steel(Option)**
  Stronger corrosion, longer service life, and greater pressure resistance
- **Auto start up appointment**
  Can make an appointment in 0-15 days

GR Vertical Autoclave

- **Auto water fill (only for SF/SR 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

- **Monitor of exhaust filter (only for SAS/SFS/SRS)**

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

- **Smart microcomputer control**

  Inspiration"high speed microcomputer control,not only to monitor and control the whole process,but also to update the function in the future

- **LCD/USB/APP/Smart management system (Option)**

  LCD: 5 inch LCD screen to show information in words
  USB: to help to store and transfer the sterilization data
  APP: Remote management APP (only in China)
  Smart management system: linked with LIMIS/SCADA system(only in China)

- **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

- **Auto drainage (option)/Auto cleaning (only for SF/SR)**

  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

- **Fully automatic drying (only for SR models)**

  Can set drying temp.and drying time.After sterilization, water willbe drained out automatically,then an inbuilt pump will supply clean air into the chamber through an air filter

- **Biosafety function (only for SAS/SFS /SRS)**

  Use a 0.2μm PTFE filter(effiency 99.99%) 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

Safety Features

- **Humanized design**

  The lid and bench corners are covered with insulation to avoid getting scald
  The exclusive patented "eight column evenly distributed"interlock device is safer and more

- **Interlocking device**

  Reliable than ordinary interlocking devices

- **Lid closing checking**

  Machine can not start if lid is not locking well by checking mechanically and electrically

- **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

- **Cooling lock OPEN temperature**

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

- **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

- **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

- **Auto trouble shooting**

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

- **Safety test function**

  Regular testing of system security and safety protection measures is possible

- **Electrical protection**

  Equipped with a highly sensitive electrical protection system,effectively providing leakage protection, overcurrent and short-circuit protection

Spare Part Option



Micro printer

To print temp., time and F0 value



Tray



Adjust foot



Digital pressure sensor



Stainless steel bucket

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



Load thermometer

(Floating PT100 sensor)



IQ/OQ/PQ (3Q)adapter joint

IQ/OQ/PQ documents
USB:to transfer the data by USB
LCD:change display screen from LED to LCD

GR Vertical Autoclave



Fast cooling fan

Standard with fast cooling fan to shorten the whole cycle



Highest working temp.138°C



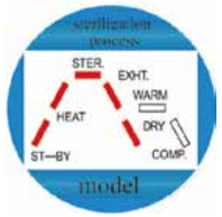
6 levels of exhaust speed control

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



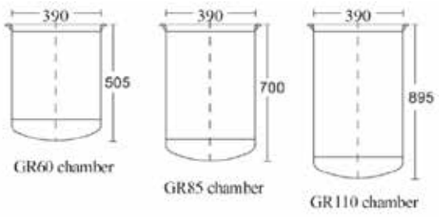
Up and down flip open, vertical chamber; One move by one hand can easily open and close





Preset diverse programs

Flow chart to show the process, press DATA atany time can check the current program setting



39CM big diameter in all GR series, more useful in application

Safety Features

Model	Standard GR60SA Auto Water III GR60SF Auto Drying GR60SR	Standard GR85SA Auto Waterfill GR85SF Auto Drying GR85SR	Standard GR110SA Auto Waterfill GR110SF Auto Dying GR110SR
Capacity (L)	60	85	110
Dimension (L*W*H)(mm)	SA:644x660x980 SF/SR:644x831x980	SA:64x660x980 SF/SR:644x831x980	SA:644x660x980 SF/SR:644x831×1180
Chamber Dimension (Dia*H)(mm)	①390x505	①390×700	①390x895
Rated Power(W)	2900	4600(2900 as option)	4600
SUS 304 Basket (Dia*H)(mm)(Note 1)	(370x190)×2	(ϕ 370x280)×2	(ϕ 370x250)x3
Power Requirement	220V±10%15A 50HZ/60HZ	220V±10%25A 50HZ/60HZ	220V±10%25A 50HZ/60HZ
Temperature Display Acuracy	0.1°C		
Working Environment	5°C~40°C relative humidity≤85%		
Chamber Material	SUS304 stainless steel		
Sterilization Temp.range	105°C~138°C		
Sterilization Time.range	1~6000 min		
Melting Temp.range	60°C~115°C		
Melting Time	1~6000 min		
Warming Temp	45°C~79°C		
Warming Time	1~9999 min		
Drying (Only for SR)	Drying time: 1~300min Drying temp: 80~160°C		
Cooling lock OPEN Temp.range	40°C~99°C for solid,waste,agar,self-defined 40°C~80°C (note 2)for liquid		
Sterilization Mode	Liquid, Liquid with warming, solid, Wrapped instrument, Fabric, Ruber, Fast, Waste, Agar, Self-defined		
Program Number Saved	SA:20 programs SF/SR:60 programs		
Exhaust Speed Control	Fully automatic internal discharging with 6 levels choice		
Lid Open Way	Flip open (up and down)		
Water Tank	SA: 2 water tanks to collect steam SF: 1 water storage tank more than SA SR: I water tank to collect steam+1 water storage tank (note 3)		
Appointment Timer Range	(Auto start up appointment) 0~15 days		
Pressure Gauge Range	-0.1~0.5MPa		
Pressure Valve Set Pressure	0.29Mpa		
Controler	"Inspiration"smart microcomputer controller		
Safety Device	"Eight column 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 for0.2um biosafety filter (basic model+S)		