

Features of New Steam Sterilizers, Digital Fuzzy Controlled Autoclaves

DAIHAN New Steam Sterilizers P. 16~17

DAIHAN's new Autoclaves are upgraded with a simpler and more ergonomic design. Unique and innovative 'Electronic Safety Door Locking System' and 'Steam Condensing Mechanism' maximize the user safety, which is the most critical feature of autoclave product. New Lever-type Door Handle makes anybody open and close the door very easily and safely. Both of Solid and Liquid cycles are offered up to the samples to be sterilized, which ensures optimum sterilizing performance.



New Steam Sterilizers,
Digital Fuzzy Controlled Autoclaves

» Safety Upgrade

- Special '**Steam Condensing Mechanism**' protects the user from hot steam after sterilizing cycle, by condensing the hot steam into small amount of water : patent registered.
- '**Safety Door Locking System**' ensures the door firmly locked by electronic-controlled switch and solenoid latch while sterilizing cycle is ongoing. The door can be opened only when there is no hot-steam and high-pressure inside the pressure vessel: patent registered.
- **CE-MDD (0470)** certified as a medical device, by which DAIHAN's autoclaves can be supplied to the hospitals in Europe.
- Stainless Steel Cover is implemented to prevent the user from burn by high temperature in the pressure vessel.
- Very high quality **Over Pressure Valve** is used to automatically release abnormal high pressure inside the vessel.

» Function/Convenience Upgrade

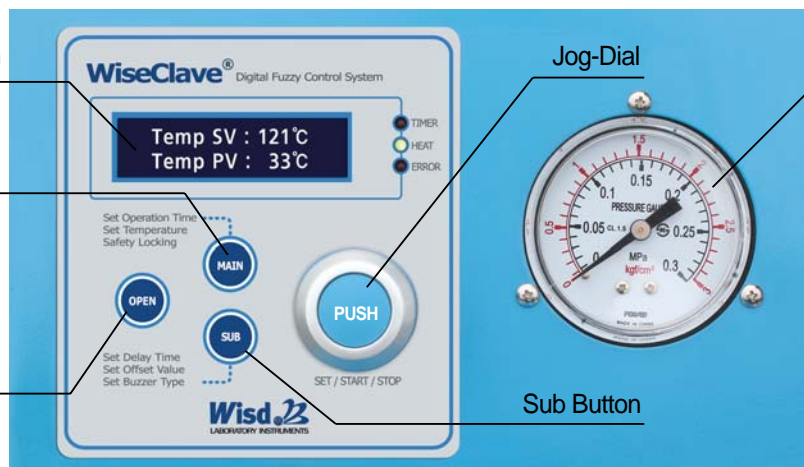
- **One-Touch Lever-type Door Handle** is invented and implemented for the user to open & close the door very easily and safely : patent registered.
- Two different operation mode of **Solid and Liquid Cycle** are offered, which can be chosen up to the kind of sample to be sterilized.
- New Jog-Dial Controller with simples user interface: patent registered
- Digital Timer functions for Delay time and Operation time are available.
- Innovative Easy-to-Use Digital Fuzzy Controller.
- Digital LCD with Back-Light

» New Jog-Dial Controller

Digital LCD
with Back-light Function

Main Button

Open Button

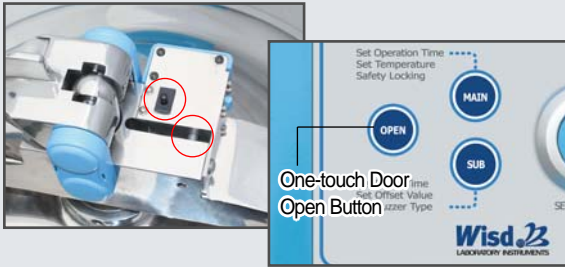


Jog-Dial

Pressure Gauge

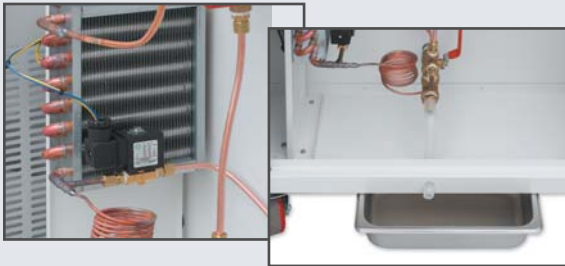
Sub Button

- Simplest and easiest User Interface by ergonomic design
- New design of Jog-Dial is more sturdy and convenient
- High quality Digital LCD with Back-Light
- One-touch 'Open button' to open the door only when sterilizing cycle is not on going



» Safety Electronic Door Locking System

Sterilizing cycle can be stated only when the door is completely closed. Electro-mechanical sensor, solenoid latch, and one-touch Open button work together to implement the perfect safety door, which can be opened only when the temperature and pressure is low enough inside the pressure vessel.



» Special Steam Condensing Mechanism

Hot steam generated by sterilizing cycle is not released out directly. It is condensed into a small amount of water just after the sterilizing cycle by special condensing mechanism, which protects the user from dangerous high temperature steam.



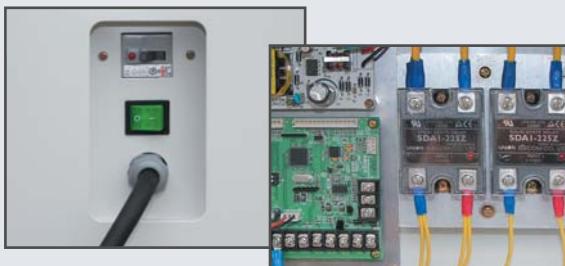
» Lever-type Sliding Door

This real innovation of door closing mechanism makes any user easily close the door with consistent degree of closing by a single hand, regardless of the level of strength in his/her arms. Opening is also very easy and can be done with single hand as well.



» Liquid & Solid Cycle Mode

Operation mode is optional between Solid Cycle mode and Liquid Cycle mode. In Solid Cycle mode, heating is immediately off and steam is released quickly just after sterilizing period. But in Liquid mode, temperature is decreased very slowly and steam is released out little by little for much longer time.



» Using International Standard Components

Maintenance and Service is very convenient because most of the components and parts are internationally standard ones and available in the market.



» CE-MDD(CE 0470-Medical Device Directive) Certified

DAIHAN's new autoclaves are designed and produced strictly following European standard for electric and mechanical safety. So, it can be supplied to, and used safely in, world-wide hospitals and institutes requiring CE-MDD Certification.

DAIHAN® Steam Sterilizers, Digital Fuzzy-controlled Autoclaves, “WAC”, 47-/60-/80-/100-Lit., up to 132 °C, Max.2 kgf/cm² Electronic Door Lock, Steam Condensing Mechanism, Lever-type Sliding Door, Solid-/Liquid-Modes, CE-MDD Certified **NEW**



Steam Sterilizers, Digital Fuzzy-Controlled Autoclave, With 2× Wire Baskets

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Special Steam Condensing Mechanism
- Electronic Door Lock Sensing System for User Safety.
- Safety and Easy to Use Lever-type Sliding Door
- **Patented Jog-Dial Control System**
- “CE-MDD (CE 0470- Medical Device Directive) Certified” (WAC-100 excluded)
- **PL(Product Liability) Insurance**

- * Ideal for Biotechnology, Clinical, Environmental, Medical and Food Industry.
- * Innovative Easy-to-Use Digital Fuzzy Controller.
- * Top-loading type Sterilizer for Easy Loading of Large Working Volume.
- * Casters equipped for Excellent Mobility.
- * Digital LCD with Back-Light Function.
- * Digital Timer Function - ‘Delay Time’ and ‘Operation Time’ can be Controlled.
- * **Solid / Liquid Mode** can be chosen by a customer considering a Sample Phase.
- * Safety and Easy to Use Lever-type Sliding Door.
- * Complete Safety Pressure Mechanism.
- * Automatic Over Pressure Release Valve ensure User Safety.
- * **Electronic Door Lock Sensing** System for User Safety.
- * Heat-Protective Lid Cover for User Safety.

Specification

Capacity & Models	47 Lit. “WAC-47”	60 Lit. “WAC-60”	80 Lit. “WAC-80”	100 Lit. “WAC-100”
Temp. Range & Accuracy	Ambient 5°C to 132°C, ±0.5°C at 121°C			
Pressure & Gauge	1.2 kgf/cm ² at 121°C / 2.0 kgf/cm ² at 132°C, 0 ~ 3 kgf/cm ²			
Sterilization mode	Solid- or Liquid-mode			
Heating Power/Consumption	2 kW	3 kW	2 kW × 2	2 kW × 2
Timer & Alarm	99 hr 59 min 59 sec, Error status & Timer-end			
Display	Digital LCD Display with Back-Light Function			
Controller	Digital Fuzzy-Control System (Fully Automatic)			
Door & Closing System	Lever-type Sliding Door / Safety Electronic Door Closing System			
Safety Circuit	Over-Temp./-Pressure/-Current protection, Sensor Error Detection			
Material	Stainless Steel (# 304)-Pressure Vessel, Powder Coated Steel-External			
Basket	2ea of Stainless Steel Wire Baskets are Included			
Basket Dimension (mm)	φ 270 × h240	φ 320 × h240	φ 370 × h240	φ 420 × h240
Dimension (w×d×h)	Inner (mm)	φ 300 × h670	φ 350 × h650	φ 400 × h650
	Outer (mm)	680 × 470 × 880	680 × 470 × 900	780 × 580 × 900
Packing Size (mm)	800 × 700 × h1,280 mm		940 × 800 × h1,350 mm	
Gross Weight (kg)	116 kg	120 kg	173 kg	173 kg
Power Supply*	1Phase - AC 120V, 60Hz or - AC 230V, 50/60Hz		1 Phase - AC 120V, 60Hz or - AC 230V, 50/60Hz 3 Phase with Terminal Block	

* Other Specifications are available upon Customer's Request.

Ordering Information

- * 2ea of Wire Baskets are included in the All Autoclaves

Autoclaves, 1 Phase, Digital Fuzzy Controlled

- DH.WAC05047 Autoclave, 230V, 47 Lit., “WAC-47”, with Cord / Plug
 DH.WAC05060 , 60 Lit., “WAC-60”, with Cord / Plug
 DH.WAC05080 , 80 Lit., “WAC-80”, with Cable
 DH.WAC05100 , 100 Lit., “WAC-100”, with Cable
 DH.WAC06047 Autoclave, 120V, 47 Lit., “WAC-47”, with Cable
 DH.WAC06060 , 60 Lit., “WAC-60”, with Cable
 DH.WAC06080 , 80 Lit., “WAC-80”, with Cable
 DH.WAC06100 , 100 Lit., “WAC-100”, with Cable

Autoclaves, 3 Phase with Terminal Block for Custom-made Order

- DH.WAC07080 Autoclave, 80 Lit., “WAC-80”, with Terminal Block
 DH.WAC07100 , 100 Lit., “WAC-100”, with Terminal Block

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Cat. No	Description	Articles
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<Continued from... Steam Sterilizers, Digital Fuzzy-controlled Autoclaves, "WAC">

Ordering Information

(1) Spare Wire Baskets, Stainless Steel

DH.Ba7011	Wire Basket, $\phi 270 \times h240\text{mm}$, "Ba7011", for 47 Lit. WAC-47
DH.Ba7012	, $\phi 320 \times h240\text{mm}$, "Ba7012", for 60 Lit. WAC-60
DH.Ba7013	, $\phi 370 \times h240\text{mm}$, "Ba7013", for 80 Lit. WAC-80
DH.Ba7014	, $\phi 420 \times h240\text{mm}$, "Ba7014", for 100 Lit. WAC-100

(2) Optional Perforated Bottom Baskets, Stainless Steel

DH.WAC20047	Perforated Basket, $\phi 270 \times h250\text{mm}$, "WAC20047", for 47 Lit. WAC-47
DH.WAC20060	, $\phi 320 \times h250\text{mm}$, "WAC20060", for 60 Lit. WAC-60
DH.WAC20080	, $\phi 370 \times h250\text{mm}$, "WAC20080", for 80 Lit. WAC-80
DH.WAC20100	, $\phi 420 \times h250\text{mm}$, "WAC20100", for 100 Lit. WAC-100

Validation (IQ, OQ) Service

DH.WAC30047	Validation Service(IQ, OQ), "ACV47", for WAC-47
DH.WAC30060	, "ACV60", for WAC-60
DH.WAC30080	, "ACV80", for WAC-80
DH.WAC30100	, "ACV100", for WAC-100



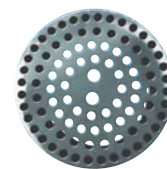
Steam Sterilizers, Digital Fuzzy-Controlled Autoclave



(1) Wire Basket Stainless Steel (Included)



Side



Bottom

(2) Perforated Bottom Basket, Stainless Steel (Optional)