Features of
New Steam Sterilizers, Digital Fuzzy Controlled Autoclaves

DAIHAN New Steam Sterilizers

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.
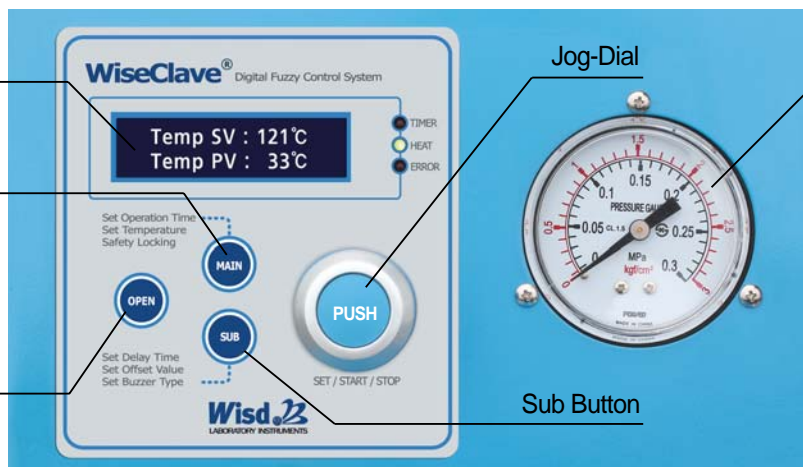
» Function/Convenience Upgrade

- **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 display with Back-light Function

Main Button

Open Button

WiseClave® Digital Fuzzy Control System

Temp SV : 121℃
Temp PV : 33℃

○ TIMER
○ HEAT
○ ERROR

Set Operation Time
Set Temperature
Safety Locking

MAIN

OPEN

SUB

Set Delay Time
Set Offset Value
Set Buzzer Type
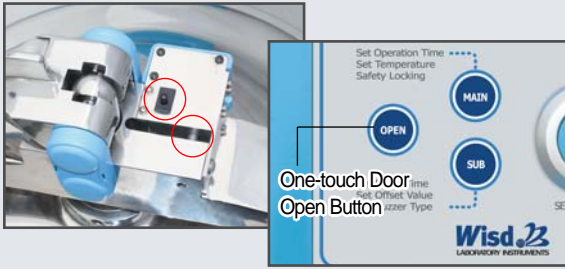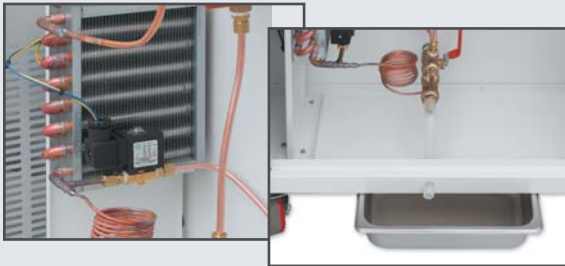
PUSH

SET / START / STOP

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. Eclectro-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℃, Max.2 kgf/cm²
Electronic Door Lock, Steam Condensing Mechanism, Lever-type Sliding Door, Solid–/Liquid–Modes, CE-MDD Certified

CE 0470
2-Year Warranty
Patented Jog-Shuttle Control System

Digital Fuzzy Controller

Strong and Safety - Screw Handle Door

Wisd.23

Steam Condensing Mechanism & Complete Safety Pressure Mechanism

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**
- ■ **Patented Jog-Shuttle 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 Display 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.
＊ Strong and Safe Screw-type Handle 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℃ to 132℃, ±0.5℃ at 121℃			
Pressure & Gauge		1.2 kgf/cm² at 121℃ / 2.0 kgf/cm² at132℃, 0 ~ 3 kgf/cm²			
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)		φ270×h240	φ320×h240	φ370×h240	φ420×h240
Dimension (w×d×h)	Inner (mm)	φ300×h670	φ350×h650	φ400×h650	φ450×h630
	Outer (mm)	680×470×880	680×470×900	780×580×900	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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*<**Continued from...** Steam Sterilizers, Digital Fuzzy-controlled Autoclaves, "WAC" >*

Ordering Information

(1) Spare Wire Baskets, Stainless Steel

DH.Ba7011   Wire Basket, ϕ270×h240mm, **"Ba7011"**, for   **47 Lit. WAC-47**
DH.Ba7012   , ϕ320×h240mm, **"Ba7012"**, for   **60 Lit. WAC-60**
DH.Ba7013   , ϕ370×h240mm, **"Ba7013"**, for   **80 Lit. WAC-80**
DH.Ba7014   , ϕ420×h240mm, **"Ba7014"**, for **100 Lit. WAC-100**

(2) Optional Perforated Bottom Baskets, Stainless Steel

DH.WAC20047   Perforated Basket, ϕ270×h250mm, **"WAC20047"**, for **47 Lit. WAC-47**
DH.WAC20060   , ϕ320×h250mm, **"WAC20060"**, for **60 Lit. WAC-60**
DH.WAC20080   , ϕ370×h250mm, **"WAC20080"**, for **80 Lit. WAC-80**
DH.WAC20100   , ϕ420×h250mm, **"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**

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Steam Sterilizers, Digital Fuzzy-Controlled Autoclave

(1) Wire Basket Stainless Steel (Included)

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