

Maximum Convenience by Advanced Digital Technology

# DAIHAN New Generation New Steam Sterilizer, Digital Fuzzy Controlled Autoclave

## Safely! Perfectly! Innovative Upgrade **MaXterile™**

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

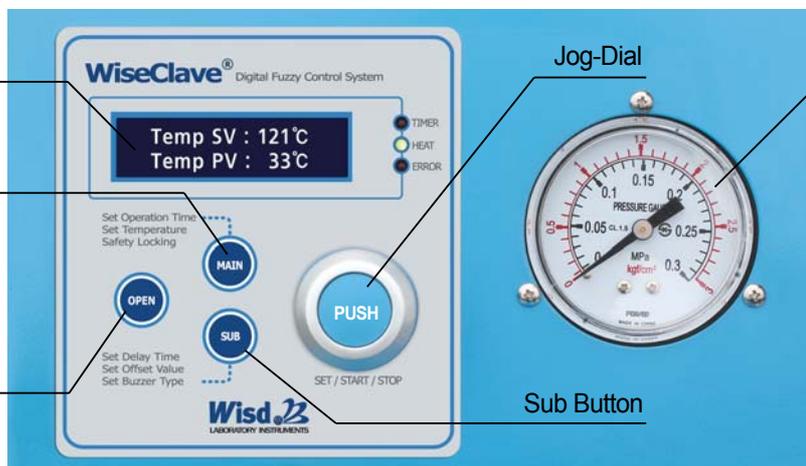
- **One-Touch Lever-type Door Handle** is invented and implemented for the user to open & close the door very easily and safely : patent registered.
- Two different operation mode of **Solid and Liquid Cycle** are offered, which can be chosen up to the kind of sample to be sterilized.
- New Jog-Dial 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

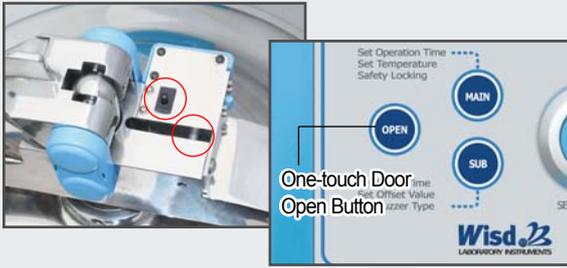


Jog-Dial

Pressure Gauge

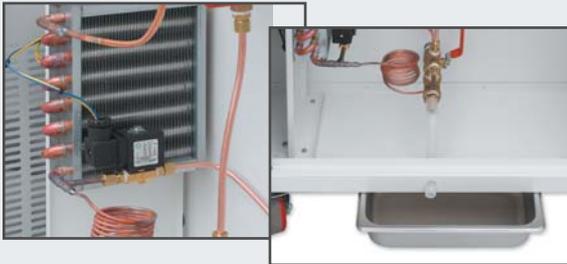
Sub Button

- 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.



## » 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.



## » Sterilization Cycle Data Recorder

Equipped the built-in thermal printer to the body. The sterilization cycle data can be printed out for validation or analysis. (MaXterile™-R models only) (Temperature, pressure, time and error status can be printed out.)

**DAIHAN MaXterile™ Digital Fuzzy-control Autoclaves, Standard & Recorder-type, 47-/60-/80-/100-Lit. NEW**  
 Steam Sterilizer, Electronic Door Lock Sys., Lever-type Sliding Door, Steam Condensing Mechanism, Max.2 kgf/cm<sup>2</sup>, up to 132 °C



(1) New Standard-model, "MaXterile 80"

- DAIHAN-brand® New Generation Steam Sterilizers
- with Certificate & Traceability :  
Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Special Steam Condensing Mechanism
- Built in DAIHAN-brand® New Generation Controller :  
Patented Jog-Dial Control System
- Electronic Door Lock System for User Safety.
- Patented Safety and Easy to Use Lever-type Sliding Door
- Built in Recorder model (only MaXterile 47R/60R/80R/100R models) :  
Sterilization Cycle Data for Validation and Analyze Sterilization (Temperature, Pressure, Time, Error Status)
- "CE-MDD (CE 0470 - Medical Device Directive) Certified"  
(MaXterile 100, MaXterile 100R excluded)
- PL(Product Liability) Insurance

- \* Ideal for Biotechnology, Clinical, Environmental, Medical and Food Industry.
- \* Innovative Easy-to-Use Digital Fuzzy Controller.      \* Included 2×Wire Baskets
- \* 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.
- \* Complete Safety Pressure Mechanism.                      \* Heat-Protective Lid Cover for User Safety.
- \* Water Low Level Detection
- \* Automatic Over Pressure Release Valve ensures User Safety.
- \* Sterilization Error Indication : Error Alarm and Massage in case of Power Failure and Temperature Error

**Specification**

(1) Standard-model	MaXterile 47	MaXterile 60	MaXterile 80	MaXterile 100
	Standard-type			
(2) Recorder-model	MaXterile 47R	MaXterile 60R	MaXterile 80R	MaXterile 100R
	Recorder-type : Built in Recording Printer, Sterilization Cycle Data (Date, Temperature, Pressure, Time, Error Status, etc.)			
Capacity	47 Lit.	60 Lit.	80 Lit.	100 Lit.
Temp. Range & Accuracy	Ambient +5 °C to 132 °C, ±0.5 °C at 121 °C			
Pressure & Gauge	1.2 kgf/cm <sup>2</sup> at 121 °C / 2.0 kgf/cm <sup>2</sup> at 132 °C, 0 ~ 3 kgf/cm <sup>2</sup>			
Sterilization mode	Solid- or Liquid-mode			
Heating Power/Consumption	2 kW	3 kW	2 kW×2	2 kW×2
Timer & Alarm	60 min, Error status & Timer-end			
Display	Digital LCD 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			
Printer	Thermal type printer, Record Paper Roll: w58 × φ40 mm			
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
	Outer (mm)	680×470×880	680×470×900	780×580×900
Packing Size (mm)	840×610×h1,252 mm		950×730×h1,352 mm	
Gross Weight (kg)	117 kg	120 kg	170 kg	170 kg
Power Supply*	1Phase - AC 120V, 60Hz or - AC 230V, 50/60Hz		1 Phase - AC 120V, 60Hz or - AC 230V, 50/60Hz 3 Phase - AC 380V, 50/60Hz	

\* Other Specifications are available upon Customer's Request.



(2) New Recorder-model, "MaXterile 80R"

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Cat. No	Description	Articles
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## Ordering Information

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

### (1) Standard-model, Autoclaves, MaXterile™, 1 Phase

DH.WAC05047	Autoclave, Standard, 230V, 47 Lit., "MaXterile 47"
DH.WAC05060	, 60 Lit., "MaXterile 60"
DH.WAC05080	, 80 Lit., "MaXterile 80"
DH.WAC05100	, 100 Lit., "MaXterile 100"
DH.WAC06047	Autoclave, Standard, 120V, 47 Lit., "MaXterile 47"
DH.WAC06060	, 60 Lit., "MaXterile 60"
DH.WAC06080	, 80 Lit., "MaXterile 80"
DH.WAC06100	, 100 Lit., "MaXterile 100"

### (1) Standard-model, Autoclaves, MaXterile™, 3 Phase

DH.WAC07080	Autoclave, Standard, 380V, 80 Lit., "MaXterile 80"
DH.WAC07100	, 100 Lit., "MaXterile 100"

### (2) Recorder-model, Autoclaves, MaXterile™-R, 1 Phase

DH.WACR2047	Autoclave, Recorder, 230V, 47 Lit., "MaXterile 47R"
DH.WACR2060	, 60 Lit., "MaXterile 60R"
DH.WACR2080	, 80 Lit., "MaXterile 80R"
DH.WACR2100	, 100 Lit., "MaXterile 100R"
DH.WACR1047	Autoclave, Recorder, 120V, 47 Lit., "MaXterile 47R"
DH.WACR1060	, 60 Lit., "MaXterile 60R"
DH.WACR1080	, 80 Lit., "MaXterile 80R"
DH.WACR1100	, 100 Lit., "MaXterile 100R"

### (2) Recorder-model, Autoclaves, MaXterile™-R, 3 Phase

DH.WACR3080	Autoclave, Recorder, 380V, 80 Lit., "MaXterile 80R"
DH.WACR3100	, 100 Lit., "MaXterile 100R"

### (3) Spare Wire Baskets, Stainless steel

DH.Ba7011	Wire Basket, $\phi 270 \times h240$ mm, "Ba7011", for 47 Lit., "MaXterile 47", "MaXterile 47R"
DH.Ba7012	Wire Basket, $\phi 320 \times h240$ mm, "Ba7012", for 60 Lit., "MaXterile 60", "MaXterile 60R"
DH.Ba7013	Wire Basket, $\phi 370 \times h240$ mm, "Ba7013", for 80 Lit., "MaXterile 80", "MaXterile 80R"
DH.Ba7014	Wire Basket, $\phi 420 \times h240$ mm, "Ba7014", for 100 Lit., "MaXterile 100", "MaXterile 100R"

### (4) Optional Perforated Bottom Baskets, Stainless steel

DH.WAC20047	Perforated Basket, $\phi 270 \times h250$ mm, "WAC20047", for 47 Lit., "MaXterile 47", "MaXterile 47R"
DH.WAC20060	Perforated Basket, $\phi 320 \times h250$ mm, "WAC20060", for 60 Lit., "MaXterile 60", "MaXterile 60R"
DH.WAC20080	Perforated Basket, $\phi 370 \times h250$ mm, "WAC20080", for 80 Lit., "MaXterile 80", "MaXterile 80R"
DH.WAC20100	Perforated Basket, $\phi 420 \times h250$ mm, "WAC20100", for 100 Lit., "MaXterile 100", "MaXterile 100R"

### Validation (IQ, OQ) Service

DH.WAC30047	Validation Service(IQ, OQ), "ACV47", for "MaXterile 47"
DH.WAC30060	, "ACV60", for "MaXterile 60"
DH.WAC30080	, "ACV80", for "MaXterile 80"
DH.WAC30100	, "ACV100", for "MaXterile 100"
DH.WACR0047	Validation Service(IQ, OQ), "ACRV47", for "MaXterile 47R"
DH.WACR0060	, "ACRV60", for "MaXterile 60R"
DH.WACR0080	, "ACRV80", for "MaXterile 80R"
DH.WACR0100	, "ACRV100", for "MaXterile 100R"



(1) New Standard-model, "MaXterile 80"



(2) New Recorder-model, "MaXterile 80R"



(3) Wire Basket Stainless steel (Included)



(4) Perforated Bottom Basket, Stainless steel (Optional)