DAIHAN Scientific



Autoclaves

Bench-top, Autoclave, Steam Sterilizer, B21	2
, Steam Sterilizer, SB21 SMART	3
, Steam Sterilizer, BT25/40	4
Vertical-type, Autoclave, Steam Sterilizer 5-	-6



Programmable Bench-top "MaXterile™ B21"



Programmable Bench-top "MaXterile™ SB21"



Programmable Bench-top "MaXterile™ BT25"



Standard-type "MaXterile™ 80"



Built in Recorder-type "MaXterile™ 80R"

DAIHAN-brand[®] Programmable Bench-top Autoclaves "MaXterile™ B", Class-B Cycle, Squared Chamber, 21.5 Lit with Pre-vacuum & Post-vacuum Drying, Safety Door Lock Sys., 2×Perforated STS Trays, HEPA Filter, Max 2.40 bar, 121~134°C



Programmable Bench-top Autoclave "MaXterile™ B"



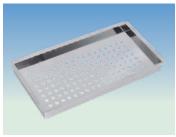
Squared Inner Chamber



Telescopic Sliding Perforated Shelves



(1) Optional Thermal Printer



(2) Spare STS Perforated Trays

- Made in Korea ■ PL(Product Liability) Insurance
- with Certificate & Traceability: Controlled by Serial Number, Certificate. Delivery-information, and Traceable Data Base System.
- Ideal for Dental Clinical, Medical, Biotechnology, etc.
- Pre-vacuum Air Removal & Post Vacuum Drying for Perfect Sterilizing.
- Safety Door Lock System for User Safety.
- Class-B Sterilization Cycle by EN13060 Standard : Hollow Load Test in compliance with EN13060 & EN 867-5 Standard. Suitable to SAL=10⁻⁶CFU, EN556-1 Certificate Sterilization Standard.
- Air Filtration System : HEPA Filter of efficiency up to 99.999% & 0.3 micron size.
- Special Steam Condensing Mechanism for User Safety
- * Manual Top Water Filling(Built in Water Level Sensor). * Optional Built-in Thermal Printer
- * Efficient Space Saving Compact Size Body and Squared Inner Chamber.
- * Programmable Function : Provide 7-Program Sterilizing Operation Cycles (Pre-set 5 Programs & Customizable 2 Programs)
- * Intuitive User Interface: LCD & Capacitive Touch Button Controller for User Convenience.
- * High-performance Microprocessor Controller * includes 2 Perforated Stainless-steel Shelves
- * Class-B Sterilizing Cycle Process by EN13060 Standard:
- $Pre-vacuum \rightarrow Water\ Filling \rightarrow \ Heating \rightarrow \ Sterilizing \rightarrow \ Exhaust \rightarrow \ Post-vacuum\ Drying \rightarrow \ End\ of\ Cycle$

Specifications & Ordering information

Spec. Model		"MaXterile™ B21"		
Sterilizing (Cycle-type	Class-B Cycle by EN13060 Standard		
Capacity		21.5 Lit.		
Temp. Ran	ge	Room Temp $+5^{\circ}\!$		
Pressure &	Gauge	Min -1.00bar, Max 2.40 bar, Built-in Digital Pressure Gauge		
Timer & Ala	arm	60 min, Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital PID Control System (Fully Automatic), Touch Button UI		
Programma	ble Function	Pre-set 5 Programs & Customizable 2 Programs		
Door-type		Manual Double Lever-type Door Lock System		
Trays		Two STS Perforated Trays (216 × 405 × h44mm) are Included		
Air Filtration System		Built-in HEPA filter, 0.3		
Vacuum Pump		Built-in 11Lit/min Vacuum Pump for Pre-vacuum & Post-vacuum Drying		
Air Removal-type		Vacuum & Gravity		
Water Fillin	g Tank	4.2Lit., 238×117×h233mm		
Safety Circ	uit	Over-Temp./-Pressure/-Current protection, Sensor Error Detection		
Material		Stainless steel -Pressure Vessel, Powder Coated steel-External		
Dimension	Interior	225×425×h225 mm		
$(w \times d \times h)$	Exterior	530×692×h391 mm		
Power Con	sumption	2,300 W		
Net Weight		56 kg		
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		
Cat. No.		DH.WACB0021		

^{*} Other Specifications are available upon Customer's Request.

Optional Thermal Printer

(1) Thermal Printer, Built-in type, $76.5 \! \times \! 72 mm$ DH.WACP001

DH.WACR5005 Thermal Paper, 5×Paper Rolls, w58×φ40mm, for Thermal Printer

Spare Stainless-steel Perforated Tray

DH.WACB1001 (2) STS Perforated Tray, $216 \times 405 \times h44$ mm

Validation (IQ, OQ) Service with Bench-top Autoclave

DH.WACB5021 Validation Service(IQ, OQ), with "MaXterile B21"

DAIHAN-brand[®] SMART Bench-top Autoclaves "MaXterile™ SB", Class-B Cycle, Squared Chamber 21.5 Lit with Smart-Lab™ System, Pre-vacuum & Post-vacuum Drying, Safety Door Lock Sys., HEPA Filter, Max 2.40 bar, 121~134°C



SMART Bench-top Autoclave "MaXterile™ SB"



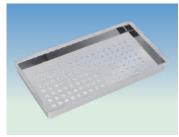
Squared Inner Chamber



Telescopic Sliding Perforated Shelves



(1) Optional Thermal Printer



(2) Spare STS Perforated Trays

- Made in Korea Smart-Lab™ System PL(Product Liability) Insurance.
- with Certificate & Traceability: Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
- Ideal for Dental Clinical, Medical, Biotechnology, etc.
- Pre-vacuum Air Removal & Post Vacuum Drying for Perfect Sterilizing.
- Safety Door Lock System for User Safety.
- Class-B Sterilization Cycle by EN13060 Standard:

 Hollow Load Test in compliance with EN13060 & EN 867-5 Standard.

 Suitable to SAL=10*CFU, EN556-1 Certificate Sterilization Standard.
- Air Filtration System : HEPA Filter of efficiency up to 99.999% & 0.3 micron size.
- Special Steam Condensing Mechanism for User Safety
- Smart-Lab™ Controller: Ergonomic 4" Full Touch Screen TFT LCD(Smart-Lab™ Controller)
- * Manual Top Water Filling(Built in Water Level Sensor).

 * Optional Built-in Thermal Printer
- * Efficient Space Saving Compact Size Body and Squared Inner Chamber.
- * Includes 2 Perforated Stainless-steel Shelves
- * Programmable Function: Provide 7-Program Sterilizing Operation Cycles (Pre-set 5 Programs & Customizable 2 Programs)
- * High-performance Microprocessor Controller
- * Class-B Sterilizing Cycle Process by EN13060 Standard :
 Pre-vacuum→ Water Filling→ Heating→ Sterilizing→ Exhaust→ Post-vacuum Drying→ End of Cycle

Specifications & Ordering information

		•		
Spec.	Model	"MaXterile™ SB21"		
Sterilizing C	cycle-type	Class-B Cycle by EN13060 Standard		
Capacity		21.5 Lit.		
Temp. Range	& Accuracy	Room Temp $+5^{\circ}\!$		
Pressure &	Gauge	Min -1.00bar, Max 2.40 bar, Built-in Digital Pressure Gauge		
Timer & Ala	rm	60 min, Error status & Timer-end		
Controller 8	k Display	Smart-Lab Controller, 4" Full Touch Screen TFT LCD, WiRe™ App Service		
Programma	ble Function	Pre-set 5 Programs & Customizable 2 Programs		
Door-type		Manual Double Lever-type Door Lock System		
Trays		Two STS Perforated Trays (216×405×h44mm) are Included		
Air Filtration	n System	Built-in HEPA filter, 0.3 μm Particle Removal 99.97%		
Vacuum Pump		Built-in 11Lit/min Vacuum Pump for Pre-vacuum & Post-vacuum Drying		
Air Remova	l-type	Vacuum & Gravity		
Water Filling	g Tank	4.2Lit., $238 \times 117 \times h233$ mm		
Safety Circu	uit	Over-Temp./-Pressure/-Current protection, Sensor Error Detection		
Material		Stainless steel -Pressure Vessel, Powder Coated steel-External		
Dimension	Interior	225×425×h225 mm		
$(w \times d \times h)$	Exterior	530×692×h391 mm		
Power Cons	sumption	2,300 W		
Net Weight		56 kg		
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		
Cat. No.	230V	DH.SACB0021		
Cat. NO.				

 $[\]star$ Other Specifications are available upon Customer's Request.

Optional Thermal Printer

DH.WACP001 (1) Thermal Printer, Built-in type, 76.5×72mm

 $\textbf{DH.WACR5005} \quad \text{Thermal Paper, } 5 \times \text{Paper Rolls, w58} \times \text{ϕ40mm, for Thermal Printer}$

Spare Stainless-steel Perforated Tray

DH.WACB1001 (2) STS Perforated Tray, 216×405×h44mm

Validation (IQ, OQ) Service with Bench-top Autoclave

DH.SACB7021 Validation Service(IQ, OQ), with "MaXterile SB21"

DAIHAN® 25 & 40Lit Programmable Bench-top Steam Sterilizer "MaXterile™ BT", 110~135 °C, Class-II Medical Device(NIDS) With Auto-Front Door, Pre- & Post-Vacuum System, Class-B Sterilization, Auto-Microprocessor Control, and Dual Door Lock SQUARE Chamber Autoclave, 2 Perforated STS Tray, HEPA Filter, Max 2.30 bar,



Programmable Bench-top Steam Sterilizer "MaXterile™ BT"

MODE	Temperature (°C)	Pressure (bar)	Sterilizing Time (min)	Drying Time (min)
Unwrapped 1	121	1,1	20	30
Unwrapped 2	134	2,1	5	30
Wrapped 1	121	1,1	30	30
Wrapped 2	134	2.1	15	30
Liquid	121	1.1	20	0
Bowie Dick	134	2.1	4	5
User Program	110 - 135	0.4 - 2.3	4 - 30	0 - 60

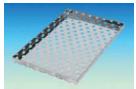
Program Cycle



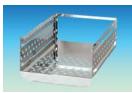
Square Inner Chamber



Sliding Perforated Shelf







(2) STS Removable Rack



(3) HEPA Filter-kit, 0.3μm



(5) Thermal Printer



(4) Movable Stand

■ Made in Korea ■ PL(Product Liability)

- with Certificate & Traceability: Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
- Class-B Sterilization Cycle by EN13060-2 Standard : Pre Vacuum Air Removal → Water Filling → Heating → Sterilizing → Ventilation → Post Vacuum Drying → End
- STS Square Chamber for Corrosion Resistance and Maximum Working Space
- * Ideal for Dental Clinical, Medical, Biotechnology, etc.
- * Full Automatic Process Cycle by High-performance Microprocessor Controller
- * Built-in Separate Water Reservoir Supplies Water Automatically
- * Self-diagnostic and Safety System:
- Display Error Codes and Audible Alarm
- Over Pressure Release Valve
- Automatic and Manual Door Lock System Over Temp Protector with Thermostat
- * Intuitive User Interface(LCD) & Indicator of Working(LED Lamp)

Specifications & Ordering information

Spec. Model		"MaXterile™ BT25"	"MaXterile™ BT40"		
Capacity		25 Lit	40 Lit		
Water Filling	g Tank	5 Lit (Ro	eservoir)		
Sterilizing C	ycle-type	Class-B Cycle by E	N13060-2 Standard		
Temp. Rang	е	110 ~	135℃		
Pressure &	Gauge	0.4 ~ 2.3 bar, Built-in Analo	g & Digital Pressure Gauge		
Timer & Ala	rm	60 min, Error Sta	atus & Timer-end		
Controller		Microprocessor PID Control Syster	n(Fully Automatic) with LCD Monitor		
Programma Function	ble	Pre-set 6 Programs & 0	Customizable 1 Program		
Door Lock		Automatic Wheel Inter Locking with One Touch Sliding Handle			
Air Filtration	n System	Built-in HEPA Filter, 0.3 μπ Particle Removal 99.97%			
Vacuum Pui	mp	Built-in Vacuum Pump(33LPM, 580mmHg) for Pre-vacuum & Post-vacuum Drying			
Air Remova	l-type	Vacuum			
Tray (Includ	ed)	2ea Stainless-ste	el Perforated Tray		
Safety Circu	iit	Over-Temp / -Pressure / -Current protection, Sensor Error Detection			
Material		Interior : Stainless-steel 304 Polished, Exterior : Epoxy Powder Coated Steel			
Dimension	Interior	270×420×h230 mm	$300\times480\times$ h $300~\text{mm}$		
$(w \times d \times h)$	Exterior	$495 \times 689 \times$ h460 mm, 60 kg	$527 \times 787 \times \text{h}530 \text{ mm}, 70 \text{ kg}$		
& Weight	Packing	$580 \times 750 \times$ h580 mm, 75 kg	650×820×h740 mm, 85 kg		
Power Consumption		2.5 kW			
Electric Reqts.		120 V, 60 Hz or 230 V, 50 / 60 Hz, 1 Phase			
Cat. No.	230V	DH.SteB8001	DH.SteB8002		
Cal. NO.					

^{*} Other Specifications are available upon Customer's Request.

Spare Accessory

 DH.SteBA1010
 (1) STS Perforated Tray
 , 255×365×h25 mm , for "MaXterile BT25"

 DH.SteBA1015
 , 285×405×h30 mm , for "MaXterile BT40"

 DH.SteBA1011
 (2) STS Removable Rack, 260×385×h155mm, for "MaXterile BT25"

 DH.SteBA1016
 , 290×425×h185mm, for "MaXterile BT40"

 DH.SteA1015
 (3) Replacement HEPA Filter-kit, 0.3µm

Optional Accessory

 DH.SteBA1013
 STS Wire Tray, 260 × 370 mm, for "MaXterile BT25"

 DH.SteBA1017
 , 273 × 410 mm, for "MaXterile BT40"

 DH.SteBA1025
 (4) Movable Stand with 1 Drawer, 560 × 700 × h800 mm, for "BT25"

DH.SteBA1026 , 580×700×h850 mm, for "BT40"

DH.SteA1005 (5) Thermal Printer, Paper Roll, "STEA1005"

DH.SteA1006 Thermal Paper Package, 4 Paper Roll, for "STEA1005"

Bench-top Autoclave with Validation (IQ, OQ) Service

DH.SteB5025 Validation Service(IQ, OQ), with "MaXterile BT25" DH.SteB5040 , with "MaXterile BT40" DAIHAN-brand[®] Digital Fuzzy-control Autoclaves "MaXterileTM", Standard-/Recorder-type, 47-/60-/80-/100-Lit. with Electronic Door Lock Sys, Lever-type Sliding Door, Steam Condensing, Solid-/Liquid-Modes, Max.2 kgf/cm², up to 132 °C (1) PED Certified-model(\$\phi\$ 3.0mm Thick-Tank), (2) Non-PED-model(\$\phi\$ 2.0mm Thick-Tank)



Standard-type, "MaXterile™ 80" (1) With PED Certi. 3mm Thick-Tank (2) Without PED Certi. 2mm Thick-Tank



Built in Recorder-type, "MaXterile™ 80R" (1) With PED Certi. 3mm Thick-Tank (2) Without PED Certi. 2mm Thick-Tank

<Continued On Next Page>

- Made in Korea CE and PED Certified PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Special Steam Condensing Mechanism, Lever-type Sliding Door
- Built in DAIHAN-brand® New Generation Controller : Patented Jog-Dial Control System
- Electronic Door Lock Sensing System for User Safety.
- Door Open Button Automatically Lock Over 80°C for User Safety
- Built in Recorder model (only MaXterile 47R/60R/80R/100R models):
 Print Sterilization Cycle Data for Validation and Analyze Sterilization
 (Temperature, Pressure, Time, Error Status, etc.)
- * Ideal for Biotechnology, Clinical, Environmental, Medical and Food Industry.

- * Digital Timer Function 'Delay Time' and 'Operation Time' can be Controlled.
- * Solid / Liquid Mode can be chosen by a customer considering a Sample Phase.
- * 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

Specifications & Ordering information

Standard-type Models		"MaXterile 47"	"MaXterile 60"	"MaXterile 80"	"MaXterile 100"		
		Standard-type					
Built in Recorder-type		"MaXterile 47R"	"MaXterile 60R"	"MaXterile 80R"	"MaXterile 100R"		
Models			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	& A	ccuracy	Roo	om Temp +5°C to 1		21°C	
Pressure & C	aug	e	1.2 kgf/cr	m² at 121 °C / 2.0 kg	nf/cm² at132℃, 0 ~	3 kgf/cm ²	
Sterilization	mode	•		Solid- or Li	iquid-mode		
Heating Power	/Cons	umption	2 kW	3 kW	2 kW×2	2 kW×2	
Timer & Aları	m			60 min, Error sta	atus & Timer-end		
Display				Digital LCD with B	ack-Light Function		
Controller			Digit	tal Fuzzy-Control S	ystem (Fully Autom	natic)	
Door & Closi	ng S	ystem	Lever-type S	liding Door / Safety	Electronic Door Cl	osing System	
Safety Circui	it	-	Over-Temp./-F	Pressure/-Current p	rotection, Sensor E	Error Detection	
Printer			Thermal t	ype printer, Record	Paper Roll: w58 ×	Φ40 mm	
Material			Stainless steel (#304)-Pressure Ve	essel, Powder Coat	ed steel-External	
Basket			2ea of Stainless steel Wire Baskets are Included				
Basket Dime	nsio	n (mm)	Φ270×h240	<i>Φ</i> 320 × h240	Φ370×h240	Φ420×h240	
Dimension	Inne	er (mm)	Φ300×h670	Φ350×h650	Φ400×h650	Φ450×h630	
$(w \times d \times h)$	Out	er (mm)	700×470×1080	700×470×1080	810×580×1140	810×580×1140	
Packing Size	(mn	1)	840×610×	h1,252 mm	950×730×	h1,352 mm	
Gross Weight (kg))	117 kg	120 kg	170 kg	170 kg	
Electric Reqts.				120V, 60Hz or 230V, 50/60Hz	AC 230V	120V, 60Hz or - , 50/60Hz Terminal Block	
(1) With PE	D(Pr	essure E	quipment Direct	ive) Certification	ϕ 3.0mm Thic	kness Tank	
		230V	DH.WAC05047P	DH.WAC05060P	DH.WAC05080P		
Standard-typ	oe						
Cat. No.		3Phase	-	-	DH.WAC07080P	DH.WAC07100P	
Built in		230V	DH.WACR2047P	DH.WACR2060P	DH.WACR2080P	DH.WACR2100P	
Recorder-type		2001	Diminition (20-1)	Dimini tortaccor	Diminion (2000)	Diminitor(2100)	
Cat. No.		3Phase	-	-	DH.WACR3080P	DH.WACR3100P	
(2) Without PED(Pressure Equipment Directive) Certification, ϕ 2.0mm Thickness Tank							
Standard-type Cat. No.		230V	DH.WAC05047	DH.WAC05060	DH.WAC05080	DH.WAC05100	
Jal. 110.		3Phase	-	-	DH.WAC07080	DH.WAC07100	
			i				
Built in		230V	DH.WACR2047	DH.WACR2060	DH.WACR2080	DH.WACR2100	
Recorder-type			Г	Γ	1		

^{*} Other Specifications are available upon Customer's Request.

3Phase

Cat. No.

DH.WACR3080 DH.WACR3100

< Continued From... DAIHAN-brand® Digital Fuzzy-control Autoclaves "MaXterile™" Standard-/Recorder-type>



(3) Wire Basket Stainless-steel (Included)





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

(3) Spare Wire Baskets, Stainless-steel & Thermal Paper for Recorder

SL.Bas7011 Wire Basket. ϕ 270×h240mm. "Bas7011". for 47 Lit.

"MaXterile 47", "MaXterile 47R"

SL.Bas7012 Wire Basket, ϕ 320×h240mm, "Bas7012", for 60 Lit,

"MaXterile 60", "MaXterile 60R"

SL.Bas7013 Wire Basket, ϕ 370 × h240mm, "Bas7013", for 80 Lit,

"MaXterile 80", "MaXterile 80R"

SL.Bas7014 Wire Basket, ϕ 420 × h240mm, "Bas7014", for 100 Lit,

"MaXterile 100", "MaXterile 100R" DH.WACR5005 Thermal Paper, 5×Paper Roll for "MaXterile R"

(4) Optional Perforated Bottom Baskets, Stainless-steel

DH.WAC20047 Perforated Basket, \$\phi 270 \times h250mm, "WAC20047", for 47 Lit. "MaXterile 47", "MaXterile 47R"

DH.WAC20060 Perforated Basket, ϕ 320×h250mm, "WAC20060", for 60 Lit. "MaXterile 60", "MaXterile 60R"

DH.WAC20080 Perforated Basket ϕ 370×h250mm "WAC20080"

for 80 Lit. "MaXterile 80", "MaXterile 80R" DH.WAC20100 Perforated Basket, ϕ 420×h250mm, "WAC20100",

for 100 Lit. "MaXterile 100", "MaXterile 100R"

Autoclave with Validation (IQ, OQ) Service

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

Autoclaves, Accessories



for

Dry-Heat







Sterilization Indicator Tapes, w19mm×L50m/Roll for Dry-Heat, EO-Gas, and Steam Sterile/Autoclaving,

* Changing Color after Expose to Sterilization Process(Dry-Heat, EO-gas, Steam Sterile)

(1) For Dry-Heat Sterile * Supplied by Kartell® in Italy

KA.1051 Dry-Heat Sterile Indicator, w19mm×L50m-Roll, White→Brown

(2) For EO-Gas Sterile * Supplied by Heinz Herenz® in Germany

HH.1080551 EO-Gas Sterile Indicator, w19mm×L50m-Roll, Red→Green

(3) For Steam Sterile/Autoclaving * Supplied by Heinz Herenz® in Germany

HH.1080550 Autoclave/Steam Sterile Indicator, w19mm×L50m-Roll, Green→Brown



Dry-Heat Sterilizer Indicator Label on Sheet, 160°C/3h, 180°C/30min, Pink ⇒ Brown for Indicating Sterilizer, Color-Changing: from Pink to Brown,

■ Supplied by LMS® in Japan

* Change of Color : Pink ▶ Brown

* Changing Time: 30 minutes at 180°C, 3 Hours at 160°C

AS2.6419.01 Heat-Sterile Label "D-L", w19×L32mm



Anabac® Deodorant "Classic" for Autoclaving, 100 Tablets Ideal for deodorization, Deodorant Capacity: max 200Lit. per One-tablet,

■ Supplied by LMS® in Japan

* French Bracing Fragrance

* 100 Tablets / Packed in PP/Paper Container

* Deodorant Volume : Max 200Lit. per 1-Tablet

AS2.6361.01 Deodorant for Autoclave, 100 Tablets / a Container

Notes	



Distributed By: Pacific Laboratory Products



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www.pacificlab.com.au



