



VERTICAL AUTOCLAVES WITH PREVACUUMS AND DRYING

AE-B SERIES CLASSIC LINE

EXCELLENT PERFORMANCE, ADVANCED FEATURES AND ALL-AROUND VERSATILITY FOR SEVERAL APPLICATIONS



The **AE-B** Series vertical floor-standing autoclaves with top-loading access cover all laboratory sterilization needs in many industries and research facilities with the aim of increasing the productivity of the laboratory. A great chamber capacity, the independent integrated steam generator, the touchscreen display, the independent clean water tank, the initial prevacuum pulses, the final vacuum drying and the direct water discharge results in an excellent autoclave to perform from the most simple to the most demanding applications.

INTENDED USE

+ STERILIZATION OF ITEMS OF COMPLEX GEOMETRIES, POROUS OR HOLLOW OBJECTS, FABRIC LOADS, LABORATORY WASTE BAGS, PLASTICS, GLASSWARE, CULTURE MEDIA AND LIQUIDS



MAIN FEATURES

EXCELLENT PERFORMANCE

AE-B Series autoclaves are autoclaves with excellent performance for several sterilization procedures. They are equipped with an independent integrated steam generator, a vacuum pump and a heating jacket to guarantee proper steam penetration on all types of loads and completely dry solid loads.

MULTIPLE TYPES OF STERILIZATION CYCLES

Several options available to perform sterilization of solids or liquids. Programmable autopreheating, auto-start, initial prevacuum pulses, duration of the final vacuum drying and optional core temperature probe for load sensed sterilization of liquids.

GREAT EASE OF USE

AE-B Series autoclaves are equipped with a 5" color touchscreen, they include an independent clean water tank that automatically feeds the independent steam generator with water, with an optional upgrade to fully automatic water feed directly from water network. Discharge is always directly sent to the drain.

SAFETY FIRST

AE-B Series autoclaves are equipped with several features to ensure the safety of the operators. These include overpressure safety valve, overtemperature safety thermostats, water level detectors, an open door detection system and an independent safety pneumatic system that locks the main door while positive pressure exists inside the sterilization chamber.



ADVANTAGES



Heating by an independent integrated powerful steam generator.



Adjustable number of initial prevacuum pulses to guarantee proper steam penetration on items of complex geometries and large loads.



Final vacuum drying feature by a heating jacket and a vacuum pump to completely dry solid loads.



Sterilization chamber and door made of high quality stainless steel grade AISI-316L extremely resistant to corrosion.



Equipment built following all applicable European Union quality, regulatory and safety standards.



Control by a PID microprocessor and a 5" touchscreen, with 50 available programs, adjustable by time, temperature, number of prevacuum pulses, drying time and type of sterilization cycle (solids or liquids, with optional core probe control).



Surpasses Vacuum Leak and Bowie Dick test cycles.



Suitable to sterilize all types of loads, including wrapped goods, fabric loads, porous and hollow objects and items of complex geometries with cavities thanks to the standard initial prevacuum phase.



Automatic clean water feed to the integrated steam generator from the independent water tank, with water level sensors included in both locations. Optional upgrade to fully automatic water feed directly from water network.



The discharge of each cycle is always directly sent to the drain to minimize long term sterilization chamber and water tank corrosion and calcification processes.



Programmable auto-preheating and auto-start.



Optional software for sterilization data management.



Optional integrated printer.



User management with administrator hierarchy.





STERILIZATION APPLICATIONS

AE-B Series autoclaves are intended for the sterilization of a wide range of liquids and solids such as wrapped and unwrapped loads, items of complex geometries, fabric loads, culture media, glassware, plastics, metal utensils, laboratory waste bags and other laboratory items.

WORKING PRINCIPLE

AE-B Series autoclaves provide a solution for the multiple sterilization needs of all laboratories, including wrapped and unwrapped solids, fabric loads, porous and hollow objects, plastics, metal utensils, laboratory waste bags, liquids, culture media, glassware and other laboratory items.

The load has to be placed into the vessel's baskets and, after manually filling the independent clean water tank with purified water, the equipment starts to create the initial prevacuum, automatically feeds water to the independent integrated steam generator, generating saturated steam that is directly injected into the sterilization chamber until the set combination of sterilization time and sterilization temperature is reached.

STANDARD AE-B SERIES STERILIZATION CYCLE

PREHEATING PHASE

· In this initial step, the user has the option to set up a preheating temperature up to 70°C to speed up the duration of the sterilization cycle.

PREVACUUM PHASE

· In this phase the equipment's vacuum pump mechanically removes air from the chamber and load through a single or multiple vacuum pulses of -0,75 Bargs. This allows the steam to penetrate load objects of difficult geometries that couldn't otherwise be reached with simple gravity displacement.

HEATING PHASE

· After completing the prevacuum phase the powerful independent integrated steam generator assembled outside the sterilization chamber heats up dramatically and injects saturated steam throughout the chamber.

STERILIZATION PHASE

- · Upon reaching the set sterilization temperature inside the chamber the sterilization phase begins, accurately sustaining the temperature throughout the duration of this phase.
- This crucial step is controlled by a PT-100 Class A temperature probe located within the chamber. As an option for liquids sterilization processes, this phase can be regulated by a flexible PT-100 Class A temperature probe located inside a sample.

VACUUM DRYING PHASE

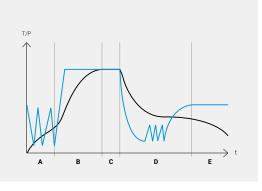
· After sterilization phase finishes, only for solid programs, vacuum drying starts, where multiple vacuum pulses occur while the heating jacket is turned on, completely drying the load.

COOLING PHASE

· After the vacuum drying step is completed natural cooling begins and an acoustic beep will sound when a safety temperature is reached and the door can be opened.

Sterilization cycle graph for a solid load

- Prevacuum phase
- Heating phase Sterilization phase
- Vacuum drying phase
- Cooling phase
- Temperature
- Pressure



DIGITAL MICROPROCESSOR WITH TOUCHSCREEN



Digital microprocessor with a 5" TFT touchscreen for an easy programming and parameters selection.



Several process parameters are shown on the screen such as current temperature, current pressure, both in numbers and in graphs, including water status or heating status.

AE-B Series autoclaves have 50 programs and the first 14 are predefined and protected. The rest of the programs are editable with the following parameters settings:

- Sterilization temperature.
- · Sterilization time.
- · Prevacuum pulses number.
- Final drying time.
- · Sterilization mode (Solids or Liquids).
- Sterilization controlled by main chamber temperature probe or both main chamber temperature probe plus core temperature probe.



AE-B SERIES PROGRAMS

AE-B Series autoclaves have 50 programs, from P1 to P50, and the first fourteen are predefined and protected.

PREDEFINED PROGRAMS

Program N°	Program name	Prevacuum pulses	Sterilization temperature °C	Sterilization time min	Drying time min	Program mode Solids or Liquids	Core probe regulation
P1	BD	3	134	4'	4'	Solids	-
P2	Vacuum	1	-	-	-	Solids	-
P3	Porous-134	3	134	4'	15'	Solids	-
P4	Prion-134	3	134	18'	20'	Solids	-
P5	Porous-121	3	121	20'	15'	Solids	-
P6	Hollow-134	3	134	4'	10'	Solids	-
P7	Hollow-121	3	121	20'	10'	Solids	-
P8	Wrapped-134	1	134	7'	20'	Solids	-
P9	Wrapped-121	1	121	20'	20'	Solids	-
P10	Solids-134	1	134	4'	10'	Solids	-
P11	Solids-121	1	121	20'	10'	Solids	-
P12	Flash-134	1	134	3'	1'	Solids	-
P13	Liquid	1	121	30'	-	Liquids	-
P14	Liquid probe	1	121	15′	-	Liquids	Core probe

The rest of the programs are editable with the following parameters settings:

- Prevacuum pulses number.
- Sterilization temperature.
- Sterilization time.
- · Final drying time.
- Sterilization mode (Solids or Liquids).
- Sterilization controlled by main chamber temperature probe or both main chamber temperature probe plus core temperature probe.



LOADING CAPACITIES



ISO ERLENMEYER FLASKS

Autoclave model	Usable volume L	(250mL Ø85 x 143m	m)		(0	500mL Ø105 x 183m	m)		(0	1000mL 3131 x 230m			(0	2000mL 3166 x 280m		
		Total baskets	Units/ basket	Tota	l units	Total baskets	Units/ basket	Tota	l units	Total baskets	Units/ basket	Tota	l units	Total baskets	Units/ basket	Tota	l units
				Α	В			Α	В			Α	В			Α	В
AE-50-B	50	3	7	21	28	1	4	4	12	1	1	1	3	1	1	1	2
AE-75-B	75	3	12	36	48	2	8	16	24	2	5	10	=	1	3	3	6
AE-110-B	110	4	12	48	60	3	8	24	32	3	5	15	=	1	3	3	9
AE-150-B	153	4	21	84	105	4	14	56	=	3	8	24	=	1	5	5	10

The data contained within these tables, regarding load capacities, serves as a non-binding guide to assist you in the selection of the most appropriate autoclave model.



ISO BOTTLES

Autoclave model	Usable volume L	(250mL Ø70 x 143mi	m)		(500mL Ø80 x 185mi	m)		(0	1000mL Ø101 x 230m			((2000mL Ø136 x 260m		
		Total baskets	Units/ basket	Total	units	Total baskets	Units/ basket	Tota	units	Total baskets	Units/ basket	Total	units	Total baskets	Units/ basket	Total	l units
				Α	В			Α	В			Α	В			Α	В
AE-50-B	50	3	9	27	36	1	7	7	21	1	4	4	=	1	1	1	2
AE-75-B	75	3	20	60	80	2	14	28	42	2	8	16	=	1	4	4	8
AE-110-B	110	4	20	80	100	3	14	42	56	3	8	24	=	1	4	4	12
AE-150-B	153	4	33	132	165	4	24	96	=	3	15	45	=	1	8	8	24

A: Number of units using standard baskets.

The data contained within these tables, regarding load capacities, serves as a non-binding guide to assist you in the selection of the most appropriate autoclave model.

A: Number of units using standard baskets.

B: Number of units using specially designed baskets for the specific combination of autoclave model and container.

B. Number of units using specially designed baskets for the specific combination of autoclave model and container.



Accessories

INTEGRATED BASKET LIFT SYSTEM

References		CLASSIC-LIFT	CLASSIC-LIFT-R
Dimensions L x D x H mm		800 x 300 x 2100	800 x 300 x 2600
Power W		480	480
Voltage V		230	230
Frequency Hz		50/60	50/60
Weight Kg		40	45
Maximum load Kg		30	40
	79 L	✓	-
For autoclaves with the following chamber volumes	115 L	✓	✓
onumber forumes	175 L	=	✓

- Stainless steel electric lift system built into the side of the autoclave with swivel arm to help load and unload heavy items. The device is built into the side of the autoclave. Push-button operation with opening up to 200°.
- Motor with auto brake system in the event of obstacles or overload.
- Available in two models: the standard lift system and reinforced lift system.
- It can be factory fitted or retrofitted.



MOBILE BASKET LIFT SYSTEM

Reference	MOB-LIFT
Dimensions L x D x H mm	420 x 800 x 2200
Power W	200
Voltage ∨	90 - 250
Frequency Hz	50/60
Weight Kg	70
Maximum load Kg	30

- · Stainless steel electric lift system with casters to help load and unload heavy items up to 30Kg.
- Equipped with long-life battery for cordless use.
- Push-button operation.
- Motor with auto brake system in the event of obstacles or overload.
- Compatible with any autoclave model.



Accessories

STAINLESS STEEL WIRE BASKETS

Reference		CV-28	CV-75-130	CV-75S	CV-75	CV-150-130	CV-150S	CV-150M
Dimensions	Exterior Ø x H mm	270 x 185	370 x 130	370 x 180	370 x 265	470 x 130	470 x 190	470 x 235
Differsions	Interior Ø x H mm	260 x 180	360 x 125	360 x 175	360 x 260	460 x 125	460 x 185	460 x 230
	33 L	2	-	-	-	-	-	-
For autoclaves with the	55 L	3	-	-	-	-	-	-
following	79 L	-	4	3	2	-	-	-
chamber volumes	115 L	-	6	4	3	-	-	-
voluliles	175 L	-	-	-	-	6	4	3



STAINLESS STEEL LIQUIDS COLLECTOR TRAY FOR WIRE BASKETS

Reference		TR-270	TR-370	TR-470
Dimensions	Exterior Ø x H mm	240 x 50	320 x 50	420 x 50
Dimensions	Interior Ø x H mm	238 x 48	318 x 48	418 x 48
	CV-28		-	-
For the following wire baskets models	CV-75S & CV-75	-		-
buoneto modelo	CV-150S & CV-150M	-	-	



UNPERFORATED STAINLESS STEEL BASKETS FOR LABORATORY WASTE STERILIZATION

	CCI-28	CCI-75S	CCI-75	CCI-150S	CCI-150M
Exterior Ø x H mm	270 x 185	370 x 180	370 x 265	470 x 190	470 x 235
Interior Ø x H mm	260 x 180	360 x 175	360 x 260	460 x 185	460 x 230
33 L	2	-	-	-	-
55 L	3	-	-	-	-
79 L	-	3	2	-	-
115 L	-	4	3	-	-
175 L	-	-	-	4	3
	Ø x H mm Interior Ø x H mm 33 L 55 L 79 L 115 L	Exterior 270 x 185 Ø x H mm 260 x 180 33 L 2 55 L 3 79 L - 115 L -	Exterior 270 x 185 370 x 180 Interior 260 x 180 360 x 175 33 L 2 - 55 L 3 - 79 L - 3 115 L - 4	Exterior 270 x 185 370 x 180 370 x 265 Interior 260 x 180 360 x 175 360 x 260 33 L 2 - - 55 L 3 - - 79 L - 3 2 115 L - 4 3	Exterior 270 x 185 370 x 180 370 x 265 470 x 190 Interior Ø x H mm 260 x 180 360 x 175 360 x 260 460 x 185 33 L 2 - - - 55 L 3 - - - 79 L - 3 2 - 115 L - 4 3 -



STAINLESS STEEL "SCHIMMELBUSCH" DRUM FOR MEDICAL INSTRUMENTS STERILIZATION

Exterior					
Mathematic Mat	Reference		TBE-24x16	TBE-34x24	TBE-48x24
Interior	Dimensions		240 x 165	340 x 240	480 x 240
Solution	Difficusions		230 x 155	330 x 230	470 x 230
of autoclaves with the following chamber 79 L - 2 - olumes 115 L - 3 -		33 L	2	-	-
vith the following chamber 79 L olumes - 2 - 115 L - 3 -	For autoclaves	55 L	4	-	-
115L - 3 -	with the following chamber	79 L	-	2	-
175 L 3	volumes	115 L	-	3	-
		175 L	-	-	3





Accessories

STAINLESS STEEL CYLINDERS FOR PETRI DISHES STERILIZATION

Reference		CEP-1027	CEP-1041	CEP-1427	CEP-1441
Dimensions	Exterior Ø x H mm	100 x 270	100 x 410	140 x 270	140 x 410
Petri dishes	Maximum number dishes / cylinder	10	18	10	18
	Diameter Ø mm	80	80	120	120
	33 L	4	4	2	2
For autoclaves with the	55 L	8	4	4	2
following chamber volumes	79 L	16	8	10	5
	115 L	24	16	15	10
volullies	175 L	28	14	16	8



STAINLESS STEEL CYLINDERS FOR PIPETTE STERILIZATION

Reference		CEPP-726	CEPP-740	CEPP-1025	CEPP-1435
Dimensions	Exterior Ø x H mm	70 x 260	70 x 400	100 x 250	140 x 350
Differisions	Interior Ø x H mm	60 x 250	60 x 390	90 x 240	130 x 340
_	33 L	11	11	6	6
For autoclaves with the	55 L	22	11	12	12
following	79 L	42	21	20	10
chamber volumes	115 L	63	42	30	20
volunics	175 L	90	30	51	34



HEIGHT ADJUSTABLE TRAY SUPPORT

Reference			SRA-R-300	SRA-R-400	SRA-R-500
Dimensions	Ext. Ø x H m	m	250 x 190	350 x 180	450 x 180
Max. number trays / support		4	4	4	
Trovo	Referen	ce	TRAY-SRA-R-300	TRAY-SRA-R-400	TRAY-SRA-R-500
Trays	Dim. Ø	x H mm	240 x 20	340 x 20	440 x 20
		33 L	2	-	-
For autoclave	es with	55 L	3	-	-
the following		79 L	-	3	-
volumes		115 L	-	4	-
		175 L	-	-	4



^{*}The purchase of a tray support comes with a set of two trays and six fastening clips. Likewise, the purchase of a tray includes a set of three

 $[\]bullet$ For sterilization of instruments, small bags and other small objects that must be placed

[•] Material: AISI-304 stainless steel.

Accessories

FLEXIBLE CORE TEMPERATURE PROBE PT-100 CLASS A

- After installing this accessory, the temperature regulation of the sterilization cycle can either be controlled by the main chamber temperature sensor or both the main chamber temperature sensor and the temperature sensor of the flexible core temperature probe.
- The temperature control by the flexible core temperature probe is especially advantageous for processes involving the sterilization of large volumes of liquids, where the sterilization process is regulated by both the temperature achieved in the center of the liquid sample as well as the temperature achieved in the sterilization chamber. Furthermore, should the autoclave be opened at chamber temperatures higher than 80°C there is a risk of liquids boiling over which can be avoided if the temperature of the sample is controlled throughout the sterilization procedure.
- · Must be installed in our facilities.

Reference: PT-2-B



EXTERNAL TEMPERATURE PROBE ADAPTER



- External adapter for continuous validation processes that allows the access of an external probe (Ø 3-6 mm) to obtain a temperature reading independent from that of the equipment microprocessor.
- It is located on the door of the autoclave
- Must be installed in our facilities.

Reference: EXT-TP

INTEGRATED THERMAL PRINTER



- Prints program number, cycle number, temperature, pressure, date and hour of the run and error messages.
- Selectable printing cadence between 10 and 240 seconds.
- Must be installed in our facilities.

Reference: IT/TS Consumable: Paper: PAPER-IT

TRANSPORT TROLLEY



- Auxiliary trolley to assist the loading and unloading of the autoclave
- Built in chromed iron and plastic.
- The surface of each shelf is textured to prevent the load from shifting.
- Rubber coated wheels to reduce noise
- Dimensions (LxDxH): 730 x 490 x 700 mm.

Reference: TR-TR

CABLE GLAND



- Installation of a Ø2mm or Ø4mm cable gland to provide access to as many as eight external temperature probes for calibration and validation procedures.
- Must be installed at our factory.

Reference: PRENSACLAV



Accessories

STERILIZATION CONTROL TAPE



- Class 1 indicator for steam sterilization. The change of color indicates that the materials have been processed, without being a guarantee of proper sterilization, additional methods are needed such as biological indicators (EN ISO 11138).
- Tape roll of 50 m x 19 mm.

Reference: TEST-CT

BOWIE DICK TEST PACK



- Class B indicator that checks the correct steam penetration in porous loads.
- Indicator printed with non-toxic inks and laminated.
- · Box of 20 tests.

Reference: TEST-BD

20 min 121°C Color change.

AUTOMATIC WATER FILLING KIT



- Water pump to automate the feed of the independent clean water tank with purified water.
- Compatible with installations that either have a purified water network, a purified water tank or facilities that have an unpurified water network, in the latter case, the kit should be supplied with two other accessories: water purifier (ECOPUR-500) and purified water tank (TANK-KLL).
- · Must be installed in our facilities.

Reference: KLL-B

SW8000 SOFTWARE





- Communication software between the equipment and the PC that allows the real-time and posterior visualization and registry of each cycle. Cycles can also be exported to Excel or printed.
- Connection to PC via Ethernet, data can also be exported directly with USB stick.
- Supplied with an Ethernet cable, an USB stick that includes the software and installation drivers and an Ethernet to USB adapter.

Reference: SW8000

ECO-EFFICIENT WATER PURIFIER



- Direct flow eco-efficient water purifier without water accumulation capable of filtering 1,3L/min with LED display.
- The installation of this accessory requires the joint installation of the external tank (TANK-KLL) and the automatic water filling system (KLL-B) corresponding to each model.

Reference: **ECOPUR-500**

Exterior dimensions L x D x H mm	Purity (TDS) ppm	Electrical conductivity µS	Hardness mmol/l
220 x 425 x 415	0,0005	>1	0,0125

TECHNICAL SUMMARY OF AE-B SERIES AUTOCLAVES

	Recommended setting	Industry and research laboratories
Onnered electricity	Equipment placement	Floor-standing
General classification	Load direction	Top-loading
	Chamber profile	Round
	Culture media and liquids	++
Π	Laboratory waste bags	++
Recommended type of load	Porous solids and wrapped loads	++
	Glassware	++
	Method to generate steam	Independent integrated steam generate
(C)	Type of purge	Vacuum
(//) Sterilization technology features	Prevacuum pulses by vacuum pump	✓
	Vacuum drying by heating jacket and vacuum pump	✓
ण)) Transfer of data	Ethernet & USB	✓
🗐 Batch printers	Integrated printer	0
	Sterilization chamber volume	55 - 175 L
	External building material	AISI-304
	Sterilization chamber material	AISI-316L
	Vacuum pump	Membrane
	Gasket material	Silicone rubber
Sterilization chamber and door	Min max. sterilization temperature	105 - 134°C
specifications	Maximum pressure (above atmospheric pressure)	2,1 Barg
	Mechanism to open the door	Manual wheel
	Direction in which the door opens	Lateral
	Automatic locking with pressure	•
	Thermally insulated door	~
	Screen display	TFT touchscreen
	Screen size	5"
User interface and microprocessor	Total number of available programs	50
	User management with administrator hierarchy	~
	Automatic microprocessor control	~
	Timer start	·
	Auto-preheating	·
Special evolve and process	Vacuum leak test	·
Special cycles and process optimization	Bowie Dick test	·
•	Final postvacuum drying (to completely dry solid loads)	· · · · · · · · · · · · · · · · · · ·
	Temperature regulation by core probe	0
Adjustable cycle parameters	Number of prevacuum pulses	1-3
	Temperature of sterilization phase	105 - 134°C
	Duration of sterilization phase	1 - 250 min
	Duration of drying phase	1 - 360 min
	Temperature regulation by core probe	On/Off
	Sterilization mode (solids or liquids)	<u> </u>
		Y
	Air intake with bacteriological filter	0 - 20 1
+ Other specifications	Independent clean water tank capacity	9 - 20 L
	Flexible core probe	0
	Premium casters with brakes	→
	Pressure gauge	✓
	Electric customization (115-230M V/230-400T V)	0
Services	Third-party qualification (IQ/OQ/PQ)	0

^{+:} Recommended ✓: Standard 0: Optional









Specifications

•				
References	AE-50-B	AE-75-B	AE-110-B	AE-150-B
Total/usable volume of the chamber L	55/50	79/75	115/110	175/153
Usable dimensions of the chamber Ø x H mm	300 x 710	400 x 600	400 x 850	500 x 760
External dimensions L x D x H mm	505 x 580 x 1290	610 x 700 x 1185	610 x 700 x 1435	750 x 820 x 1400
Loading height mm	975	870	1120	1085
Net weight Kg	99	135	165	245
Available powers W	3600	3600 or 6000	6000 or 9000	6000 or 9000
Standard voltage* V	230	230	400	400
Frequency Hz	50/60	50/60	50/60	50/60

^{*}Other voltages and electrical configurations available on request. Special models with increased power may operate with other voltages.

Safety features

- · Safety valve.
- Safety thermostats with manual rearm for the heating jacket and the steam generator.
- Pneumatic door blocking system while positive pressure exists inside the sterilization chamber.
- · Open door sensor.
- Thermally insulated door.
- Water level detector in the independent integrated steam generator.
- Water level detector (min./max.) in the independent clean water tank with overflow drainage.
- · Bacteriological filter for inlet air.
- Several visual and acoustic safety and warning alarms.

Regulations

All our AE-B Series autoclaves are designed to comply with the strictest international directives and standards, including the following regulations:

- EN-61010-1 Safety requirements for electrical equipment for measurement, control and laboratory use. Part 1: General requirements.
- EN-61010-2-040 Part 2-040: Requirements for laboratory autoclaves.
- EN-61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.
- AD 2000 Merkblatt Pressure vessels.
- 2014/35/UE Low voltage.
- · 2014/30/UE Electromagnetic compatibility.
- 2014/68/UE Pressure equipment.

Find out more about our AE-B Series autoclaves on our **Youtube** Channel. Installation guide available for download on our website.

General features

Adjustable sterilization temperature 105 - 134°C Adjustable sterilization time 1 - 250min Adjustable prevacuum pulses 1 - 3 Adjustable drying time 1 - 360min Max. pressure 2,1Barg Sterilization control system Fully automatic microprocessor control by either chamber temperature probe or flexible core temperature probe or flexible		
Adjustable prevacuum pulses Adjustable drying time 1 - 360min Max. pressure 2,1Barg Fully automatic microprocessor control by either chamber temperature probe or flexible core temperature probe Air purge system Mechanical displacement by vacuum pump Heating system Independent integrated steam generator Vacuum drying system Vacuum pump plus heating jacket Prevacuum system Vacuum pump External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically freeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Adjustable sterilization temperature	105 - 134°C
Adjustable drying time Adjustable drying time 2,18arg Fully automatic microprocessor control by either chamber temperature probe or flexible core temperature probe Air purge system Mechanical displacement by vacuum pump Heating system Independent integrated steam generator Vacuum drying system Vacuum pump plus heating jacket Prevacuum system Vacuum pump External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feed sthe independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank and for the overflow of the independent clean water tank	Adjustable sterilization time	1 - 250min
Max. pressure 2,1Barg Sterilization control system Fully automatic microprocessor control by either chamber temperature probe or flexible core temperature probe Air purge system Mechanical displacement by vacuum pump Heating system Independent integrated steam generator Vacuum drying system Vacuum pump plus heating jacket Prevacuum system Vacuum pump External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Monitoring of sterilization parameters Self-control of obtained values (To, P & t) vs programmed values. Oycle is automatically interrupted if obtained values differ from programmed values. Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the inde	Adjustable prevacuum pulses	1 - 3
Fully automatic microprocessor control by either chamber temperature probe or flexible core temperature probe Air purge system Mechanical displacement by vacuum pump Heating system Independent integrated steam generator Vacuum drying system Vacuum pump plus heating jacket Prevacuum system Vacuum pump External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Monitoring of sterilization parameters programmed values (To, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system the independent clean water tank and for the overflow of the independent clean water tank	Adjustable drying time	1 - 360min
Chamber temperature probe or flexible core temperature probe or flexible core temperature probe Air purge system Mechanical displacement by vacuum pump Heating system Independent integrated steam generator Vacuum drying system Vacuum pump plus heating jacket Prevacuum system Vacuum pump External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (To, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system Chamber temperature probe Mechanical displacement by vacuum pump Heating system Vacuum pump Independent memperature probe Vacuum pump Independent clean water tank and for the overflow of the independent clean water tank	Max. pressure	2,1Barg
Heating system Independent integrated steam generator Vacuum drying system Vacuum pump plus heating jacket Prevacuum system Vacuum pump External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually feed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Independent clean water tank and for the overflow of the independent clean water tank and for the overflow of the independent clean water tank	Sterilization control system	chamber temperature probe or flexible core
Vacuum drying system Vacuum pump plus heating jacket Prevacuum system Vacuum pump External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values of the independent values of the independent integrated steam generator. Optional upgrade to fully automatic clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Air purge system	Mechanical displacement by vacuum pump
Prevacuum system Vacuum pump External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually feed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system Vacuum pump AISI-304 stainless steel AISI-316L stainless	Heating system	Independent integrated steam generator
External building material AISI-304 stainless steel Sterilization chamber material AISI-316L stainless steel Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually feed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system AISI-316L stainless steel AISI-316L stainless steel Silicone rubber Unlimited Programmed Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure display Pressure display Pressure display Pressure display on software and printer tickets Independent on automatically feed clean water tank that automatically feeds the independent integrated steam water tank and for the overflow of the independent clean water tank and for the overflow of the independent clean water tank and for the overflow of the independent clean water tank	Vacuum drying system	Vacuum pump plus heating jacket
Sterilization chamber material AISI-316L stainless steel	Prevacuum system	Vacuum pump
Gasket material Silicone rubber Connection to PC Ethernet Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Monitoring of sterilization parameters Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	External building material	AISI-304 stainless steel
Connection to PC Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system Ethernet Unlimited Prior touchscreen Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Orainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Sterilization chamber material	AISI-316L stainless steel
Connection to printer Integrated Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Monitoring of sterilization parameters Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Gasket material	Silicone rubber
Number of programs 50 (14 preset and 36 user free) Programmable auto-start Unlimited range Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Connection to PC	Ethernet
Programmable auto-start Unlimited range 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system Unlimited range 5" TFT touchscreen Cell Touchscreen Touchscreen Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Connection to printer	Integrated
Screen type 5" TFT touchscreen Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Number of programs	50 (14 preset and 36 user free)
Opening door mode Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system Horizontal swiveling door with blocking wheel Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system The independent clean water tank and for the overflow of the independent clean water tank	Programmable auto-start	Unlimited range
Monitoring of sterilization parameters Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values differ from programmed values Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage system Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupted if obtained values. C	Screen type	5" TFT touchscreen
Monitoring of sterilization parameters programmed values. Cycle is automatically interrupted if obtained values differ from programmed values. Pressure display Pressure gauge on control panel, digital display on screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Opening door mode	Horizontal swiveling door with blocking wheel
Water management Spray screen, registry on software and printer tickets Independent manually fed clean water tank that automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Monitoring of sterilization parameters	programmed values. Cycle is automatically interrupted
Water management automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean water feed directly from water network Drainage system Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank	Pressure display	Pressure gauge on control panel, digital display on screen, registry on software and printer tickets
Drainage system the independent clean water tank and for the overflow of the independent clean water tank	Water management	automatically feeds the independent integrated steam generator. Optional upgrade to fully automatic clean
Casters Included swiveling premium casters with brakes	Drainage system	the independent clean water tank and for the overflow
	Casters	Included swiveling premium casters with brakes











