



**Vertical desktop autoclaves**

**Pages 56 to 57**

**Pressure regulator**

**Vertical stand autoclaves.**

**Pages 58 to 61**

**Microprocessor control and atmospheric purge**

**Autoclave preparation of culture media**

**Page 62**

**Water distiller for autoclaves**

**Page 63**

**Horizontal stand autoclave**

**Page 64**

**Microprocessor control**

**Horizontal stand autoclaves**

**Pages 65 to 67**

**Microprocessor control and fractional vacuum purge**

**Polypropylene and polyester bag sealers**

**Pages 68 an 69**



## ELECTRICAL AUTOCLAVES FOR STERILIZATION

Wide range of electrically heated bench top and top loading autoclaves. Pressure range from 0.62 to 2 bar, Capacity: 1.5, 8, 12, 18, 20, 23, 25, 50, 80 and 150 litres.

*Complies with the pressure and autoclave directives*



- *50 Years of sterilization experience.*
- *Quality and innovation.*
- *A new dimension in design and technology*



### PRINCIPAL OF STEAM STERILIZATION:

STERILIZATION IS THE PROCESS OF THE DESTRUCTION AND ELIMINATION OF ALL FORMS OF MICROBIAL LIFE, INCLUDING BACTERIA AND ITS SUB-FORMS.

THE LABORATORY AUTOCLAVE CONSISTS OF A VESSEL IN WHICH STEAM FLOWS AT A HIGH PRESSURE WITH A STERILIZATION PURPOSE. SATURATED STEAM WILL IMMEDIATELY CONDENSE AND THUS RELEASING ITS HIGH EVAPORATION HEAT, WHICH IS IN FACT THE DESTRUCTIVE AGENT. IN ORDER THAT STERILIZATION WOULD BE EFFECTIVE, STEAM MUST BE SATURATED AND, CONSEQUENTLY, ALL THE AIR INSIDE THE VESSEL MUST BE PURGED BEFORE INITIALIZING THE PROCESS.

IN THE FOLLOWING PAGES J.P. SELECTA OFFERS AN EXTENSIVE RANGE OF AUTOCLAVES WITH A CHOICE OF ATMOSPHERIC PURGING OR VACUUM PURGING SYSTEMS. A CHOICE OF MICROPROCESSOR CONTROLLED SYSTEMS ARE OFFERED INCLUDING DRYING CYCLES AT THE END OF THE STERILIZATION CYCLE.



# Electrical Autoclaves for sterilization



THREE DIFFERENT CONTROL SYSTEMS:



**CONTROL BY PRESSURE WITH ATMOSPHERIC PURGE: MICRO 8 MED 12 MED 20**



**MICROPROCESSOR CONTROL OF TEMPERATURE AND STERILIZATION CYCLE, PULSED VACUUM AIR PURGE:**

**AUTESTER ST DRY PV-III 25 (mod. horizontal)**



**AUTESTER ST DRY PV-B 12 (mod. horizontal)  
AUTESTER ST DRY PV-B 18 (mod. horizontal)  
AUTESTER ST DRY PV-B 23 (mod. horizontal)**



RS-232 and USB interface output of parameters to a computer, printer or USB adapter.

**PRESOCLAVE PLUS III 50 (mod. vertical)  
PRESOCLAVE PLUS III 80 (mod. vertical)  
PRESOCLAVE PLUS II 150 (mod. vertical)  
AUTESTER ST DRY PV-III 50 (mod. vertical)  
AUTESTER ST DRY PV-III 80 (mod. vertical)  
AUTESTER ST DRY PV-III 150 (mod. vertical)**

The printer can be built-in the autoclaves together with the control panel

**REGULATION SYSTEM 2**  
**MICROPROCESSOR CONTROL OF TEMPERATURE AND STERILIZATION CYCLE, ATMOSPHERIC AIR PURGE:**

**AUTESTER P 1,5 (mod. vertical)  
PRESOCLAVE III 50 (mod. vertical)  
PRESOCLAVE III 80 (mod. vertical)  
PRESOCLAVE II 150 (mod. vertical)**



## SUMMARY TABLE OF MODEL RANGE

MODELS	Part No.	System DRY	Capacity litres	Temperature °C	Pressure bar	Power W	Control	Purge control	Type
MICRO 8	4001745	NO	8	121 and 134	1 and 2	1000	Pressure thermostat	Manual	Vertical bench top
MED 12	4001756	NO	12	121 and 134	1 and 2	1800	Pressure thermostat	Atmospheric	Vertical bench top
MED 20	4001757	NO	20	121 and 134	1 to 2	2500	Pressure thermostat	Atmospheric	Vertical
PRESOCLAVE III 50	4001758	NO	50	115 to 134	0.62 to 2	3600	Electronic controller	Atmospheric	Vertical
PRESOCLAVE III 80	4001759	NO	80	115 to 134	0.62 to 2	3600	Electronic controller	Atmospheric	Vertical
PRESOCLAVE PLUS III 50	4001770	NO	50	115 to 134	0.62 to 2	3600	Electronic controller	Atmospheric	Vertical
PRESOCLAVE PLUS III 80	4001771	NO	80	115 to 134	0.62 to 2	3600	Electronic controller	Atmospheric	Vertical
PRESOCLAVE PLUS II 150	4002172	NO	150	115 to 134	0.62 to 2	7500	Electronic controller	Atmospheric	Vertical
AUTESTER ST DRY PV-B 12	4001737	YES	12	121 and 134	1 and 2	1800	Microprocessor	Purged vacuum	Horizontal bench top
AUTESTER ST DRY PV-B 18	4001734	YES	18	121 and 134	1 and 2	1500	Microprocessor	Purged vacuum	Horizontal bench top
AUTESTER ST DRY PV-B 23	4001735	YES	23	121 y 134	1 and 2	1700	Microprocessor	Purged vacuum	Horizontal bench top
MED 40 CLT	4002000	NO	40	105 to 125	0 to 1	6000	Electronic controller	Atmospheric	Vertical
AUTESTER ST DRY PV-III 25	4002420	YES	25	105 to 134	0.21 to 2	2510	Microprocessor	Purged vacuum	Horizontal bench top
AUTESTER ST DRY PV-III 50	4002516	YES	50	105 to 134	0.21 to 2	3600	Microprocessor	Purged vacuum	Vertical
AUTESTER ST DRY PV-III 80	4002519	YES	80	105 to 134	0.21 to 2	3600	Microprocessor	Purged vacuum	Vertical
AUTESTER ST DRY PV-III 150	4002518	YES	150	105 to 134	0.21 to 2	7500	Microprocessor	Purged vacuum	Vertical

## QUICK OVERVIEW



## Autoclaves for sterilization “MICRO 8”, “MED 12” and “MED 20”

PRESSURE REGULATOR THERMOSTAT OF 1 AND 2 bar. TEMPERATURES 121 °C AND 134 °C.  
 VERTICAL DESKTOP MODELS. “MICRO 8” CAPACITY: 8 LITRES. “MED 12” CAPACITY: 12 LITRES.  
 VERTICAL STAND MODEL “MED 20” CAPACITY: 20 LITRES.

*An economic alternative. Semiautomatics.*

### SAFETY:

**SAFETY VALVE:** PREVENTS THE PRESSURE WITHIN THE AUTOCLAVE OVERPASSING THE MAXIMUM SET LIMIT.  
**SAFETY PRESSURE:** DISCONNECTS POWER TO THE HEATER IN CASE OF OVERPASSING THE PRESSURE SET LIMIT.  
**SAFETY THERMOSTAT:** DISCONNECTS THE HEATING IN CASE OF OVERTEMPERATURE OR LACK OF WATER IN THE TANK.  
 THERMALLY INSULATED LID MADE OF MOLDED THERMOPLASTIC.

### COMMON FEATURES

AISI 304 stainless steel external case and top.  
 Stainless steel chamber and lid, with easy opening.  
 INCOLOY special stainless steel heater element, which provides long life, low corrosion and high temperatures resistance.  
 Manual air purge when starting (“MICRO 8” model).  
 Automatic atmospheric purge (“MED 12” and “MED 20” models).  
 Safety device to prevent lid opening.  
 Starting main switch.



### REAR PART

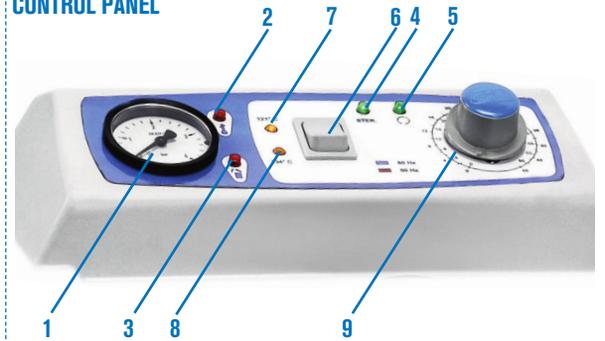
Mains source.  
 Two fuse carriers.  
 Safety thermostat.



### SIDE PART

Drain outlet.  
 Steam and drainage selective valve.

### CONTROL PANEL



1. Pressure gauge.
2. Over temperature alarm light indicator.
3. Door open light indicator.
4. Sterilization phase light indicator.
5. Sterilization end of cycle light indicator.
6. Temperature selector 121°C or 134°C.
7. Light indicator at 121°C.
8. Light indicator at 134°C.
9. Timing from 0 to 60'.



## Autoclave for sterilization “MICRO 8”

DESKTOP MODEL



### MODEL

Part No.	Capacity litres	Ø (usable) cm	Height (usable) cm	Height/Width/Depth (exterior) cm	Power W	Weight Kg
4001745	8	24	15	40 38 38	1000	13

It comes complete with a stainless steel wire basket of Ø 22x14cm high. Part no. 1004771.



## Autoclave for sterilization "MED 12"

DESKTOP MODEL

Features: see page 56



### MODEL

Part No.	Capacity litres	Ø (usable) cm	Height (usable) cm	Height/Width/Depth (exterior) cm	Power W	Weight Kg
<b>4001756</b>	12	24	26	46 38 38	1800	18

It comes complete with a stainless steel wire basket of Ø 22x24cm high. Part no. 1004772.

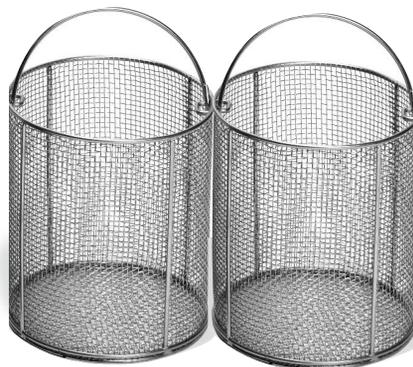


## Autoclave for sterilization "MED 20"

VERTICAL STAND MODEL

CONFORMS TO APPARATUS PRESSURE REGULATION DIRECTIVES.

Features: see page 56



### MODEL

Part No.	Capacity litres	Ø (usable) cm	Height (usable) cm	Height/Width/Depth (exterior) cm	Power W	Weight Kg
<b>4001757</b>	20	24	41	70 38 38	2500	41

It comes complete with two stainless steel wire baskets of Ø 23x17 cm Part No. 1004773



## Autoclaves for sterilization “Presoclave” 50 and 80 litres

MICROPROCESSOR TEMPERATURE AND CYCLE CONTROL AND ATMOSPHERIC PURGE.  
ELECTRONIC CONTROL OF TIME AND TEMPERATURE RANGE FROM 115 °C TO 134 °C. (0.62 TO 2 bar).  
CONFORMS TO APPARATUS PRESSURE REGULATION DIRECTIVES.  
VERTICAL MODEL: 50 AND 80 AND 150.



### SAFETY:

- SAFETY OVER PRESSURE VALVE:** PREVENTS OVER PRESSURE ABOVE THE MAXIMUM SET LIMIT.  
**SAFETY PRESSURE SWITCH:** DISCONNECTS POWER TO THE HEATER IF THE UNIT EXCEEDS THE MAXIMUM PRESSURE LIMIT.  
**SAFETY THERMOSTAT AND WATER LEVEL:** DISCONNECT POWER TO THE HEATER IF INSUFFICIENT WATER OR OVER TEMPERATURE.  
**SAFETY LID:** PREVENTS THE LID BEING OPENED IF THE CHAMBER IS UNDER PRESSURE.  
**SAFETY INSULATION:** THERMALLY INSULATED LID .

### An economic alternative, semi-automatic

#### FEATURES

External case made from stainless steel.  
INCOLOY stainless steel heater elements, hard waring, resistant to corrosion and high temperatures.  
RS-232 connection.  
External lateral probe port.  
Sterilization chamber and door made from stainless steel.  
Automatic purge to atmosphere

#### CONTROL PANEL



1. Pressure gauge.
2. Illuminated alarm indicator.
3. Illuminated indicator door open
4. Temperature display.
5. Time display
6. Temperature set pushbutton (range from 115 °C to 134 °C).
7. Pushbutton increase value.
8. Push button START
9. Push Button STOP
10. Push button Reduce value.
11. Push button select time, (range from 3' to 99').
12. Push button open lid.
13. Devaporization pushbutton.



#### MODELS

	Part No.	Capacity litres	Ø Height (usables cm)	Height / Width / Depth (exterior cm)	Power W	Weight Kg
PRESOCLAVE III 50	4001758	50	30 70	117 48 62	3600	75
PRESOCLAVE III 80	4001759	80	40 62	119 58 72	3600	100

Does not include baskets and drums, order separately.

#### ACCESSORIES: AISI 304 Stainless steel wire baskets and drums.

For Presoclave III 50, Part. no: 4001758.

Capacity, 3 baskets Ø 25 and 20 cm. height. Part No. **1000495**

For Presoclave III 80, Part. no: 4001759.

Capacity, 2 baskets Ø 44 and 22 cm height. Part No. **1000780**

Sterilization drum made from AISI 304 stainless steel.

For Presoclave III 50, Part. no: 4001758.

Capacity, 3 drum Ø 25 and 18 cm. height. Part No. **1002418**

For Presoclave III 80, Part. no: 4001759.

Capacity, 2 drum Ø 35 and 27 cm. height. Part No. **1002419**

#### Detergent Bio-Sel.

Water distillation unit especially for autoclaves.

Purge microfilter. Part No. **4001221**

Printer of continuous paper roll with print out of temperature, time and mode. Part No. **4120113** (see page 64).

#### BACK VIEW:



1. Safety valve.
2. Mains power.
3. Safety thermostat
4. Steam discharge and drainage outlet

#### COMPLEMENTS That needs to be factory installed:

Pt100 second sensor only temperature reader. Part No. **4001219** (see page 63).  
Loading and unloading crane. Part No. **1002426** (see page 61).



# Autoclaves for sterilization “Presoclave PLUS” 50, 80 and 150 litres.



MICROPROCESSOR TEMPERATURE AND CYCLE CONTROL AND ATMOSPHERIC PURGE.  
ELECTRONIC CONTROL OF TIME AND TEMPERATURE RANGE FROM 115 °C TO 134 °C. (0.62 TO 2 bar).  
CONFORMS TO APPARATUS PRESSURE REGULATION DIRECTIVES.  
PROCESS REGISTRATION AND DOWNLOAD VIA USB. VERTICAL MODEL: 50, 80 AND 150 LITRES.

### SAFETY:

- SAFETY OVER PRESSURE VALVE:** PREVENTS OVER PRESSURE ABOVE THE MAXIMUM SET LIMIT.
- SAFETY PRESSURE SWITCH:** DISCONNECTS POWER TO THE HEATER IF THE UNIT EXCEEDS THE MAXIMUM PRESSURE LIMIT.
- SAFETY THERMOSTAT AND WATER LEVEL:** DISCONNECT POWER TO THE HEATER IF INSUFFICIENT WATER OR OVER TEMPERATURE.
- SAFETY LID:** PREVENTS THE LID BEING OPENED IF THE CHAMBER IS UNDER PRESSURE.
- SAFETY INSULATION:** THERMALLY INSULATED LID .

## An economic semi-automatic alternative

### FEATURES

- External case made from stainless steel.
- INCOLOY stainless steel heater elements, hard waring, resistant to corrosion and high temperatures.
- Process registration and download via usb.
- External lateral probe port (only models 50 and 80 litres).
- Sterilization chamber and door made from stainless steel.
- Automatic purge to atmosphere.
- 10 programs configurable by the user.

### CONTROL PANEL

1. TFT touch screen with virtual push buttons.
2. Pressure gauge.
3. Push button open lid.



MODELS	Part No.	Capacity litres	Ø Height (usables cm)	Height / Width / Depth (exterior cm)	Power W	Weight Kg
PRESOCLAVE III 50	4001770	50	30 70	117 48 62	3600	75
PRESOCLAVE III 80	4001771	80	40 62	119 58 72	3600	100
PRESOCLAVE II 150	*4001772	150	50 70	118 80 95	7500	225

Does not include baskets and drums, order separately. Part No. 4001772 due to its consumption is manufactured for three-phase current at 230 V or 400 V to be specified.



### ACCESSORIES: AISI 304 Stainless steel wire baskets and drums.

- For Presoclave III 50 Plus, Part. no: 4001770.  
Capacity, 3 baskets Ø 25 and 20 cm. height. Part No. **1000495**
- For Presoclave III 80 Plus, Part. no: 4001771.  
Capacity, 2 baskets Ø 36 and 28 cm. height. Part No. **1000496**
- For Presoclave II 150 Plus, Part. no: 4001772.  
Capacity, 2 baskets Ø 44 and 22 cm height. Part No. **1000780**
- Sterilization drum made from AISI 304 stainless steel.
- For Presoclave III 50 Plus, Part. no: 4001770.  
Capacity, 3 drum Ø 25 and 18 cm. height. Part No. **1002418**
- For Presoclave III 80 Plus, Part. no: 4001771.  
Capacity, 2 drum Ø 35 and 27 cm. height. Part No. **1002419**
- Detergent Bio-Sel.**
- Water distillation unit** especially for autoclaves.
- Purge microfilter.** Part No. **4001221**
- Loading and unloading crane.** Part No. **1002426** (see page 61).



### BACK VIEW:

1. Safety valve.
2. Mains power.
3. Safety thermostat
4. Steam empty valve and Drain selector valve.
5. USB connector.

**COMPLEMENTS** That needs to be factory installed:  
**Pt100** second sensor only temperature reader. Part No. **4001219** (see page 63).  
**Printer** of continuous paper roll with print out of program, temperature, pressure, time and phase. Part No. **4002417**



# Autoclaves for sterilization "Autester ST DRY PV III"

**MICROPROCESSOR PROCESS CONTROL.**  
**AUTOMATIC VACUUM DRY AND PURGE "PREVACUUM"**  
**PROGRAMMABLE TEMPERATURE FROM 105 °C TO 134 °C (0.21 TO 2 bar).**  
**CONFORMS TO APPARATUS PRESSURE REGULATION DIRECTIVES.**  
**VERTICAL FLOOR STANDING MODEL: 50, 80 AND 150 LITRES.**



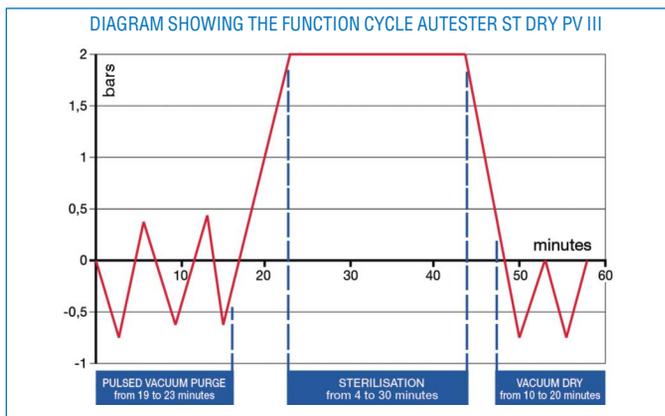
CONFORMITY	
EN 61010-1	SAFETY FOR EQUIPMENT FOR LABORATORY USE
EN 61010-2-040	SAFETY FOR STERILIZER EQUIPMENT FOR LABORATORY USE
EN 61326	ELECTROMAGNETIC COMPATIBILITY FOR EQUIPMENT FOR LABORATORY USE.

## FEATURES

- Stainless steel exterior and top.
- Stainless steel lid.
- Lid, six closure point system.
- Pulsed vacuum system and atmosphere purge.
- External steam generator (except 150 litres autoclave).
- Water reservoir for clean water for the steam generator boiler.
- External water connection if required.
- 6 function modes.
- RS 232 for PC parameters printing (back side).
- Printer output.
- USB output for PEN-DRIVE data logging.
- Connection for a second temperature sensor.
- 10 customer set programs.
- Lateral external probe port (except 150 litres autoclave).

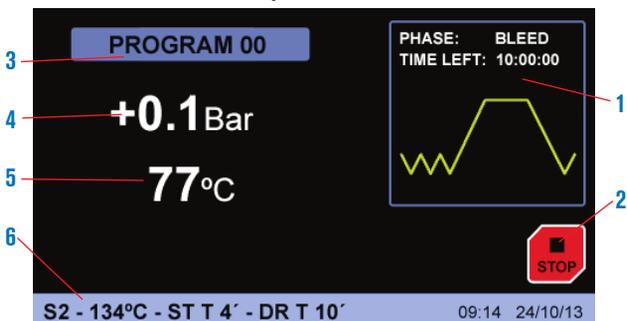
## SAFETY

- Safety:** The lid cannot be opened if the chamber is under pressure.
- Safety valve:** Prevents over pressure over the maximum limit.
- Safety pressure switch:** switches the heater power off to if over pressure.
- Safety Lid:** insulated lid protection.



## CONTROL PANEL

TFT touch screen with virtual pushbuttons.



- Graphical representation of real time process
- Start/Stop virtual pushbutton.
- Running program.
- Press indicator.
- Temperature indicator.
- Running program parameters.



## BACK VIEW

- Mains input.
- External water supply.
- Safety valve.
- Vacuum vapour valve.
- Air in filter valve.
- Safety thermostat.
- Safety thermostat.
- Empty tank valve.
- Drain tank valve.
- RS232 connector.
- USB connector.

## MICROPROCESSOR FEATURES

The microprocessor controls the performing of the air extraction process, sterilizing and drying, executing the selected procedures and commands by the user, adjusting the following parameters:

- Sterilization temperature from 105°C up to 134°C.
- Sterilization time from 3' to 59'.
- Drying time from 20' to 60'.
- Up to 10 user-configurable programs.
- Six operating modes:
  - Solid 1 - Solid 2 fractions. - Solid 3 fractions -
  - Drying - Liquids - Liquids 2 probes
- Verification test
- Vacuum - Bowie Dick.
- Settings:
  - Units - languages (Spanish, English, French).
  - Printer module On/Off. - Clock: date/time.
- External water: on/off.
- Password for configuration.
- Calibration (adjustment offset)
- Temperature probe 1 - Temperature probe 2
- Water dosing. - Pressure
- Audible and visual alarm for overtemperature and insufficient temperature.
- Network failures detection and memorization
- Safety thermostat by software
- Sterilization cycles data logging with capacity for over 500 cycles.
- Internal cleaning program
- Graphical representation of real time process



Error messages of functions and program execution are displayed and an acoustic alarm sounds. The vapour generator automatically cuts out.

### MESSAGES:

- |                     |                           |                      |
|---------------------|---------------------------|----------------------|
| 1. E 2PROM          | 7. VACUUM                 | 13. LEVEL 1          |
| 2. RTC FAULT        | 8. PRESSURE               | 14. LEVEL 2          |
| 3. SENSOR PRECISION | 9. BOILER TEMPERATURE     | 15. DOOR             |
| 4. HEATER PROBE     | 10. TEMPERATURE LOW FAULT | 16. PRINTER NO PAPER |
| 5. CHAMBER PROBE    | 11. INPUT ERROR           | 17. PAPER JAM        |
| 6. OVER PRESSURE    | 12. STERILIZATION         | 18. ELECTRICAL FAULT |

### MODELS

	Part No.	Dry	Capacity litres	Ø / Height (usables) cm	Height / Width / Depth (exterior) cm	Temp. °C	Water Reservoir H <sub>2</sub> O capacity.	Basket size	Power W	Weight Kg
<b>AUTESTER ST DRY PV III 50</b>	<b>4002516</b>	Yes	50	30 63	117 48 62	105 to 134	10	3	3000	108
<b>AUTESTER ST DRY PV III 80</b>	<b>4002519</b>	Yes	80	40 60	119 58 72	105 to 134	10	2	4850	136
<b>AUTESTER ST DRY PV III 150*</b>	<b>4002518</b>	Yes	150	50 70	118 80 95	105 to 134	20	3	7500*	250

Comes without baskets and drums.\* The part number 4002518 due to its power rating is only manufactured for three phase 230V or 400V. Specify preference when ordering.

### COMPLEMENTS: Factory fitted options.



**Printer** of continuous paper roll with print out of program, temperature, pressure, time and phase. Part No. **4002417**  
**Pt100 Sensor** (See page 63).

### COMPLEMENTS FOR "PRESOCLAVE III", "PRESOCLAVE PLUS" AND "AUTESTER ST DRY PV III"

#### Loading and unloading crane

Baskets elevator for loading and unloading of autoclaves of 50, 80 and 150L  
 With adapter for handling baskets without deforming.  
 Axial rotation for placing baskets to a trolley.  
 Total lift height: 2.35 m (autoclave assembled)  
 Bottom part made of epoxy coated steel and upper part made of stainless steel.  
 Maximum crane load: 40 Kg.  
 Power: 230V 300W  
 UP/DOWN pushbutton.  
 Part No: **1002426**



### PARAMETERS AND PROGRAMS PRE INSTALLED IN THE AUTOCLAVE MICROPROCESSOR

(Note: All these parameters are adjustable by the user)

Nº Programme	Description	Temperature Sterilization	Time Sterilization	Time Dry	Purge
0	Free	-	-	-	-
1	Unwrapped instruments	134 °C	4 min	15 min	2 (1)
2	Wrapped instruments	134 °C	12 min	30 min	3 (2)
3	CJD	134 °C	20 min	20 min	3 (2)
4	Delicate unwrapped	121 °C	15 min	15 min	2 (1)
5	Delicate wrapped	121 °C	30 min	30 min	3 (2)
6	Disinfecting	105 °C	25 min	15 min	1 (3)
7	Liquids	121 °C	30 min	-	1 (3)
8	Solids	121 °C	15 min	30 min	1 (3)
9	Solids	134 °C	4 min	30 min	1 (3)

(1) Double Vacuum purge. (2) Triple Vacuum purge.

(3) Atmospheric purge (No vacuum).

### ACCESSORIES: AISI 304 Stainless steel wire baskets and drums.

For **Autester ST DRY PV-II 50**, Part No: 4002516.  
 Capacity, 3 baskets Ø 25,5 and 20 cm. height. Part No: **1000495**  
 For **Autester ST DRY PV-II 80**, Part No: 4002519.  
 Capacity, 2 baskets Ø 36 and 28 cm. height. Part No: **1000496**  
 For **Autester ST DRY PV-II 150**, Part No: 4002518.  
 Capacity, 3 baskets Ø 44,5 and 22 cm. height. Part No: **1000780**  
 Sterilization drum made from AISI 304 stainless steel.  
 For **Autester ST DRY PV-II 50**, Part No: 4002516.  
 Capacity, 3 drum Ø 25 and 18 cm. height. Part No: **1002418**  
 For **Autester ST DRY PV-II 80**, Part No: 4002519.  
 Capacity, 2 drum Ø 35 and 27 cm. height. Part No: **1002419**  
**Detergent Bio-Sel.** (see page 63)  
**Water distillation** unit especially for autoclaves. (see page 63).  
**Purge microfilter.** Part No. **4001221**



# Culture media autoclave preparer “Med 40 CLT”

CONTROL OF PROCESSES BY MICROPROCESSOR.  
FOR ADJUSTABLE TEMPERATURES FROM 105°C TO 125°C.  
VERTICAL MODEL CAPACITY: 40 LITRES



STANDARD	
EN 61010-1	SAFETY REQUIREMENTS FOR LABORATORY USE EQUIPMENTS.
EN 61010-2-040	SAFETY REQUIREMENTS FOR LABORATORY USE EQUIPMENTS. STERILIZERS.
EN 61326	REQUIREMENTS FOR ELECTROMAGNETIC COMPATIBILITY OF LABORATORY EQUIPMENTS.

### APPLICATIONS

Ideal for the operative workflow in microbiology and in tissue culture laboratories. Preparation, sterilization and dispensing culture media is integrated in a single autoclave. High efficiency system in heating, cooling and chamber agitation.

### FEATURES

- Stainless steel outer casing.
- Tank and cover in stainless steel.
- USB output for data recording in PEN-DRIVE.
- 50 programs totally configurable by the user.
- Dosage per peristaltic pump.
- Dosage control by a pedal.
- Magnetic stirrer for internal stirring with PTFE rod.
- Agitation speed adjustment (50-200 rpm).
- Filler for dosage additive.
- Temperature control by water probe and by product probe.

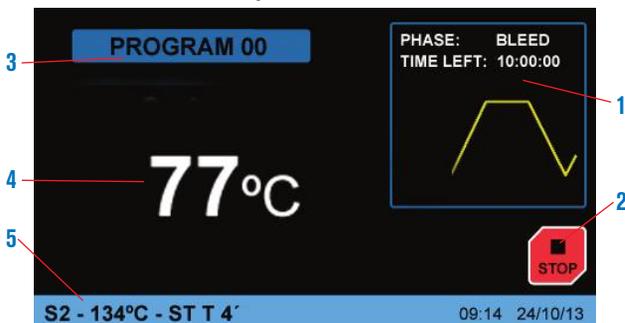
### SAFETY

- Safety:** The lid cannot be opened if the chamber is under pressure.
- Safety valve:** Prevents over pressure over the maximum limit.
- Safety pressure switch:** switches the heater power off to if over pressure.
- Safety Lid:** insulated lid protection.



### CONTROL PANEL

TFT touch screen with virtual push buttons.



- Graphical representation of processes in real time
- Start/Stop button.
- Program in execution.
- Temperature indicator.
- Parameters of the program in execution

Available from July 2020

### MODEL

Part No.	Capacity litres	Ø	Height (useful) cm	Height /Width / Depth (exterior) cm	Power W	Weight Kg
4002000	40	20	45	117 50 65	6000 III phase	95

**COMPLEMENTS** that must be installed at the factory:  
**Printer** on continuous paper with indication of temperature, time and mode. Part number **4002417** (See page 61)

**OPTIONS:** for vertical autoclaves, need to be factory fitted.



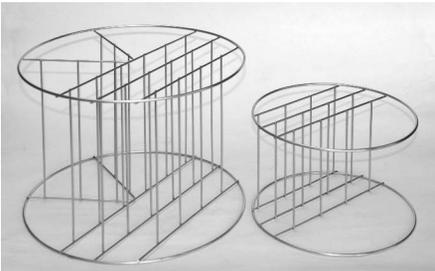
**Pt 100 Sensor.** 2<sup>nd</sup> Probe for reading sample temperature.

To guarantee in all circumstances that the system has completed the cycle to the set time and temperature parameters, the Autester ST DRY PV III autoclave can be installed with a temperature probe that can be placed within the culture flask, residual packets etc.

When the probe is connected to the controller of the autoclave, it must be selected in settings, whereby the real time temperature values detected by the probe, are displayed and printed.

For autoclaves PRESOCCLAVE III and PRESOCCLAVE PLUS this Pt100 sensor only reads the temperature with an external thermometer. Part No. **4001219**

**ACCESSORIES FOR VERTICAL AUTOCLAVES**



AISI 304 stainless steel wire baskets.

Part No.	Ø	Height cm	Suitable for autoclaves Part No.	Number of baskets
<b>1004771</b>	22	14	<b>4001745</b>	<b>1</b>
<b>1004772</b>	22	24	<b>4001756</b>	<b>1</b>
<b>1004773</b>	23	17	<b>4001757</b>	<b>2</b>
<b>1000495</b>	27	20	<b>4001758 - 4001770 - 4002516</b>	<b>3</b>
<b>1000496</b>	36	28	<b>4001759 - 4001771 - 4002519</b>	<b>2</b>
<b>1000780</b>	44	22	<b>4001772 - 4002518</b>	<b>3</b>
<b>1000490*</b>	26	19	<b>4001758 - 4001770 - 4002516</b>	<b>3</b>
<b>1000491*</b>	36	26	<b>4001759 - 4001771 - 4002519</b>	<b>2</b>
<b>1000492*</b>	47	20	<b>4001772 - 4002518</b>	<b>3</b>

\*AISI 304 stainless steel blind baskets.

AISI 316 stainless steel wire dividers for autoclave baskets.

Part No.

**1001217** 4 divider compartments for basket part no. 1000495.

**1001218** 6 divider compartments for basket part no. 1000496.

**1001222** 7 divider compartments for basket part no. 1000780.

**Sterilization Drums.**

Código	Ø	Height cm	Suitable for autoclaves Part No.	Capacity Drums
<b>1002418</b>	25	18	<b>4001758 - 4001770 - 4002516</b>	<b>3</b>
<b>1002419</b>	35	27	<b>4001759 - 4001771 - 4002519</b>	<b>2</b>
<b>1002420</b>	28	18	<b>Not suitable for our autoclaves.</b>	

**Water distiller, specially for autoclaves “DEST-4”.**

Distillation capacity: 1.2 litres/hour. Internal capacity 4 litres.

Case made from thermo resistant plastic.

Internal stainless steel.

Cooling by forced air through a condenser. Without glass heater elements.

Easy to use. Safety cut out system if over temperature due to insufficient water.

Comes complete with a 4 litre three way dispenser plastic bottle with filter.

Note: for daily use it is recommended to change the filter every 3 months.



Part No.	Capacity Distillation litre/Hour	Conductivity µs/cm	Ø	Height cm	Power W	Weight Kg
<b>4001729</b>	<b>1.2</b>	<b>5</b>	<b>29</b>	<b>39</b>	<b>750</b>	<b>3.5</b>

**Spare:** Dispenser spout with filter. Part No. **4001730**

**Detergent “BIO-SEL”**

We recommend the use of BIO-Sel detergent for cleaning, it is also biodegradable and free from Phosphates.

Part No.

**1000025** Capacity 1 litre.

**1000026** Capacity 4 litres.

**1000852** Box of 12 x 1 litre flasks.

**1000853** Box of 4 x 4 litre flasks.



# Autoclave for liquids and solids sterilization "Autester ST DRY PV III" 25

CAPACITY: 25 LITRES. SPACE FOR 12 BOTTLES OF 250 ML, 9 OF 500 ML, 3 OF 1000 ML AND 2 OF 2000 ML.  
CONFORMS TO THE REGULATION - 2014/68/EU EQUIPMENT UNDER PRESSURE.



**Complete selection of programs. Displays in English - Spanish - French.**

## FEATURES

- Sterilization chamber and lid made from AISI 304 stainless steel.
- External case epoxy coated.
- Digital control of all autoclave operations.
- TFT 3,5" touch screen .
- Air filter, purifies air before entering in the sterilization chamber.
- Separate clean water reservoir and waste water.
- RS-232 Interface output of parameters to a computer or for printer.
- USB output for PEN-DRIVE data logging.

## SAFETY

- Safety valve.
- Prevents the door being opened if under pressure or high temperature is produced.
- Temperature safety thermostat.
- Door closed correctly detector
- Thermally protected lid.

## MICROPROCESSOR FUNCTIONS

Controlled parameters are:

- Sterilization temperature from 105°C up to 134°C.
- Sterilization time from 3' to 59'.
- Drying time from 20' to 60'.
- Up to 10 user-configurable programs.
- Six operating modes:
  - Solid 1 - Solid 2 fractions. - Solid 3 fractions - Drying - Liquids - Liquids 2 probes
- Verification test
- Vacuum - Bowie Dick.
- Settings:
  - Units - languages (Spanish, English, French). - Printer module On/Off. - Clock: date/time.
  - Password for adjustment.
  - Calibration.
  - Temperature probe 1 - Temperature probe 2 - Water dosing - Presion.
- Audible and visual alarm for overtemperature and insufficient temperature.
- Network failures detection and memorization.
- Safety thermostat by software.
- Sterilization cycles data logging with capacity for over 500 cycles.
- Internal cleaning program.
- Graphical representation of real time process.



MODEL	Part No.	Capacity litres	Ø/Depth (usables) cm	Height/Width/Depth (exterior) cm	Power W	Weight Kg
AUTESTER ST DRY PV III 25	4002420	25	30 35	58 46 59	2510	52



Comes complete with three trays, extractor forceps, and additional support for instruments and sterile wrapping bags.

## PARAMETERS AND PROGRAMS PRE INSTALLED IN THE AUTOCLAVE MICROPROCESSOR

(Note: All these parameters are adjustable by the user)

Nº Programme	Description	Temperature Sterilization	Time Sterilization	Time Dry	Purge
0	Free	-	-	-	-
1	Unwrapped instruments	134 °C	4 min	15 min	2 (1)
2	Wrapped instruments	134 °C	12 min	30 min	3 (2)
3	CJD	134 °C	20 min	20 min	3 (2)
4	Delicate unwrapped	121 °C	15 min	15 min	2 (1)
5	Delicate wrapped	121 °C	30 min	30 min	3 (2)
6	Disinfecting	105 °C	25 min	15 min	1 (3)
7	Liquids	121 °C	30 min	-	1 (3)
8	Solids	121 °C	15 min	30 min	1 (3)
9	Solids	134 °C	4 min	30 min	1 (3)

- (1) Double Vacuum purge.
- (2) Triple Vacuum purge.
- (3) Atmospheric purge (No vacuum).

## MESSAGES:

- |                       |                           |
|-----------------------|---------------------------|
| 1. E 2PROM            | 10. TEMPERATURE LOW FAULT |
| 2. RTC FAULT          | 11. INPUT ERROR           |
| 3. SENSOR PRECISION   | 12. STERILIZATION         |
| 4. HEATER PROBE       | 13. LEVEL 1               |
| 5. CHAMBER PROBE      | 14. LEVEL 2               |
| 6. OVER PRESSURE      | 15. DOOR                  |
| 7. VACUUM             | 16. PRINTER NO PAPER      |
| 8. PRESSURE           | 17. PAPER JAM             |
| 9. BOILER TEMPERATURE | 18. ELECTRICAL FAULT      |

## CONTROL PANEL

TFT touch screen with virtual pushbuttons.



1. Graphical representation of real time process
2. Start/Stop pushbutton.
3. Running program.
4. Press indicator.
5. Temperature indicator.
6. Running program parameters.

## ACCESSORIES

**Ink Printer** (no thermal).  
Paper size 2 1/4" (56 mm) wide.  
Includes communications and power cable.

### Model

Part No.	Height/Width/Depth cm	Power	Weight Kg
4120113	4 16 10	DC 5V 3A	1



**Water distiller** especially for Autoclaves. (See page 63).

**Bag sealers** (See page 68 and 69).

**Special tray** for bottles of 0.25, 0.5, 1 or 2 litres. Part No. **4002416**



## Autoclave for sterilization "Autester ST DRY PV" Class B

AUTOMATIC VACUUM DRY AND PURGE.  
PROGRAMS TO 121 °C AND 134 °C (1 AND 2 bar).  
MODEL HORIZONTAL. CAPACITY: 12, 18, AND 23 LITRES.



### APPLICATIONS

"Class B" autoclaves are used within the field of general medicine, dentistry, veterinary, tattoo parlours and sterilization applications in general, to sterilize any material that could have been in contact with body fluids including blood.

The general capabilities of the instrument are regulated by EN 13060 that guarantees the differing sterilization applications.

The normal processes include: Solids with and without wrapping, porous material with and without wrapping and utensils that have cavities and holes (e.g. dentistry materials.)

To guarantee sterilization of these materials the "AUTESTER ST DRY PV" Class B, autoclaves, have an efficient staged vacuum, that performs a complete extraction of air that allows penetration of the steam vapour.

The same vacuum system is used to obtain the dry phase, which is required for perfect storage of sterilized materials.

The "AUTOCLAVES ST DRY PV" Class B includes verification and validation programs.

### CONFORMITY:

EN 13060	SMALL GENERAL PURPOSE STEAM STERILIZERS.
EN 61010-1	EQUIPMENT SAFE FOR LABORATORY USE.
EN 61010-2-040	SAFETY FOR STERILIZER EQUIPMENT FOR LABORATORY USE
EN 61326	ELECTROMAGNETIC COMPATIBILITY FOR EQUIPMENT USED IN THE LABORATORY.

### SAFETY:

SAFETY VALVE:	PREVENTS THE PRESSURE EXCEEDING THE MAXIMUM SET LIMIT.
SAFETY THERMOSTAT:	DISCONNECTS THE HEATER AGAINST OVER TEMPERATURE OR LOW WATER IN THE RESERVOIR.
	THERMALLY INSULATED LID.

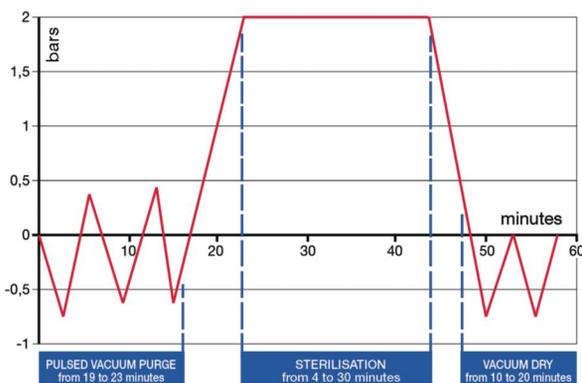


12 litres



18 and 23 litres

DIAGRAM SHOWING THE FUNCTION CYCLE AUTESTER ST DRY PV



**Staged fractional vacuum:** Extracts air from the load that permits absolute steam vapour penetration.

**Sterilization stage:** Sterilization within the time and temperature selected.

**Dry cycle:** Extracts the humidity from the load leaving it suitable for storage.



# Autoclave for sterilization Autester "ST DRY PV" 12 Class B

CAPACITY: "ST DRY PV": 12 LITRES.



**According to directive: 2014/68/UE equipment under pressure, 3.3.**

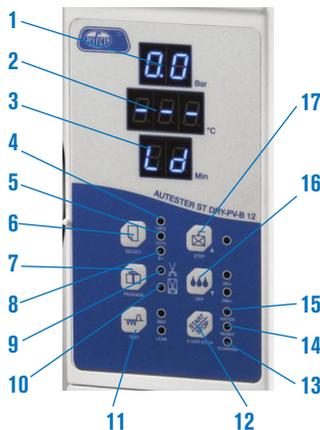
## FEATURES

- Stainless steel internal chamber.
- Staged vacuum purge.
- Dry by vacuum
- Incorporated steam generator.
- Water reservoir to supply the chamber
- High vapour penetration of porous material
- Used in digestive studies, ophthalmology, operating theatres etc .

## SAFETY

- Safety valve.** Prevents over pressure over the maximum working limit.
- Safety thermostat.** Disconnects power to the heater if over temperature or low water in the reservoir.
- Thermally protected lid.**

## CONTROL PANEL



**NEW DESIGN**

### TEMPERATURE CONTROL AND AUTOMATIC MICROPROCESSOR CYCLE.

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| 1. Pressure indicator (bar).      | 10. Solids (Wrapped).               |
| 2. Temperature indicator (°C).    | 11. Test.                           |
| 3. Time Indicator (min.).         | 12. Preheating.                     |
| 4. 121 °C.                        | 13. Sterilization cycle in process. |
| 5. 134 °C.                        | 14. Autoclave ready for operation.  |
| 6. Program selection.             | 15. Low level water indicator.      |
| 7. Select wrapped or non wrapped. | 16. Fast dry (1 or 5 minutes).      |
| 8. Textile materials.             | 17. "Maintain hot" the chamber.     |
| 9. Solids (Not wrapped).          |                                     |

CYCLES	134 °C Wrapped	134 °C Not Wrapped	121 °C Wrapped	121 °C Not Wrapped	Textiles	Test Bowie Dick	Test Vacuum
Sterilization Temperature	134 °C	134 °C	121 °C	121 °C	134 °C	134 °C	-
Sterilization pressure	2.1 bar	2.1 bar	1.1 bar	1.1 bar	2.1 bar	-	2.1 bar
Vacuum purge time	8 min.	4 min.	8 min.	4 min.	8 min.	-	-
Sterilization time	12 min.	4 min.	30 min.	20 min.	12 min.	3.5 min.	10 min.
Dry time	10 min.	10 min.	10 min.	10 min.	15 min.	1 min.	-

MODEL	Part No.	Capacity litres	Ø / Depth cm		External dimensions cm			Trays dimensions cm			Power W	Weight kg
			Height	Width	Height	Width	Depth	Height	Width	Depth		
AUTESTER ST DRY PV B 12	4001737	12	20	35	39,2	48,7	60	1,8	14	29,5	1800	42,2



Comes complete with: spare joint, door adjustment key, support with three trays, extractor forceps, empty water filter and waste water out.

## ACCESSORIES

### Thermal Printer.

Paper size 2 1/4" (56 mm) wide.  
Includes communications and power cable.  
Power: DC 5V 3A  
Part No: **4120123**

**Water distiller** especially for Autoclaves. (See page 63).

**Bag sealers** (See page 68 and 69).





# Autoclave for sterilization "Autester ST DRY PV" 18 Class B "ST DRY PV" 23 Class B



CAPACITY: "ST DRY PV" 18: 18 LITRES. "ST DRY PV" 23: 23 LITRES..

**According to directive: 2014/68/UE equipment under pressure, 3.3.**

## FEATURES

- Digital electronic control.
- Stainless steel internal chamber.
- Staged vacuum purge.
- Dry by vacuum
- Incorporated steam generator.
- Water reservoir to supply the chamber
- High vapour penetration of porous material
- Used in digestive studies, ophthalmology, operating theatres etc.
- Automatic or manual filling of the water tank.
- Printer interface.
- USB connection for parameters memorization (software included).

## SAFETY

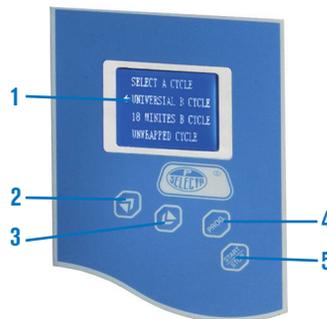
- Mechanism door lock**, prevents the door being opened accidentally.
- Safety valve**. Prevents over pressure over the maximum working limit.
- Safety thermostat**. Disconnect power to the heaters if over temperature or low water in the reservoir are produced.
- Thermally insulated lid**.
- Dirty water tank full alarm**.



TEMPERATURE CONTROL AND AUTOMATIC MICROPROCESSOR CYCLE.

## CONTROL PANEL

- LCD screen.
- Push button increase parameters.
- Push button decrease parameters.
- Push button menu.
- Push button Start-Stop.



CYCLES	134 °C Emergency	134 °C Solid	134 °C Hollow	134 °C Sanguinary	121 °C Solid	121 °C Hollow	134 °C Glass	121 °C Tampon	134 °C Bowie Dick	134 °C Helix	134 °C User-defined	Test Vacuum
Sterilization Temperature	134 °C	134 °C	134 °C	134 °C	121 °C	121 °C	134 °C	121 °C	134 °C	134 °C	134 °C	-
Sterilization pressure	2,1 bar	2,1 bar	2,1 bar	2,1 bar	1,1 bar	1,1 bar	1,1 bar	1,1 bar	2,1 bar	2,1 bar	-	-
Vacuum purge number	1	1	4	3	1	3	1	3	3	3	3	-
Sterilization time	4 min.	4 min.	4 min.	18 min.	20 min.	20 min.	4 min.	30 min.	3,5 min.	3,5 min.	4 min.	-
Dry time	8 min.	4 min.	10 min.	10 min.	8 min.	10 min.	4 min.	18 min.	3min.	3 min.	3 min.	-

MODEL	Part No.	Capacity litres	Ø / depth cm	External dimensions cm			Trays dimensions cm			Power W	Weight kg
				Height	Width	Depth	Height	Width	Depth		
AUTESTER ST DRY PV 18	4001734	18	24,5 38	40	47	56	2	20,5	28	1500	46,6
AUTESTER ST DRY PV 23	4001735	23	24,5 48	40	47	67	2	20,5	38	1700	48



Comes complete with: spare joint, door adjustment key, support with three trays, extractor forceps, empty water filter and waste water out.

## ACCESSORIES

- Ink Printer** (no thermal).  
Paper size 2 1/4" (56 mm) wide.  
Includes communications and power cable.  
Power: DC 5V 3A  
Part No: **4120124**
- Water distiller** especially for Autoclaves. (See page 63).
- Bag sealers** (See page 68 and 69).





## Bag sealer "S-400-B"

SUITABLE FOR POLYPROPYLENE-POLYESTER STERILISING BAGS WITH A PAPER BASE.

NEW DESIGN

### FEATURES

Front part made of metal epoxy covered case.  
Pressure sealer. Manual cut.

### CONTROL PANEL

Illuminated mains switch.

### MODEL

Part No.	Seal Width mm	Maximum seal length mm	Height / Width / Depth (exterior) cm	Power W	Weight Kg
4100047	12	300	17,5 47 35	100	4.8



## Bag sealer "Seal-1000"

FOR POLYPROPYLENE AND POLYESTER BAGS WITH A STERILE PAPER BASE.

### FEATURES

Metal construction with stainless steel tray.  
Pressure sealer unit with lateral lever with two bilateral cutting edges.  
Constant sealing temperature (from 180 °C and 200 °C).

External support for rolls of up to 240mm wide, with adjustable separator sides to accommodate different roll sizes.

### CONTROL PANEL

Illuminated start switch.  
Indicator, optimum seal temperature.

Part No.	Seal width mm	Maximum seal length mm	Height / Width / Depth (exterior) cm	Power W	Weight Kg
4101712	10	260	30 36 43	400	6.5



## Automatic bag sealer "Seal-Com 2"

ACCORDING TO DIN 58953 SECTION 7 STANDARD. FOR POLYPROPYLENE-POLYESTER BAGS WITH PAPER BASE TO STERILIZE. CONTINUOUS SEALING. MANUAL OR AUTOMATIC ADVANCE.

### Continuous Thermosealer

NEW DESIGN

### FEATURES

Exterior in enamel protected steel.  
Heating time: 4".  
Sealing width: 10 mm.  
Sealing speed: 6 m / min.  
Acoustic signal of cycle starting.  
Electronic regulation and digital reading of temperature.

### CONTROL PANEL

Start-up light switch.  
Manual or automatic start switch.

### MODEL

Part No.	Height / Width / Depth (sealer) cm	Power W	Weight Kg
4100044	16 48 26	720	13





## Automatic bag sealer with printer "Seal-Com 3"

ACCORDING DIN 58953 SECTION 7 STANDARD. FOR SEALING STERILE PAPER, POLYPROPYLENE-POLYESTER BAGS. SPECIAL FOR A LARGE AMOUNT OF BAGS SEALING.

NEW

### FEATURES

Exterior made from AISI 304 stainless steel, ideal for sealing plastic paper bags, solid plastic paper and only paper bags.

Heating time: 4 minutes.

Seal width: 12 mm.

Sealing speed: 10 m/min.

Acoustic sign of cycle starting.

Temperature touch control from 60 to 220°C.

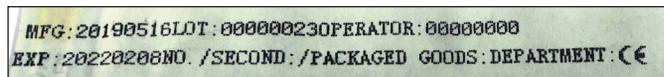
### CONTROL PANEL

LCD touch screen 7" indicating:

- Setpoint temperature and actual temperature.
- Date and time (automatic date change).
- Print size.

### PRINTING

Print sterilization date, expiration date, sterilization lot, name of the operator, name of the item and department.



### MODEL

Part No.	Height / Width / Depth (sealer) cm	Power W	Weight Kg
<b>4100049</b>	22 56 26	500	20

### ACCESSORIES

#### Roller table

Measures cm: 74.5 width x 28.6 depth x 5.2 height.

Part No. **4100053**



### SEALING MACHINE ACCESSORIES

#### Rolls of paper for sterilization "Polisteril"

Paper base polypropylene and polyester bags showing differing ink prints of sterilized items.

Part No.	Bag width cm	Bag length m
<b>4100075</b>	7,5	100
<b>4100100</b>	10	100
<b>4100200</b>	20	100



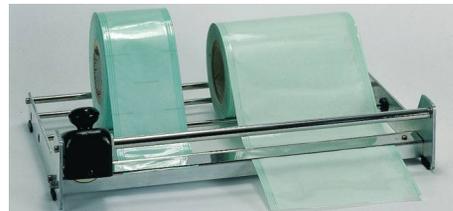
#### Sterile paper "Policort" trimmer

Completely made of metal with back and reel support, for a capacity of 2 x 200mm or 4 x 100 mm wide reels. Circular cutting knife edge.

Measurements: 13 high x 51 wide x 32 cm deep.

Weight: 2.8 Kg.

Part No. **4100045**



#### Date stamping machine for sterile bags.

Part No. **4100046**

STERILIZED  
30 OCTOBER 2022  
VALID FOR 3 MONTHS.



**OPTIONS:** Ultrasonic cleaning baths for dentistry, "Ultrasons-Digit" (see page 94). Dry sterilizer "DRYTIME" poupinel oven (see page 136).

### ACCESSORIES FOR AUTOCAVES

#### Mercury-free thermometer for recording autoclave's temperature.

It indicates the highest temperature reached by the autoclave to verify its correct operation.

AISI 304 stainless steel made body and glass lens resistant to humidity, pressure and high temperatures.

Range: -20/150°C. Accuracy: ± 2°C.

Part number **1097101** Without calibration.

Part number **1097102** With individual calibration report at 121°C.

