



# Autoclaves for sterilisation "Autester ST DRY PV II"

**MICROPROCESSOR TEMPERATURE AND CYCLE CONTROL AND PULSED VACUUM PURGE SYSTEM.**  
**AUTOMATIC VACUUM DRY AND PURGE "PREVACUUM"**  
**PROGRAMMABLE TEMPERATURE FROM 105 °C TO 134 °C (0.21 TO 2 bar).**  
**CONFORMS WITH THE CURRENT REGULATIONS FOR PRESSURE VESSELS.**  
**VERTICAL FLOOR STANDING MODEL: 30, 50, 75 AND 140 LITRES.**



### CONFORMITY

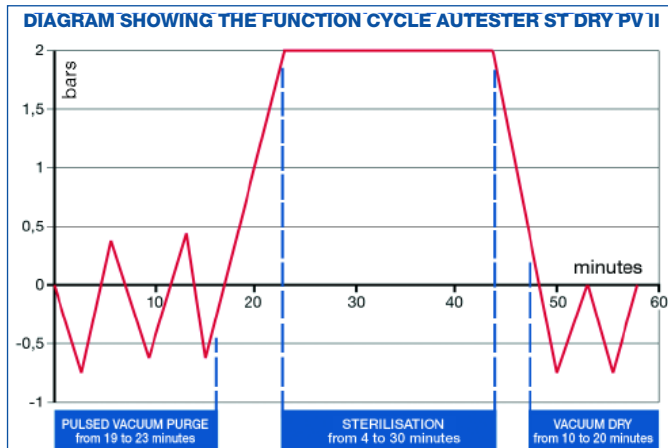
**EN 61010-1 SAFETY FOR EQUIPMENT FOR LABORATORY USE**  
**EN 61010-2-041 SAFETY FOR STERILISER EQUIPMENT FOR LABORATORY USE**  
**EN 61326 ELECTROMAGNETIC COMPATIBILITY FOR EQUIPMENT FOR LABORATORY USE.**

### FEATURES

AISI 304 stainless steel exterior and top.  
 AISI 316 stainless steel lid  
 Lid, six closure point system.  
 Pulsed vacuum system and atmosphere purge.  
 Incorporated steam generator, connected to the main chamber.  
 Water reservoir for clean water for the steam generator boiler.  
 External water connection if required.  
 6 function modes.  
 Printer output. RS232 connection for download or to a printer.  
 Connection for a second temperature sensor  
 Memory for 9 customer set programs.

### SAFETY

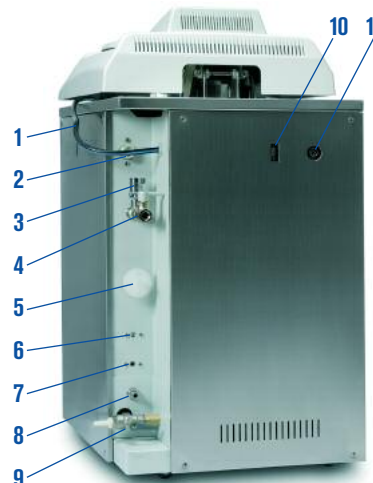
**Safety:** The lid cannot be opened if the chamber is under pressure.  
**Safety valve:** Prevents over pressure over the maximum limit.  
**Safety pressure switch:** switches power off to the heater if over pressure.  
**Safety Lid:** insulated lid protection.



### CONTROL PANEL



1. LCD parameter indicator.
2. MONO single button control multi-function processor.
3. LED in operation.
4. Push button Start / Stop.
5. Printer (optional).
6. Open Lid.



### BACK VIEW

1. Mains input.
2. External water supply.
3. Safety valve.
4. Vacuum vapour valve.
5. Air in filter valve.
6. Safety thermostat.
7. Safety thermostat.
8. Empty tank valve.
9. Drain tank valve.
10. RS232 Printer connection.
11. 2nd Temperature sensor connection.

## CONFORMITY

The microprocessor controls the air extraction, sterilisation and dry process from preset values set by the operator. Controlled parameters are:

- Sterilisation temperature from 105 °C to 134 °C
- Sterilisation time from 3' to 60'
- Drying time from 20' to 60'
- Programs-0 to 9 user configurable
- Six pre-set functions:
  - Solids 1 fraction
  - Solids 2 fractions
  - Solids 3 fractions
  - Dry
  - Liquids
  - Liquids 2 temperature probes
- Verification tests
  - Vacuum
  - Bowie Dick
- Configuration
  - Units
  - Languages ( Spanish, English, and French).
  - Printer
  - Timer: date/hour
  - Water connection external: on/off.
- Password
- Calibration
  - Temperature probe 1
  - Temperature probe 2
  - Water fill



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

### MESSAGES:

- |                       |                           |
|-----------------------|---------------------------|
| 1. E 2PROM            | 10. TEMPERATURE LOW FAULT |
| 2. RTC FAULT          | 11. INPUT ERROR           |
| 3. SENSOR PRECISION   | 12. STERILISATION         |
| 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      |

## 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-II 30</b>	<b>4002514</b>	Yes	30	30 40	97 48 62	105 to 134	10	2	2800	90
<b>AUTESTER ST DRY PV-II 50</b>	<b>4002515</b>	Yes	50	30 70	117 48 62	105 to 134	10	3	3000	108
<b>AUTESTER ST DRY PV-II 75</b>	<b>4002425</b>	Yes	75	40 60	107 58 72	105 to 134	10	2	3600	136
<b>AUTESTER ST DRY PV-II 140*</b>	<b>4002426</b>	Yes	140	50 70	118 80 95	105 to 134	20	3	7500*	250

Comes without baskets.

\* The part number 4002426 due to its power rating, only manufactured for three phase 220V or 380V, specify preference when ordering.

### OPTIONS: Factory fitted options



**Thermal printer** continuous paper roll with print out of temperature, pressure, time and mode.  
Part No. **4002417**

**Pt100 Sensor**  
(See page 53).

### ACCESSORIES

**AISI 316 Stainless steel baskets.**

**Sterilisation drum** made from AISI 304 stainless steel.

**Detergent Bio-Sel.**

**Water distillation unit** especially for autoclaves  
(see page 53).

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

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

N° Programme	Description	Temperature Sterilisation	Time Sterilisation	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).

**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 II autoclave can be installed with a temperature probe that can be placed within the culture flask, residual packets etc. In this way proof that the programmed time and temperature for the run have been achieved.

When the probe is connected to the controller of the autoclave, it is automatically recognised by the micro-processor, whereby the real time and temperature values detected by the probe are displayed and printed. For autoclaves PRESOCCLAVE II this Pt100 sensor only temperature reader.

Part No. **4001219**

**ACCESSORIES FOR VERTICAL AUTOCLAVES**



Perforated AISI 316 stainless steel **baskets.**

Part No.	Ø	Height cm	Suitable for autoclaves Part No.	Number of baskets
<b>1004770</b>	21.5	15	<b>4001404</b>	1
<b>1000596</b>	22.5	24	<b>4047725</b>	1
<b>1000495</b>	28	20	<b>4002135 - 4002514</b>	2
<b>1000495</b>	28	20	<b>4001725 - 4002515</b>	3
<b>1000496</b>	38	28	<b>4002136 - 4002425</b>	2
<b>1000780</b>	48	22	<b>4002426</b>	3



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.



**Sterilisation Drums.**

Part No.	Ø	Height cm	Suitable for autoclaves Part No.	Capacity Drums
<b>1002418</b>	28	18	<b>4002135 - 4002514</b>	2
<b>1002418</b>	28	18	<b>4001725 - 4002515</b>	3
<b>1002419</b>	35	27	<b>4002136 - 4002425</b>	2



**NEW**

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

Distillation capacity: 1.5 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 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 that the filter be changed every 3 months.

No external additional water required

Part No.	Capacity Distillation litre/Hour	Conductivity µs/cm	Ø	Height cm	Power W	Weight Kg
<b>4001729</b>	1.5	5	29	39	750	3.5

**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.