

# **Autoclaves for sterilization "Autester ST DRY PV II"**



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.

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.

RS 232 for PC parameters printing (back side).

Printer output (optional).

USB adapter for parameters memorization (optiona),

Connection for a second temperature sensor.

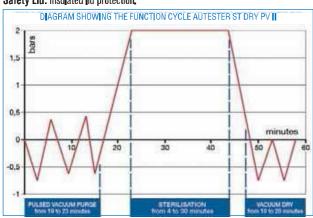
Memory for 9 customer set programs,

### **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 the heater power off to if over pressure,

Safety Lid: insulated lid protection.





- 1, LCD parameter indicator,
- MONO single button control multifunction processor.
- 3. LED "in" operation.
- 4. Push button Start / Stop.
- 5. USB adapter or printer (optional).
- 6. Open Lid knob.
- 7. USB function light indicator





## 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 connector,
- 11. 2nd Temperature sensor con nection.

### CONFORMITY

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

- Sterillization temperature from 105 °C to 134 °C
- Sterilization time from 3' to 59'.
- . Drying time from 20' to 60'
- Programs-0 to 9 user configurable
- Six pre-set functions:
  - Solids 1
  - 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 or USB adapter.
  - Timer: date/hour
  - Water connection external: on/off.
- Password
- Calibration
  - Temperature probe 1
  - Temperature probe 2
  - Water fill

Error messages of functions and program execution 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 STERILIZATION
4. HEATER PROBE	13, LEVEL 1
5. CHAMBER PROBE	14 <b>. LEVE</b> L 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 (usab <b>l</b> es) cm	Height / Width / Depth (exterior) cm	Temp. ° C	Water Reservoir H <sub>2</sub> O capacity.	Basket size	Power W	Weight Kg
AUTESTER ST DRY PV   50	4002515	Yes	50	30 63	117 48 62	105 to 134	10	3	3000	108
AUTESTER ST DRY PV   80	4002425	Yes	80	40 60	107 58 72	105 to 134	10	2	3600	136
AUTESTER ST DRY PV   150*	4002426	Yes	150	50 70	118 80 95	105 to 134	20	3	7500*	250

Comes without baskets and drums.

## **COMPLEMENTS:** Factory fitted options.





ACCESSORIES: AISI 304 Stainless steel wire baskets and drums. For Autester ST DRY PV-■ 50, Part No: 4002515.

Capacity, 3 baskets Ø 25,5 and 20 cm, height, Part No: 1000495

For Autester ST DRY PV-■ 80, Part No: 4002425.

Capacity, 2 baskets Ø 36 and 28 cm, height, Part No: 1000496

For Autester ST DRY PV- 150, Part No: 4002426.

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-■ 50, Part No: 4002515. Capacity, 3 drum Ø 25 and 18 cm, height, Part No. 1002418

For Autester ST DRY PV-■ 80, Part No: 4002425.

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

Detergent Bio-SeL

Water distillation unit especially for autoclaves.

(see page 62).

- 1. Thermal printer continuous paper roll with print out of temperature, pressure, time and mode, Part No. 4002417
- 2. USB adapter model. Pen-Drive included (Memory board) for data storage. Part No. 4120132

Pt100 Sensor (See page 62),

Nº Programme	Description	Temperature Ster <b>l</b> ization	Time Ster <b>l</b> ization	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)

- (2) Trip**i**e Vacuum purge
- (3) Atmospheric purge (No vacuum),

<sup>\*</sup> The part number 4002426 due to its power rating is only manufactured for three phase 230V or 400V. Specify preference when ordering.

### OPTIONS: for vertical autoclaves, need to be factory fitted,



Pt 100 Sensor, 2nd 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.

When the probe is connected to the controller of the autoclave, it is automatically recognised by the micro-processor, whereby the real time temperature values detected by the probe, are displayed and printed. For autoclaves PRESOCLAVE II this Pt100 sensor only reads the temperature with an external thermometer. Part No. 4001219

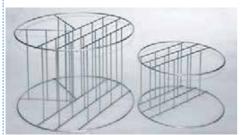
## **ACCESSORIES FOR VERTICAL AUTOCLAVES**



### ALSI 304 stainless steel wire baskets,

Part No.	Ø cm	Height	Suitab <b>l</b> e for autoc <b>l</b> aves Part No.	Number of baskets
1004771	22	14	4001745	1
1004772	22	24	4001775	1
1004771	22	14	4001757*	1
1004772	22	24	4001757*	1
1000495	25,5	20	4001725 - 4002515	3
1000496	36	28	4002136 - 4002425	2
1000780	44,5	22	4002426	3

Note:\* For autoclave Part No. 4001757 supplied with 1 basket Part No. 1004771 + 1 basket Part No. 1004772



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.

Part No.	Ø I	Height m	Suitable for autodaves Part No.	Capacity Drums
1002418	25	18	4001725 - 4002515	3
1002419	35	27	4002136 - 4002425	2
1002420	28	18	Not suitable for our a	utodaves.



## Water distiller, specially for autoclaves "DEST-4".

Distillation capacity: 1,5 litres/hour. Internal capacity 4 litres. Case made from thermo resistant plastic.

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Cooling by forced air though 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 Disti <b>l</b> ation litre/Hour	Conductivity µs/cm	Ø Height cm	Power W	Weight Kg	
4001729	<b>1</b> .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,