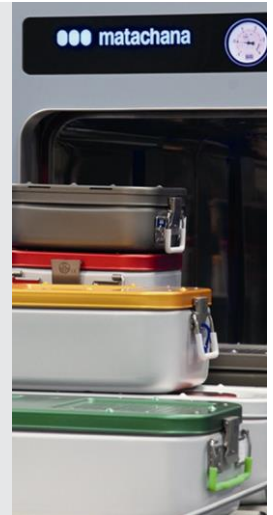


MATACHANA Steam Sterilizers

SC500 SERIES

COMMERCIAL DESCRIPTION – COD. 76361 → 76364/78365 → 76368/76369 → 76372



INTRODUCTION

The MATACHANA Series **SC500** sterilizers are manufactured in Spain and they incorporate state-of-the-art security and efficacy to its technical design guaranteeing a perfect control of all sterilisation processes.

They have been conceived bearing in mind the needs of CSSDs and surgical blocks in hospitals and primary care centres.

They are manufactured following directives of quality standards EN ISO 9001 and EN ISO 13485, with certification granted by the control institution Lloyd's Register Ltd., which guarantees that the Company Antonio Matachana, S.A. carries out a quality management in the design, production, delivery, installation and after sale-service of their products.

Some of the Series **SC500** most remarkable features are: its ergonomics and user friendliness, the production capacity, the control and register by industrial microcomputers, the color touch screen, the special design of the vacuum system by ejector and vertical doors with automatic activation.



MODELS

The Series **SC500** comprises three models and their variants with a loading capacity from 154 to 300 litres. These sterilizers are suitable, because of their performance, to most medium capacity requirements from our customers: One or two doors (to include them in installations with loading and unloading zone (common or differentiated) and with or without steam generator...

	SC500		SC501		SC502	
	1 door	2 door	1 door	2 door	1 door	2 door
Total Dimensions (mm)						
Height	1824	1824	1824	1824	1824	1824
Width	900	900	900	900	900	900
Depth	995	1009	1342	1355	1622	1635
Chamber Dimensions (mm)						
Height	500	500	500	500	500	500
Width	500	500	500	500	500	500
Depth	675	675	1020	1020	1300	1300
Power (kW)						
With generator €	21	21	21	21	21	21
Without generator (V)	3	3	3	3	3	3
Chamber volume (litres)	167	167	252	252	321	321
Capacity (UTE)	1	1	1,5	1,5	2	2
Net weight E (kg)	634	704	711	841	790	900
Net weight V (Kg)	564	634	641	771	720	830

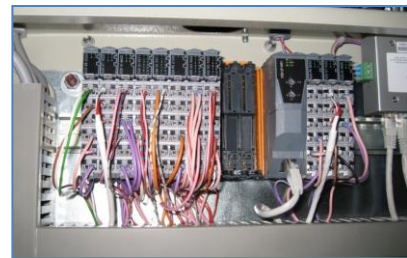
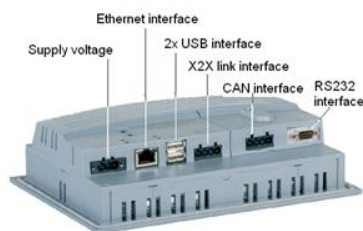
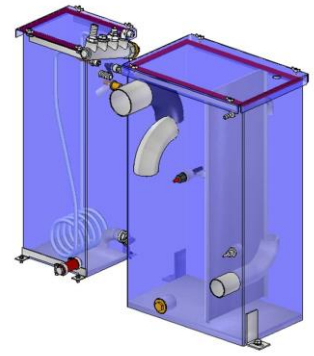
MAIN FEATURES

The MATACHANA Series **SC500** sterilizers include in their technical design the state of the art security and efficacy features:

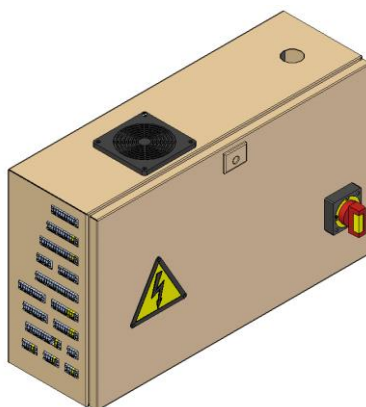
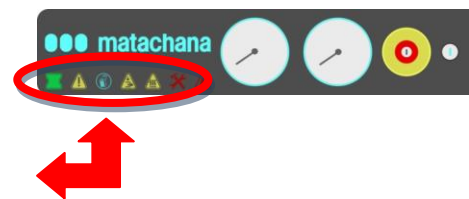
- Chamber, jacket and steam generator (if included) made of high quality stainless steel AISI 316L (1.4404).
- Rectangular design chamber with inlet dimensions 500 x 500 mm.
- Encircling jacket that grants the absence of cold spots inside the chamber.
- Special mechanized housing of the door gasket for a maximum life span.
- Automatic sliding vertical doors by means of a pneumatic cylinder with security and stop systems.
- Conditioning sterilizer doors. The sterile area door can be opened only if the cycle has completed successfully. Additionally the door / s are equipped with the following safety devices:
 - In case there is pressure inside the chamber at the end of the cycle, you can not open the door / s.
 - Limit switch (monitored by the control system) which detects the end position of the door closing
 - For 2-door models, you can not open a door when the other is already open.
 - The door / s will be closed pressing the closing door key. If the key is not pressed, the movement will reverse until door is fully open.
 - Limited closing force to 150 N by a safety plate by contact.

Chassis made of height quality stainless steel.

- Vacuum by means of ejector (Venturi system), with recirculation water pump and economizer tank: high efficiency and low maintenance, silent and effective. Low water consumption.
- Independent water tanks with heat recovery coil of condensates, which allows pre-heating the water generator with a consequent energy saving. Additionally helps to eliminate non-condensable gases (according to EN 285).
- Control and independent register by industrial microcomputer with a built-in PLC touch screen, easy to use and understand. This independence of readings consists in a double temperature sensor and chamber pressure connected to the two built-in PLC in the sterilizer.

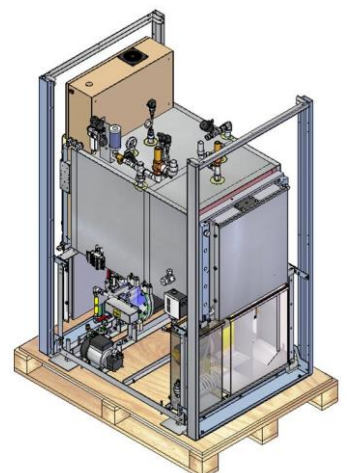


- High visibility front backlit which incorporates symbols to indicate different situations such as process status, alarms (during the cycle or supplies), pending repair, ...

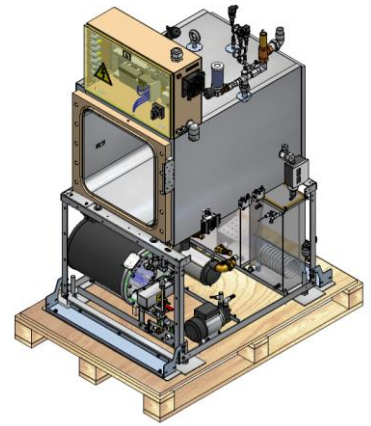


be made of stainless steel.

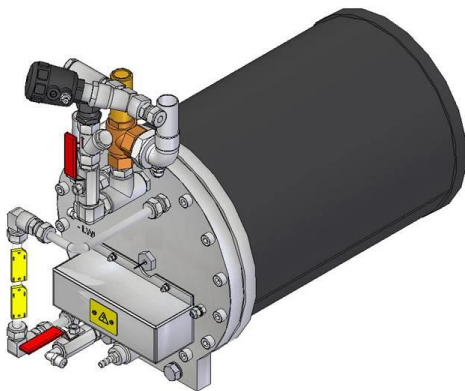
- This will allow the user to know the equipment status easily and quickly.
- Significant improvements at design level for a better accessibility to different components of the sterilizer in order to improve the maintenance or the equipment repair.
- Maintenance front door made of high quality steel. Optionally this door can be made of stainless steel.
- Electrical panel with passive distribution systems for connecting sensors and actuators. This system simplifies the wiring and reduces maintenance costs.



- Access ports for validation.
- Pressure gauges on front panel (chamber and steam) in NSA and chamber in S.A.
- Average sound power level inferior to 76dBA (according to measurements made in accordance with EN ISO 3746.



STEAM GENERATOR



Models SC500 E-1/2, SC501 E-1/2 and SC501 E-1/2 incorporate their own steam generator in stainless steel AISI316L, with automatic operation and steam production adapted to the capacity of the sterilizer. Equipped with a safety system, a water level control by floats and a level visual indicator in frontal side.

The generator has a water tank with a water filling pump to the generator.

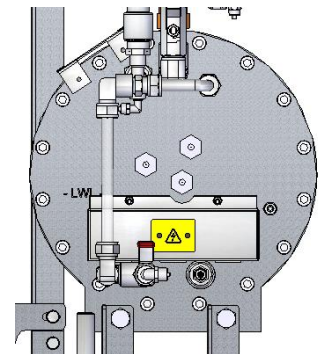
The pressure regulation is performed by pressure transducer which allows adapting the working pressure according to the selected sterilization cycle enabling a better control of the resistances activation time, and therefore energy savings.

The steam is generated through 6 Kw resistances which work with independent contactors being possible to work with a single resistance once reached the working pressure. This saves considerable energy because it is not necessary full generator power.

Possibility of incorporating the steam bypass option to make those sterilizers also can work with function steam network.

Complete generator power: 18 Kw (3 resistances of 6 Kw).

Water consumption per cycle: 12-14 liters



CONSTRUCTION MATERIALS

Element	Type of material	Comments
Chamber	stainless steel AISI 316L	Thickness: 5 mm
Jacket	stainless steel AISI 316L	Continuous / Thickness: 5 mm
Doors	stainless steel AISI 316L	Automatic / Thickness: 6 mm
Thermal insulation chamber	Mineral wool	Thickness: 40/90mm
Thermal insulation door	Mineral wool	
Chassis and outer panels	stainless steel AISI 304	
VERSIONS WITH STEAM GENERATOR:		
Water tanks	stainless steel AISI 304	Separated / Thickness: 1, 5 mm
Steam generator	stainless steel AISI 316L	Thickness: 2mm
Thermal insulation generator	Armaflex	Thickness: 25 mm

CONTROL SYSTEM AND REGISTRATION

The sterilizer is controlled by a colour touch screen with a built-in CPU and an industrial PLC equipped with analogical and digital inputs / outputs in which is centralized all operations of the sterilizer.

The screen is a TFT high quality colour touch screen of 5.7" which provides high brightness and contrast, and wider viewing angle from anywhere.

Using the colour touch screen, the user "intercoms" with the sterilizer microcomputer to perform the following functions:

- Access to program selection menus, information, maintenance and statistics.
- Opening doors, signalling their status.
- Parameters display of various programs.
- On-line monitoring of the current data cycle: temperature, pressure, phase time, cycle time and phase name.
- Display and operating alarm management and / or handling errors, cycle reset.
- Process graphic display (pressure and temperature) in real time.
- Users managements and passwords.



MATACHANA SC500 sterilizers are fitted as standard, with a new alphanumeric digital printer located in the loading area, for the detailed sterilization processes register. Besides the pressure parameters, time, and temperature, provides other important information such as cycle and batch number, date, total cycle time, etc.. This new printer has an exceptional paper storage capacity which allows to print up to 40 cycles without replacing the paper roll.

Due to the large internal memory of this new screen, you can store the process data of the last 1000 cycles (including 20 cycles with complete analogical curves).

Optionally, through the USB port is possible to discharge cycles or also the connection (via Ethernet) to an external printer for printing cycles in A4 format.

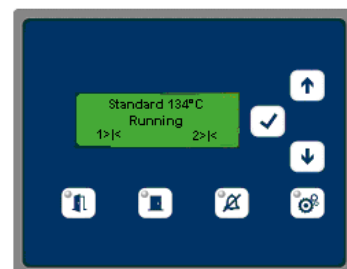
There is also the possibility of identifying automatically the appropriate cycle for the type of load by reading, via a barcode reader of a label that contains, in barcode format, the information relating to the name of load, sterilization program, date of packaging...

Serial port for thermal printer connection (standard).

Additionally, the screen is ready for the connection to external PC systems (CSSDoc, third-party tracking systems), remote access for remote diagnostics of Technical Service and to Internet via its Ethernet port as standard.

For double door machines, the unloading side has a LCD screen with a resolution of 4 x 20 characters.

the microcomputer, with the standard program, has different programs covering a wide range of sterilization processes.



PROGRAMS

The microcomputer, with the standard programming, has a range of programs covering a wide range of sterilization processes. Optionally, and on request, can be incorporated other programs according to user's special needs.

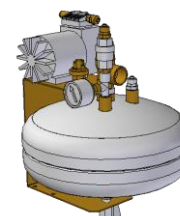
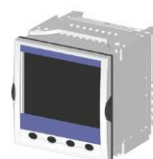
Standard program table;

PROGRAMS	DESCRIPTION
Test	Vacuum test
Test	Bowie & Dick test (134 °C – 3.5 min.)
Test	Pre-heating
Production	standard 134 °C
Production	standard 121 °C
Production	Containers 134 °C
Production	Rapid 134 °C
Production	Special P 134 °C

Optionally the sterilizer can incorporate the Auto-Run program that allows to do automatically a Vacuum Test and a preheating program at the beginning of the day. You simply need to enter the date and time you want to run this program. Running both programs automatically enables to increase the CSSD's productivity.

OPTIONAL ACCESSORIES

- Software CSSDoc for data supervision
- Videorecorder
- Air detector according EN 285 / HTM 01
- Manual steam by-pass
- Built-in or external air compressor
- Possibility of manufacturing different voltages and frequencies
- Possibility of maintenance on left side
- Water treatment system (water softener, reverse osmosis)
- System of water recovery of the vacuum system
- Uninterruptible power supply system (UPS)



- Loading system (trolleys, platforms, baskets, inner shelves, racks...)
- Panelling system (side panelling, jambs, lintels, maintenance doors).

DECLARATION OF CONFORMITY CE

The sterilizers of the series ~~SC500~~ comply with the most recent applicable regulations in force in the European Union. We can indicate as most significant:

- European Directive 93/42/EEC concerning Medical Devices. MATACHANA SC500 sterilizers comply with this directive and therefore bear clearly and indelibly the CE mark followed by the Notified Body number which has done the conformity assessment procedure.
- Directive 97/23/EC concerning Pressure Equipment. As a pressure equipment, the sterilizer meets established specifications on design, fabrication and evaluation of pressure recipients and its components with the corresponding CE marking for this directive. The sterilizer has been designed according to the design code AD-2000.
- Other applicable directives are:
 - Low voltage 2006/95/EC
 - Electromagnetic Compatibility 2004/108/EC
 - Safety of Machinery 2006/42/EC