

Steam sterilizers
Matachana SC500

SC500 steam sterilizers

The evolution of a success

MATACHANA series SC500 Sterilizers have been designed taking into account the real needs of today's hospital sterilization, as much in sterilization centrals as in surgical units, outpatient centres, outsourced sterilization services, etc.

The SC500 is designed and manufactured in our production site in Barcelona (Spain), a new plant equipped with the latest technological breakthroughs in terms of sustainability, energy efficiency and process control.



Models	SC500		SC501		SC502	
Technical specification	1 door	2 doors	1 door	2 doors	1 door	2 doors
Total dimensions (mm)						
Width	900	900	900	900	900	900
Height	1824	1824	1824	1824	1824	1824
Depth	995	1009	1342	1355	1622	1635
Chamber dimensions (mm)						
Width	500	500	500	500	500	500
Height	500	500	500	500	500	500
Depth	675	675	1020	1020	1300	1300
Power (kW) *						
WITH steam generator	21	21	21	21	21	21
WITHOUT steam generator	2	2	2	2	2	2
Chamber volume (liters)	167	167	252	252	321	578

(* SC500 has version with built-in steam generator as well as without steam generator to be connected to steam network (external supply))

General features of series SC500

- **Technology**
New control system more powerful and modern. TFT touch screen for loading area with integrated PLC. Frontal made of an innovative material that prevents dirt and reflections. Easy to clean.
- **Ergonomics**
More accessible displays with a modern and versatile interface.
- **Sustainability**
Energy and water consumption reduced thanks to incorporated economizer systems.
- **Efficiency**
Redesigning of vacuum system by Venturi.
- **Compatibility**
Perfect drying tested with the most demanding packaging on the market.
- **Connectivity**
Ready to connect with the most usual management and traceability systems via Ethernet port.
- **Comfort**
New range of more functional accessories, adapted to the loading requirements.
- **Accessibility**
Full circuits and components redistribution that facilitates the accessibility of the Technical Service for easy maintenance procedures.
- **Remote diagnosis**
Remote connection via Ethernet port to know the sterilizer's condition and enable the Technical Support Service to diagnose incidences/failures remotely for faster solution.



Control Unit

With this sterilizers' new line MATACHANA aims to create and develop equipment with an easy and intuitive use while offering a high level of quality.

Hence the incorporation of a control unit composed mainly by a **TFT colour touch panel QVGA** (with integrated PLC) for the loading area, a **4 lines characters LCD display** with function keys for the unloading area and an industrial PLC.



Navigation menu

MATACHANA has developed an intuitive interface with a number of icons that allows the user of the sterilizer to move easily and quickly through different programs selection menus and configuration.

Additionally, the software offers several useful features such as:

- Summaries management of printer process
- User selection menu
- Display sensor values (temperature and pressure)
- Passwords edition
- Maintenance settings
- Alarm, warning and error messages

Separate readings

The control unit provides a sterilization monitoring thanks to the temperature and pressure double reading, connected to the two PLC available in the equipment. The temperature and pressure sensors are independent which ensures a management of independent readings too.





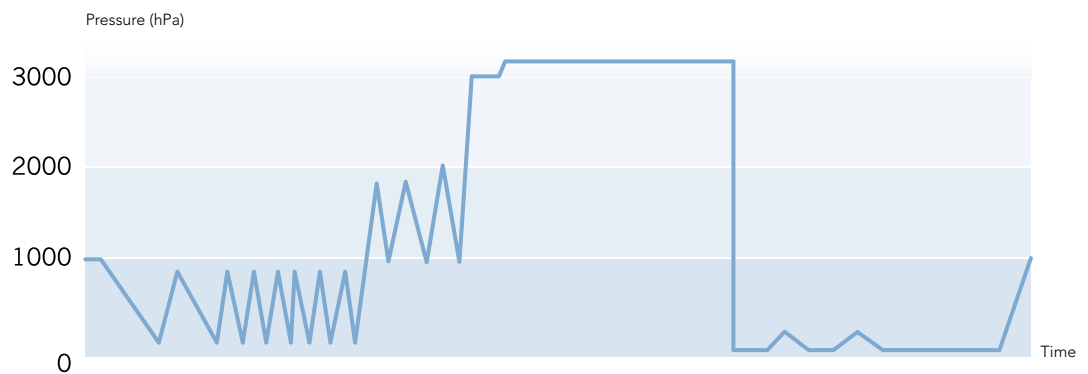
Programs

MATACHANA series SC500 Sterilizers have several pre-set programs covering an extensive range of combinations to suit the needs of the most demanding sterilization centres.

Two types of programs are available:

- Test programs: checking correct sterilizer operation
- Production programs: sterilization or production programs of sterile material

Graph (Pressure profile) of a production cycle:



SC500 standard programs list

Production programs	Application
Standard 134 °C	For packed materials (solid instruments or with cavities)
Standard 121 °C	For packed thermosensitive materials
Containers 134 °C	For packed materials (solid instruments or with cavities) or heavy loads in baskets or containers
Rapid 134 °C	For solid materials simple packing (one layer)
Special P 134 °C	For materials likely to be contaminated with prions (*)
Test programs	Application
Vacuum Test	Check the chamber tightness
B&D Test	To ensure the correct air removal and the steam penetration on the load
Preheating	Preheat the chamber (at the beginning of the day)

(*) Do not assume that prions can be inactivated by treating only with this program. An adequate pre-treatment will be required prior to sterilization with this program, as recommended by WHO.

Additionally, there are other optional programs (Open Liquids, Silicone Implants, steam Disinfection, Autostart) and others according to customer request.

Options



Built-in compressor

Vacuum system with liquid ring pump

Connection to recovery systems and external cooling, allowing considerable savings in water consumption

Manual and automatic steam bypass

Record and graphic display by a three-channel video recorder

Data download via USB port

Option for printout report and cycle graph in A4 format by external printer

Supply by UPS

Able to perform maintenance on left side

Remote alarm

Air detector (manual and automatic version)

Automatic generator purge

Frontal in stainless steel

Extra manometer on frontal

Supplies alarm

Programmed Autostart

Automatic shut off after the last cycle of the day



matachana





Compact design

Series SC500 main features

Compact design

Its size allows placing it in tight spaces and benefits the installation greatly.

Continuous chamber and jacket in stainless steel

High quality, 1.4404 (AISI 316L).

Enveloping design jacket

No "cold spots" in the chamber guaranteed.

Chassis in high quality steel

Vertical sliding doors

Through pneumatic cylinder with security and stop systems. Conditioning of doors (double door models) to ensure that the door from the sterile area can be opened ONLY if the cycle has been successfully completed.

High precision mechanized of the door gasket housing

Ensures a gasket's high durability and easy maintenance.

Vacuum system by ejector (Venturi system) with water recirculation pump and economizer tank

Low maintenance, quiet and efficient. Low water consumption.

Separate water tanks

The water tank for the generator has a heat recovery system for the condensates which favours the non condensates gases removal and achieves an energy saving.



Vacuum system



Water tanks



Stainless circuits

Separate control and registration

By two PLC (one of them built into the touch screen).

High visibility backlit frontal

Incorporates several indicators icons helping the user to know at any moment the equipment status quickly and easily. Additionally, the device is equipped with a light indication of the emergency pushbutton activation.

Manómetros de cámara y vapor en el panel frontal del lado de carga y de cámara en el del lado de descarga

Panel de control compuesto por pantalla táctil TFT en color (lado de carga) y display LCD con teclas de función (lado de descarga).

Frontal service door

Manufactured with an innovative material that prevents the accumulation of dirt and reflections. Easy to clean.

Steam generator made of 1.4404 stainless steel (AISI 316L) with automatic operation.

Setting the working pressure depending on the program selected and resistances control by multicontactor system. Both functions guarantee energy savings. Levels regulation system of security, "minimum" and "maximum" by level floats and with visual level indicator.

Electrical cabinet with passive distribution systems

Simplifies the wiring and reduces maintenance costs.

Total accessibility to equipment components

From one side as well as from the frontal panel (complete opening), facilitating the sterilizer's maintenance.

Ethernet connection

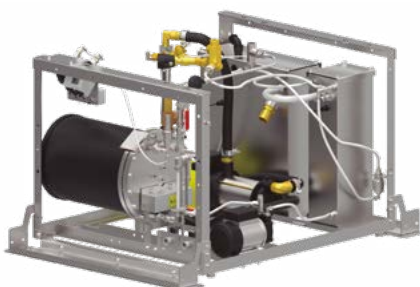
Allows an effective connectivity to different peripherals (PC, barcodes, printers, etc.).

Direct connection to our monitoring software EasyLOOK

Possibility of connection to the most common traceability and total management software.



Steam generator



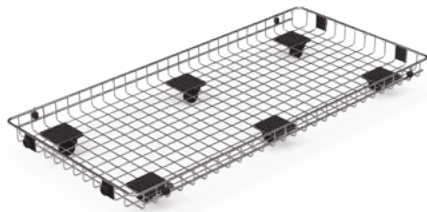
Accessibility for maintenance

Loading systems and accessories

MATACHANA offers a wide range of loading accessories whose top priority is to facilitate the work in the preparation area and subsequent loading / unloading into the sterilizer.

Each one of these accessories is adapted to different models of SC500 sterilizers as well as to different needs the final user may have.

The main accessories available are:



Loading platform

- **Modular basket in stainless steel 1.4301 (AISI 304).**
- **Loading platforms in stainless steel 1.4301 (AISI 304) rod.**

With temperature resistant wheels and caps.

- **Transport trolleys at a fixed height in stainless steel 1.4301 (AISI 304)**

With different compatible fixing systems, depending on the guides system installed in the sterilizer. High manoeuvrability due to the wheels with locking and brake system.

- **Transport trolleys at an adjustable height with electrical height adjusting of the platform**

Facilitates the task in areas with sterilizers of different heights. High manoeuvrability due to the wheels with locking and brake system.



Loading frame

- **Loading frame in stainless steel 1.4301 (AISI 304)**

Designed to facilitate to the maximum tasks in the preparation area with "anti-breakage" shelves. Lightweight, resistant and versatile.



Manual trolley at adjustable height



Steam sterilizers
SC500 Series



Innovation is the way forward

MATACHANA, a family-owned company founded in 1962, is a world leader in the manufacture of steam sterilization equipment, diverse low temperature sterilization technologies, as well as washing and thermoisinfection equipment, providing comprehensive solutions for the Healthcare, Life Science and Pharma sectors.

Since the company's foundation more than 60 years ago, our mission has been to provide the best service, bringing our knowledge and field experience to our customers to facilitate their daily work, allowing them to be efficient in the production whereas keeping rigorously the quality.

MATACHANA has a worldwide presence, with offices based in Spain, France, Germany, Italy, Portugal and Indonesia, or through its distributors in over 120 countries.

We are aware that Training and Service contribute decisively to achieve customer satisfaction. For this reason, we have always invested in the development of these two areas of activity, which enables a direct contact with customers and help us to develop together a continuous improvement process.

Technical Engineering Support

An assistance provided by engineers, highly skilled expert technicians and support staff, all committed to ensure the proper equipment operation and condition.

MIEC, training center

As we feel seriously committed and liable for achieving the optimum operation from the MATACHANA equipment, we invest in the training of the future users, proposing a service of educational courses to all our customers on a regular basis and in the 5 continents.

Environmentally friendly

The company counts on 4 production sites in Europe. The devices are designed and manufactured using the latest technologies on the market to achieve the best results in terms of energy savings and reduction in water consumption. Our Production Center located in Castelldefels (Barcelona) complies with the ISO 14001.

Quality

The MATACHANA devices are developed, manufactured and tested within a strict quality control according to the international Standards ISO 9001 and EN ISO 13485 for the quality management of medical devices.



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S1000

Steam Sterilizer

THE ECOSMART
STERILIZER
MADE TO LAST



+ SUSTAINABILITY



+ CONNECTIVITY



+ DURABILITY



MADE TO LAST

STERILIZATION CHAMBER
LIFETIME WARRANTY

VACUUM EJECTOR
LIFETIME WARRANTY

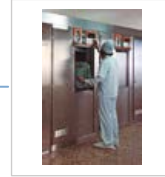


Since its foundation, MATACHANA development policy has been to elaborate long lasting products. The 25 year-old S1000 sterilizers still in operation in the market are living proof of this.

1975



1983



1987



1990



2000



2008



2012



2024



Did you know how long is the **25 years lifespan** of 1 MATACHANA sterilizer in numbers?

+ 62,000 cycles performed

+ 375,000 reprocessed sterilization modules

+ 187,000 patient surgeries

Sterilizer working 313 days per year, running 8 cycles per day with chamber capacity of 6 SM, and using 2 SM per surgery.

STERILIZATION CHAMBER LIFETIME WARRANTY!

MATACHANA has been producing and welding its chambers for more than 40 years in a dedicated factory. The experience, total production control and the highest quality of 316L stainless steel used, provide the confidence to grant the **chamber lifetime warranty (15 years) for all new S1000 sterilizers (*)**



VACUUM SYSTEM BY EJECTOR LIFETIME WARRANTY!

MATACHANA always stands for the vacuum pump ejector solution as the preferred vacuum system. During the last 30 years, the ejector has proven its efficiency, efficacy and specially its **reliability** compared to other vacuum systems. Its high reliability and reduced maintenance cost, bring us to implement **ejector lifetime warranty (15 years) for all new S1000 sterilizers. (*)**

(*) These conditions must be observed:

- Installation requirements and usage must be fulfilled, according to the IFU
- Maintenance must correctly be performed, following MATACHANA's indications



+ Info

+ SUSTAINABILITY

WATER SAVING

ENERGY SAVING

ECOFRIENDLY PACKAGE

SUSTAINABLE
COMPONENTS



S1000 was specially developed keeping the sustainability as the first overriding requirement.



WATER SAVING

Two new configurations which will allow to save water during regular operation.



Up to **45% water saving** per cycle, thanks to built-in cooling coil connected to the facility's chilled water system in a close loop (included as standard).



Up to **90% water saving** per cycle, thanks to the built-in heat exchanger and pump connected to the facility's chilled water system in a close loop (optional configuration).



REGULAR



45%
water saving

EcoSAVE



90%
water saving

EcoSAVE+



ENERGY SAVING

New steam generator insulating material and the **Smart steam generator management** combined with the **Auto Power off** and **Auto Start Week**, as standard configurations, represents up to **15% energy saving**.



SUSTAINABLE COMPONENTS

The accurate selection of stainless steel suppliers, as well as MATACHANA's proximity supplier policy allows a 20% carbon foot print reduction.



...all these features combined with the **ECOFRIENDLY PACKAGE** produced with wood from sustainable forests turns the S1000 into the **ECOSMART STERILIZER**

MATACHANA SUSTAINABLE FACTORIES

GREEN ELECTRICITY AND WATER CONSERVATION



SUSTAINABLE INNOVATION IS THE WAY FORWARD

In line with our corporate responsibility, a targeted orientation of MATACHANA's innovation product development process towards sustainability is essential. For this purpose, we are analyzing where CO₂ is generated and where it can be saved, which is a first step towards CO₂-neutral production.

GREEN ELECTRICITY



Since 2023, all MATACHANA production sites located in Spain have been supplied with **green electricity**. This has made it possible to achieve a CO₂ emission reduction >90% in the electricity field (based on the GHG Protocol standard). We have implemented additional measures to achieve energy reductions.

Estimated annual carbon foot reduction: **>150,000 kg CO₂-eq**

 **x 3000 cars/day**

 **x 14 round-the-world flights**

 **x 6800 trees/year**

WATER CONSERVATION



Since 2009, all MATACHANA production sites have been applying water preservation policies by reusing the water needed for the pre- assembly, assembly and final control of all MATACHANA sterilizers.

The total amount of **water saved** is **more than 1,300,000 litres per year**.

 **x 1800 persons/year**

 **x 1700 homes/day**

 **x 2100 hospital beds/day**

+ ERGONOMICS

COMPREHENSIVE LOADING SOLUTIONS RANGE

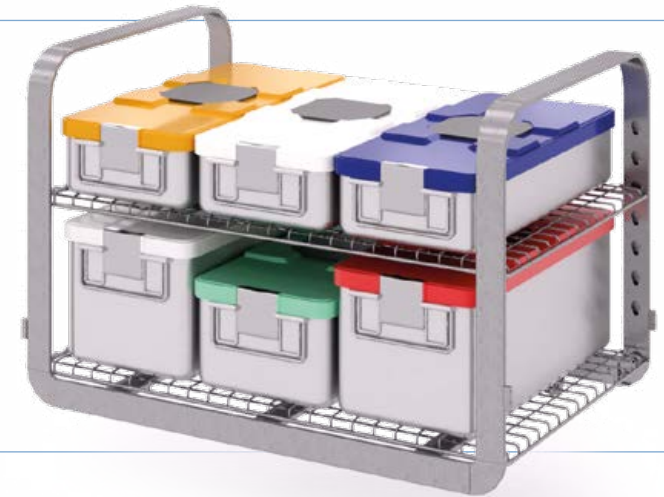


Loading the sterilizer is an essential step of the sterilization process which needs an interaction of the end user. Each user may have different needs, but ergonomics is a common request.

With the **comprehensive loading solutions range**, trolleys and automatic loading systems, the S1000 is able to cover the most demanding needs taking ergonomics to a higher level.

Shelf rack for baskets and containers

- Multiple height adjustment for the shelves to maximize the loading capacity
- Available from 4 up to 10 SM
- Possibility to add up to 6 levels of shelves



TROLLEYS

Shelf racks

- Available from 4 up to 10 SM
- Fixed height and adjustable height versions
- Compatible with automatic loading systems



Effortless

- Provided by the automatic trolley, it allows to load and unload the racks just by pressing a button in the control panel.



EasyCHARGE

- For stackable baskets and containers
- Available from 4 up to 10 SM
- Fixed height and adjustable height versions
- No empty rack return is needed



The operational readiness of the sterilizers and the users working in the RUMED is becoming increasingly important. **Automatic loading systems** will allow the end user to focus on other important requests while the instruments are being loaded, processed and unloaded automatically.

AUTOMATIC OPERATION

Increases the efficiency by reducing the stress of handling heavy loads and shortens time spent loading/unloading the sterilizer.

LOAD CONFIGURATION FLEXIBILITY

Compatible with the shelf rack and EasyCHARGE.

AUTOMATIC CYCLE SELECTION

Allows the next load to be placed in readiness before being used.



Available from 4 to 12 SM capacity

Also available version compatible with EasyCHARGE system

LOAD PRESENCE SENSOR

The correct positioning of the load ensures a safety loading and unloading.

HALF LOAD DESIGN

Minimizes handling heavy loads and optimizes the available space in the RUMED.

BI-DIRECTIONAL MOVEMENT

Allows to return empty racks to loading area for a dynamic flow of racks.

ATS (Automatic Transfer System)

MATACHANA ATS (Automatic Transfer System) is a fully automated system for loading or unloading baskets, containers or racks which uses a single shuttle to move into the first available sterilizer.

Full automatic loading and unloading to minimize the risks of injuries when users have to handle heavy loads.

Automatic cycle selection via barcode reader ensures the correct cycle for each type of load.

Intelligent software integration to have an optimal usage of the sterilizers and an even wear and tear.

Optimized design and mobility for installations with architectural barriers.



+ ERGONOMICS

AL 10 Robot

AL10 robot (compatible with automatic loading systems) is a robotic system designed to transport containers and baskets from the preparation tables to the sterilizers, performing the transfer onto automatic modules and providing an innovative loading and unloading solution.

Continuous operation with constant loading and unloading ensures a high productivity inside the RUMED, even in installations with limited free space.

Fully automatic process to improve the work environment in a RUMED thanks to a significant noise reduction.

Long-term cost savings by reducing the need for repetitive tasks from the users, and minimizing wear and tear on equipment due to more precise and controlled usage.

Safe movement around people and obstacles, prioritizing secure interactions to maintain a continuous and protected operational flow.

Expanding on the advantages provided by ATS, our AL10 robot offers other enhanced benefits



+ ERGONOMICS

+ CONNECTIVITY

EasyVIEW®



MATACHANA has always been at the forefront of connectivity and back in 1998 developed EasyLOOK, the first version of data management solution. In 2024 the new and improved version is born - EasyVIEW®.

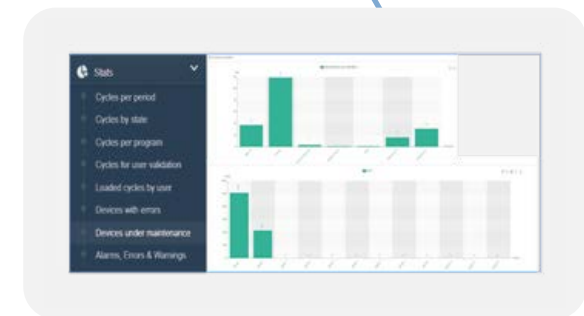
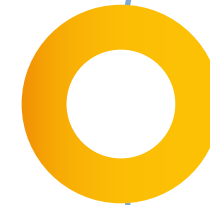


EasyVIEW® is a web server application specially developed for healthcare centres looking for **improving** their RUMED reprocessing **workflow** and equipment **documentation management**.

The application offers several benefits by means of the real-time data acquisition of up to 25 devices and can be displayed in computers, tablets and smartphones, IOS and Android.

RUMED WORKFLOW OPTIMIZATION

- Real time equipment monitoring
- Productivity statistics
- Visualization in multiple devices



OTHER DETAILS WHICH MAKES THE DIFFERENCE

TwinSMART

EasyRUN

FEATURES AND BENEFITS



TwinSMART – double touch screen with EasyRUN interface

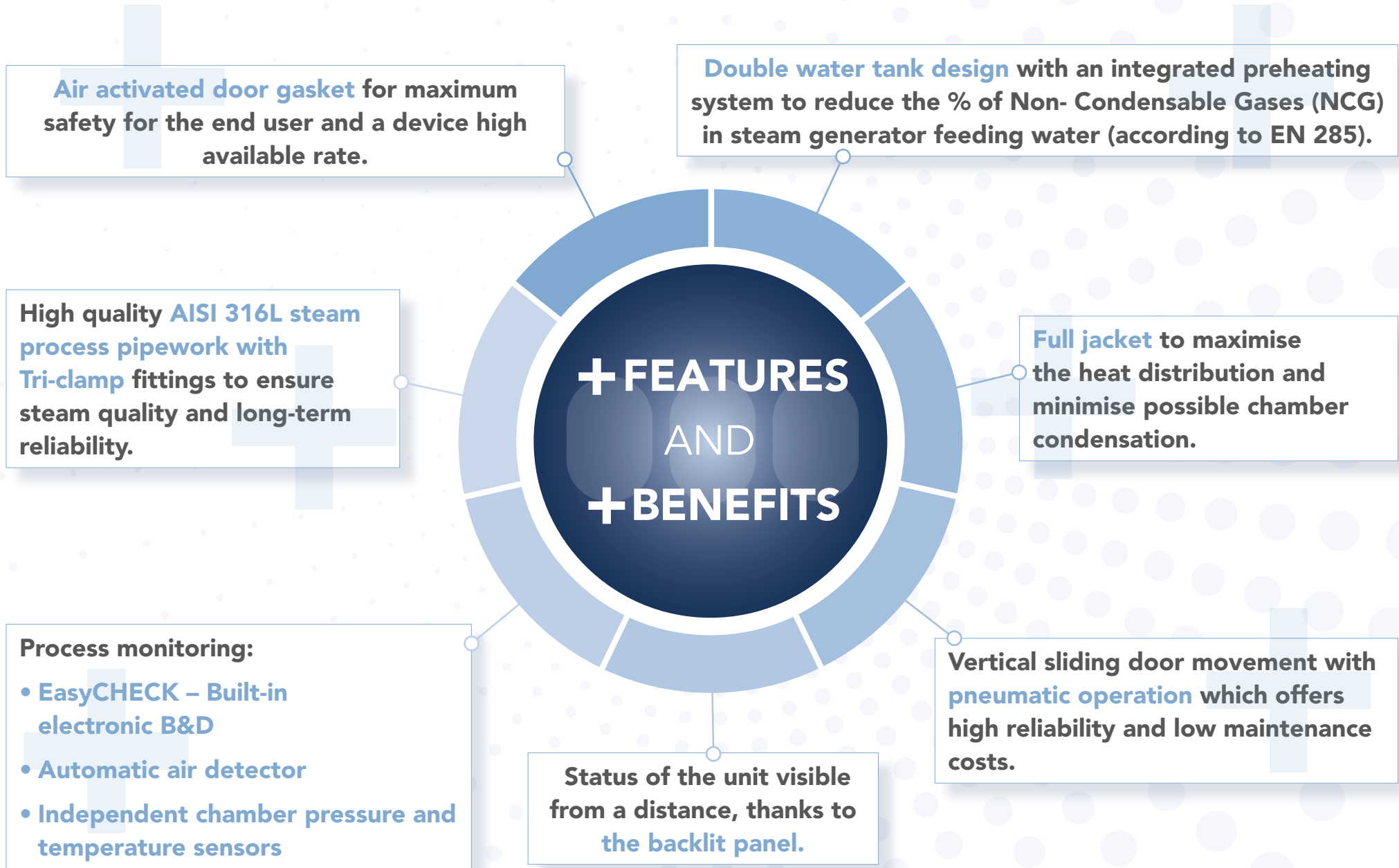
Double touch screen panels (applicable for double door sterilizers), allow users to control and monitor the sterilizer from both sides, optimizing workflow and enhancing the sterilizer's usability.

EasyRUN is an intuitive and easy-to-use interface to operate MATACHANA devices. It is **implemented** in the MATACHANA **Product Ecosystem**, simplifying and speeding up the user training on any infection prevention and control product.



EasyRUN interface is now implemented in both loading and unloading side of the S1000 sterilizer as a standard feature and positioned at **optimal ergonomic height** (<1.5 metres).





S1000 TECHNICAL DATA

Models	1004E-1	1004E-2	1006E-1	1006E-2	1008E-1	1008E-2	1010E-1	1010E-2	1012E-1	1012E-2
	1004V-1	1004V-2	1006V-1	1006V-2	1008V-1	1008V-2	1010V-1	1010V-2	1012V-1	1012V-2
Nr. doors	1	2	1	2	1	2	1	2	1	2
Chamber – mm										
Width	670	670	670	670	670	670	670	670	670	670
Height	670	670	670	670	670	670	670	670	670	670
Depth	625	638	998	996	1265	1296	1735	1733	2000	1998
Chamber volume - Litres	279	285	445	445	565	578	774	773	893	892
Overall –mm										
Width	1710	1710	996	996	996	996	996	996	996	996
Height	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954
Depth	958	977	1314	1336	1614	1636	2054	2076	2313	2338
Capacity SM	4	4	6	6	8	8	10	10	12	12
Capacity baskets SPRI	4	4	6	6	9	9	12	12	12	12
Power (kW)										
With generator (E version)	33	33	39	39	51	51	63	63	63	63
Without generator (V)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Other configurations under request. Please contact your local MATACHANA distributor.

Electrical Power supply 400 V 3~, PE / 50 Hz

Other voltages and frequencies on request

STANDARD AND OPTIONAL CONFIGURATIONS

Chamber / door / Jacket / Steam generator	
Stainless steel AISI 316L	●
Stainless steel AISI 316Ti (only chamber)	○
Chamber polishing	○
Control system and documentation	
Double touch panel	●
Double touch panel (10")	○
Built-in thermal printer	●
Barcode reader for load and cycle identification	○
USB port	●
Ethernet port	●
MATACHANA EasyVIEW®	○
Internal cycle data storage (> 1.000 cycles)	●
Maintenance	
Front and right maintenance	●
Left maintenance	○
Full front maintenance	○
Water and energy saving	
EcoSAVE / Water saving with external cooling system	●
EcoSAVE + / Water saving with external colling system	○
Auto-start Week / energy saving	●
Auto-suspend mode / energy saving	●
Steam generator energy management (only for versions with built-in electrical steam generator)	●
Process water quality	
Preheating system for Non-Condensable Gases (NCG) reduction	●
Steam generator water conductivity meter	○
Steam supply	
Plant steam supply (for V models)	●
Built-in electrical steam generator (for E models)	●
Built-in steam to steam generator	○
Built-in electrical & steam to steam generator	○
Steam manager	○
Steam by-pass (manual or automatic version)	○
Process monitoring	
EasyCHECK (built-in electronic B&D)	○
Automatic Air detector	○
Independent chamber pressure and temperature sensors	●
Sterilization and test programs	
Production programs: Standard 134 °C / Standard 121 °C / Rapid / Special P / Containers (heavy loads) (Other programs under request, please contact your local MATACHANA distributor)	●
Test programs: Vacuum, Bowie & Dick, Preheating	●
Flexible as per markets	
Liquid ring pump	○
Drain cooling under 60 °C	○
Steam generator desalinization	○
Built-in air compressor (to operate one unit)	○
Built-in air compressor (to operate two units)	○
Uninterrupted Power Supply (UPS)	○
Compliance with standards	
EN 285	●
Medical Device Regulation 2017/745 (MDR)	●
Pressure Equipment Directive 2014/68/EU	●
European Directive 2006/42/EC on Machinery	●
European Directive 2014/30/EU on Electromagnetic Compatibility (EMC)	●
European Directive 2014/35/EU on Low Voltage	●

● STANDARD CONFIGURATION

○ OPTIONAL CONFIGURATION

MATACHANA expertise in numbers

- + **60** years experience
- + **25,000** sterilizers installed
- + **120** countries
- + **62,000,000** cycles performed
- + **375,000,000** reprocessed sterilization modules
- + **187,000,000** patient surgeries



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