

ecoPlasma



PLASMA STERILIZER **ECO PLASMA**

Catalogue 2023/24

Cutting-edge sterilization technology
designed to offer the utmost in safety and
efficiency.



Sterifast
sterilization & disinfection

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Cutting-edge sterilization technology
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Fast reliable
Green Technology
Non-Toxic
Low water consumption

Minimal utility requirement
Low temprature
Energy Saving

Introducing our innovative Plasma Sterilizer

Discover cutting-edge sterilization technology with our Plasma Sterilizer, designed to offer the utmost in safety and efficiency.

Our state-of-the-art sterilization chamber provides a range of sizes to suit your specific needs, from 50 to 160 liters. For custom requirements, we're happy to accommodate your requests.

Crafted from non-corrosive aluminum, the sterilization chamber guarantees long-lasting performance. Cleaning is a breeze with its easy-to-remove internal cover, and you'll find it equipped with a holder for two loading shelves. The ergonomic design ensures a seamless loading and unloading process.

The Plasma Sterilizer boasts a secure clamp system for all mechanical connections, and you'll appreciate the durability of stainless steel tubes, unions, and clamps.

When it comes to doors, our Plasma Sterilizer features only automatic options,

available as single or double doors. The robust, non-corrosive aluminum doors are equipped with an interlock system to enhance safety. They provide automatic verification of their positions and even offer screen notifications for automatic door closing.

Safety measures are in place to prevent pinching during door closure, and a pedal-activated sliding door opening system adds to the convenience.

The Plasma Sterilizer also features an Intelligent Sliding Door Control System (I_SD_C) for further safety precautions. This system ensures that the clean-side sliding door won't open during test cycles or in the event of a failed or aborted cycle. It also prevents the clean-side door from opening if the unclean side door is closing automatically after 10 minutes to conserve energy. Countdown timers and acoustic warnings ensure you're informed throughout the process.

The housing of the Plasma Sterilizer is robust, constructed with stainless steel panels and structure. Service-friendly panels with accessible knobs make

maintenance a breeze, and you won't find any sharp edges that could pose a risk to operators. The compact external dimensions ensure it fits comfortably in your space, with wheels and supporting feet for easy mobility.

Among its key features, the Plasma Sterilizer boasts a automatic sterilizing agent refilling system. This system eliminates direct operator contact with the chemical product and is designed with convenience in mind.

The sterilizing agent refilling system also accommodates drawers with holders for sterilizing agent bottles and offers bottle perforation. RFID recognition ensures accurate and efficient refilling.

Experience the future of sterilization with our Plasma Sterilizer, where advanced technology, safety, and ease of use converge to offer a seamless and efficient solution for your sterilization needs.

Our Plasma Sterilizer is renowned for providing a high level of disinfection. This exceptional performance extends to its usage with endoscopes and various semicritical instruments, making it a valuable addition to any healthcare setting.

Cycles information

Sterilization Cycles

Advanced	Hollow loads
Normal	Non hollow loads
Endoscope	Flexible and rigid endoscopes
Free	Custom made

Test Cycles

Test I	Penetration test
Test II	Leakage test
Test III	Leakage and penetration test

Efficiency

- ✓ Efficient penetration in long lumen (10 meter extension with 1 mm diameter with both ends open and 3 meter extension with 1 mm diameter with one end open)
- ✓ Efficient sterilization of endoscopes



Routine Control

- ✓ Process monitored with H₂O₂ Biological and Chemical Indicators

Lumen Kit (Process Challenge Device)

- ✓ Available for testing with Biological and Chemical Indicators

Sterilizing Agent Refilling System

- ✓ Automatic refilling system
- ✓ The operator never gets in direct contact with the chemical product
- ✓ Supplying System located under the waistline
- ✓ Sterilizing agent tank
- ✓ The sterilizing agent in the tank keeps all its properties
- ✓ Drawer with a holder for the sterilizing agent bottle
- ✓ Automatic perforation of the recharge bottle
- ✓ All liquid of the recharge bottle is sucked into the tank
- ✓ Recognition of recharge bottles by RFID



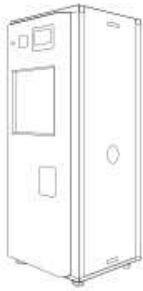
Sterilizing Agent can be shipped by air due to low concentration of H₂O₂: as a Known Consignor of Air Cargo (n. PT/KC/00006-01) Sterifast is able to supply even faster compared to competitors by avoiding time-consuming security checks of the products before being loaded on board.

Bottle and packaging system

- ✓ Recharge bottles are supplied inside a plastic bag that allows the operator to check any eventual leakage before handling the bottle
- ✓ Recharge bottles have 18 months validity
- ✓ Supplied in boxes of 4 bottles



Patent n. PCT/PT2013/000025 /W O 2014 /178740A1



ECO PLASMA

The specifications may be subject to changes due to technical advancements or consistency updates.

≡ Main Specifications

- ✓ Interactive diffusion of the ECOPlasma sterilizing agent
- ✓ Refilling data, validity and lot is printed out after each refilling
- ✓ Information of the number of diffusions performed by the previous recharge
- ✓ Cycle data printout (includes phases and phase time, total time, pressure, temperature and concentration of H2O2) it show on the screen the expected missing time for the end of cycle.
- ✓ Information of "Plasma OK" during exhaust phase, on the cycle printout
- ✓ Real time graphs on the screen
- ✓ Messages with cycle phases
- ✓ Indication of the sterilizing agent level on the screen
- ✓ Cycles archive in the HMI, search by date
- ✓ USB Connection on the Panel
- ✓ Date transfer to CSSD traceability system through network
- ✓ Data transfer to a USB flash drive. Transfers file with STV extension PC Software (Sterifast VIEWER) for system data readout and printing
- ✓ Data printer on the front panel
- ✓ Low level of corrosion of the materials during exposure (35% of concentration of H2O2)
- ✓ Display and printout text in selectable language (EN, PT, ES, D, FR, IT, IND, PL) and may be translated to your local language
- ✓ Differentiated acoustic signal of end of cycle (intermittent sound indicates a correct cycle, permanent sound indicates failed cycle)
- ✓ While waiting for the conditions to start the cycle, the system does the pre automatic heating of the load
- ✓ Automatic heating of the chamber with energy saving

7" touch screen HMI - Human Machine Interface which permits interaction between users and equipment.

Integrated quality user interface

- ✓ One or two 7" touch screen HMI with Windows operating system
- ✓ Ethernet Communication
- ✓ Phoenix Automation
- ✓ Electronic management control and solid state relay for temperature control
- ✓ Phoenix control board component

Supervision Software - For technicians, including the possibility of using it as remote software (available for distributors under agreement)

Sterifast VIEWER - PC software for the sterilizer operator enables the operator to link the graphic cycles to a specific load, providing information about the load type, department, and operator. This software allows the user to save the file in PDF format and send it to any computer within the institution. Furthermore, it provides the operator with the ability to monitor temperature and pressure values at any point on the graphic, and it offers the option to customize the desktop image as well as extend or shorten the graphs.

Robust technology and components

Sterifast High Vacuum solution

Sterifast double stage High Vacuum Pump with oil condenser and separator

- ✓ Previous Automatic heating of Vacuum Pump
- ✓ High efficiency condensator with automatic control
- ✓ Large Capacity Molecular Sieve
- ✓ High efficiency oil separator

High Voltage Plasma Generator

Plasma generator is located outside the sterilization chamber.

- ✓ Materials are not damaged by any radiation.
- ✓ Plasma generator is equipped with temperature sensor.

Innovation

The Vaporization System as well as the entire process is patented
(patent n.° PCT/PT2007/000029) WO 2009/008755A1

VALIDATION

Under request, it is possible to validate the process according to ISO 14937

Safety characteristics

We adhere to the highest safety standards in the industry, providing peace of mind while using our products. Safety is our commitment.

- ✓ Safety system for cycle start – the cycle starts only when the necessary conditions inside the chamber are met (indication on the screen)
- ✓ Overheating safety system, indicating of temperature probe failure to the operator
- ✓ Maximum temperature safety system of the chamber
- ✓ Maximum temperature safety system of the vaporizer
- ✓ Maximum temperature safety system of each door
- ✓ Probe missing safety system
- ✓ Independent temperature control system for each element with probe
- ✓ HEPA filter 0.2µm
- ✓ No electromagnetic radiation: the system does not interfere with other electric equipment
- ✓ Safe automatic supplying system: the operator has no contact with the chemical product
- ✓ Safe environment: the residues' level around the sterilizer is less than 1 ppm

I_SD_C System

Intelligent Sliding Door Control System

Sliding door of clean side will not open in the test cycles or in case of failed or aborted cycle

If the unclean side door is open, the system does not allow the opening of the clean side door.

Information on the screen about the 10 minutes time countdown to close the door

Acoustic sign warning 5 seconds before starts closing
If the door is open and you press the pedal, the time countdown will restart

During the upwards movement, if something touches the door sensor, the movement will be reversed and the door opens

Equipped with energy saving system

Construction Features

STERILIZATION CHAMBER

- ✓ Made of non-corrosive aluminium
- ✓ Chamber internal cover removable for easy cleaning, with holder for two loading shelves
- ✓ Ergonomic chamber loading/unloading position
- ✓ All mechanic connections by clamp system
- ✓ All tubes, unions and clamps are made of stainless steel.

DOORS

- ✓ Automatic (single or double) and made of non-corrosive aluminium;
- ✓ With Interlock System;
- ✓ Automatic Verification of the doors' position;
- ✓ Timing and notice of automatic door closing on the screen;
- ✓ Safety System avoiding pinching during door closing;
- ✓ Sliding door opening system activated by pedal;
- ✓ Controlled automatic heating of the doors with energy saving system.

HOUSING

- ✓ Structure and panels made of stainless steel
- ✓ Panels with knobs that make the access for service very easy
- ✓ External parts and surfaces finished with non alive edges
- ✓ Wheels with supporting feet on the four corners of the machine

What is truly complex is simplifying things: all you need to do is effortlessly connect the machine to the network. No hassle, no complex prerequisites required.

Easy Installation

- ✓ No water needed
- ✓ No need of compressed air
- ✓ No need of drain
- ✓ No special ventilation is required
- ✓ Just electrical connection
- ✓ It can be installed anywhere: with its four wheels is very easy to move






Devices that can be sterilized in the ECOPlasma system

Surgical instruments, flexible endoscopes, laparoscopy boxes, ophthalmology devices, cardiology devices, MIS devices, neurosurgery devices, otolaryngology devices, electric scalpels, electric cables, optic fibres, and all materials that are thermo-sensitive, and washed and disinfected by thermo chemical or chemical disinfection, at low temperature (60°C maximum);

Can also sterilize materials that are also sterilized at 121°C;

Packaging Materials that can be used: Polypropylene or Polyethylene sterilization pouches, reels and sheets.

Among all the models presented, we take great pleasure in offering our customers top-of-the-line quality

MODELS ECOPlasma			E50 1SD		E50 2SD		E110 1SD		E110 2SD		E160 2SD
Automatic Sliding Doors		1		2		1		2		2	
Useful Volume			44 Liters				107 Liters				158 Liters
Total volume			47 Liters				109 Liters				162 Liters
Chamber Dimensions (mm)	W		420				420				420
	H		180				420				420
	D		620				620				920
Sterilizer External Dimensions (mm)	W		700		700		700		700		700
	H		1700		1700		1800		1800		1800
	D		790		840		790		840		1140
Weight (Kg)			200		210		260		270		310
Power Supply	Voltage		230V / 380V + N + Earth		230V / 380V + N + Earth		230V / 380V + N + Earth		230V / 380V + N + Earth		230V / 380V + N + Earth
	Frequency		50/60 Hz		50/60 Hz		50/60 Hz		50/60 Hz		50/60 Hz
	Power		2,9 kW		2,9 kW		3,3 kW		3,3 kW		3,7 kW

For inquiries regarding availability, please contact the manufacturer.
Some models may only be provided upon request.

For more details, visit the Sterifast page at <https://sterifast.com>



We guarantee that no environmentally hazardous substances were used in the manufacture of our equipments.





Sterifast

sterilization & disinfection

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