

ecoPlasma



Sterifast

Sterilization & Disinfection



Sterifast

sterilization & disinfection

Sterifast is a leader in healthcare innovation. We offer advanced plasma sterilizers, reliable sterilization indicators, and high-quality packaging materials designed to protect both patients and healthcare providers and all of these products are manufactured with high quality in Portugal. Our products are environmentally friendly, ensuring safe, effective sterilization and contamination-free storage. Committed to innovation and quality, our team continuously develops solutions to meet the evolving needs of the healthcare industry, creating a healthier and more sustainable future for all.

A microscopic view of biological cells and plasma bubbles. The image shows various sized, spherical, translucent structures, likely cells or plasma bubbles, against a dark blue background. The structures are illuminated from the side, creating bright highlights and shadows that give them a three-dimensional appearance. The overall color palette is dominated by deep blues and purples, with the bright highlights providing contrast.

MEDICAL STERILIZATION PLASMA STERILIZER

STERIFAST E 50 PLASMA STERILIZER

CAPACITY : 50 -LITER

1. STERILIZATION PERFORMANCE

STERILIZATION & TEST CYCLES

- Advanced: Hollow Loads
- Normal: Non-Hollow Loads
- Endoscopes: Flexible and rigid endoscopes
- Free: Custom Made
- Test I: Penetration Test
- Test II: Leakage Test
- Test III: Leakage and Penetration Test

HIGH-VACUUM TECHNOLOGY

Dual-stage vacuum pump with automatic pre-heating and advanced filtration for precise sterilization.

PLASMA GENERATOR

External high-voltage system with temperature sensors to protect instruments and ensure optimal conditions.

2. SMART DESIGN & USER CONVENIENCE

AUTOMATED DOORS: Safety interlock, hands-free operation, energy-saving auto-heating.

CHAMBER : Non-corrosive aluminum with removable panels, adjustable shelves, stainless steel fittings.

INTERFACE: -7inch touchscreen, USB/network compatibility, and Sterifast VIEWER for remote monitoring.

3. SAFETY & OPERATOR PROTECTION

CYCLE & TEMPERATURE SAFETY: Ensures precise sterilization with sensor monitoring, automated cycle protection, and a HEPA 0.2µm filter.

ECO-FRIENDLY & CHEMICAL SAFETY: Prevents exposure to sterilant with automated refilling, RFID-compatible bottles, and minimal residual sterilant (<1 ppm).

4. EASY INSTALLATION & MOBILITY: No need water, compressed air or drainage



01

STERIFAST E 110 PLASMA STERILIZER

CAPACITY : 110 - LITERS

1. STERILIZATION PERFORMANCE

STERILIZATION & TEST CYCLES

- Advanced: Hollow Loads
- Normal: Non-Hollow Loads
- Endoscopes: Flexible and rigid endoscopes
- Free: Custom Made
- Test I: Penetration Test
- Test II: Leakage Test
- Test III: Leakage and Penetration Test

HIGH VACUUM TECHNOLOGY

Dual-stage vacuum pump with automatic pre-heating and advanced filtration for efficient, precise sterilization.

PLASMA GENERATOR:

External high-voltage system with temperature sensors to protect instruments and ensure optimal conditions.

2. SMART DESIGN & USER CONVENIENCE

AUTOMATED DOORS: safety interlock, hands-free pedal opening, energy-saving auto-heating.

CHAMBER: Durable aluminum with removable covers, adjustable shelves, and stainless-steel fittings.

INTERFACE: 7" touchscreen, USB/network connectivity, and Sterifast VIEWER for remote monitoring.

3. SAFETY & OPERATOR PROTECTION

CYCLE & TEMPERATURE SAFETY: Overheating and probe monitoring ensure precise sterilization, with automated cycle protection and a HEPA 0.2µm filter for sterile air.

ECO-FRIENDLY & CHEMICAL SAFETY: Automated refilling prevents contact with sterilants, RFID bottles ensure correct use, and minimal residue (<1 ppm) maintains a safe environment.

4. EASY INSTALLATION & MOBILITY: No need water, compressed air or drain, simplifying operation



02

STERIFAST E 160 PLASMA STERILIZER

CAPACITY: 160 - LITER

1. STERILIZATION EFFICIENCY

STERILIZATION & TEST CYCLES

- Advanced: Hollow Loads
- Normal: Non-Hollow Loads
- Endoscopes: Flexible and rigid endoscopes
- Free: Custom Made
- Test I: Penetration Test
- Test II: Leakage Test
- Test III: Leakage and Penetration Test

HIGH VACUUM TECHNOLOGY: Dual-stage vacuum pump for superior sterilant diffusion, automated pre-heating for efficiency and extended pump life, and high-efficiency oil separator with molecular sieve for clean operation.

Plasma Generator: External high-voltage generator protects instruments from radiation, while built-in temperature sensors ensure optimal conditions for plasma sterilization.

2. SMART DESIGN & USER-FOCUSED FEATURES

AUTOMATED DOORS: safety interlock, hands-free pedal opening, energy-saving auto-heating.

CHAMBER: Durable aluminum with removable covers, adjustable shelves, and stainless-steel fittings.

INTERFACE: 7" touchscreen, USB/network connectivity, and Sterifast VIEWER for remote monitoring.

3. SAFETY & OPERATOR PROTECTION

CYCLE & TEMPERATURE MONITORING: Overheating and probe monitoring ensure precise control over sterilization, with automated cycle start protection and a HEPA 0.2µm filter for sterile airflow.

ECO-FRIENDLY & CHEMICAL SAFETY: Automated refill system ensures operator safety by preventing direct contact with sterilants, RFID-enabled bottles prevent incorrect usage, and low residue levels (<1 ppm) maintain a safe environment.

4. EASY INSTALLATION: No need water, compressed air or drain, simplifying operation



03

The background consists of numerous thin, wavy lines that create a sense of depth and movement. The lines are arranged in a way that suggests a topographical map or a series of ripples on a surface. The color palette is monochromatic, ranging from dark charcoal to light gray, which emphasizes the texture and form of the waves.

DEVICE

STERIFAST ULTRASONIC 300

The Sterifast Ultrasonic 300 is a high-performance ultrasonic cleaning system designed for precision and efficiency in medical and laboratory applications. It features five ultrasonic modes for optimal cleaning and four customizable programs for tailored cycles. The large display and ergonomic controls ensure ease of use, while patented dry-running protection and an automatic shut-off enhance safety. Its sealed display prevents moisture and contamination, ensuring reliability. Specialized modes like Eco, Sweep, Pulse, Dynamic, and Degas provide versatile and effective cleaning solutions.

Total volume (V): 27.5 l

Ultrasonic power (W): 300

External device dimensions W / D / H (mm) 330 / 360 / 575

Internal tank dimensions W1 / D1 / H1 (mm) 195 / 270 / 475



04



STERIFAST LABEL GUN

Label Gun is an efficient tool designed for applying indicator labels in sterilization processes, ensuring seamless traceability and compliance with sterilization standards.

KEY FEATURES

- Efficient Labeling: Quickly and accurately applies indicator labels for steam or VH₂O₂ sterilization.
- Customizable Information: Prints operator codes, cycle numbers, expiry dates, and other essential details.
- Compatible with ISO 1-11140 Labels: Works with Type 1 indicator labels for accurate sterilization method identification.

05

STERIFAST AUTOMATIC SEALING MACHINE

The Sterifast Automatic Sealing Machine is a high-performance solution for medical packaging, providing efficient, consistent, and traceable sealing. Ideal for hospitals, CSSD units, and medical manufacturers, it ensures precision and compliance in packaging processes.

KEY FEATURES

- **ISO 2-11607 Compliance:** Ensures secure, validated sealing.
- **Fully Automatic Operation:** Improves workflow with minimal manual effort.
- **Integrated Printer:** Prints essential data for traceability, such as batch numbers and expiry dates.
- **User-Friendly Interface:** Easy to operate, integrating seamlessly into sterilization departments.



06



STERIFAST CUTTER MACHINE

Cutter Machine is designed for precise and effortless cutting of sterilization rolls and medical packaging materials, ensuring efficiency in sterile processing departments, hospitals, and dental clinics.

KEY FEATURES

- **Precise Cutting Mechanism:** Delivers clean, accurate cuts to prevent material waste and ensure consistent sizing.
- **Customizable Length Options:** Available in 50 cm, 70 cm, and 90 cm for flexible packaging needs.
- **Sturdy and Reliable Construction:** Built to last in high-demand medical environments.
- **Ergonomic Design:** Minimizes operator fatigue and ensures ease of use.

07

STERIFAST THERMOSEALING MACHINE

Thermosealing machine is a high-performance tool designed for the efficient sealing of sterilization pouches and rolls. It ensures strong, consistent seals in compliance with ISO 2-11607 standards, making it ideal for medical packaging applications.

KEY FEATURES

- Roll Holder: Built-in for easy access and organization.
 - 12mm Welding Band: Provides a strong, secure seal.
 - ISO 2-11607 Compliance: Meets international sterilization standards.
 - Sealing Signals: Acoustic and visual indicators confirm successful sealing.
 - Smooth Paper Entry: Ensures easy feeding of pouches and rolls.
 - Safety System: Overheating protection prevents accidental burns.
- This machine is perfect for hospitals, dental clinics, and sterilization centers, offering a secure and user-friendly sealing solution.



08



CONSUMING

STERIFAST FLAT STERILIZATION ROLL

Flat sterilization rolls provide reliable, safe sterilization for medical instruments, available in various colors and sizes. They offer superior protection and comply with sterilization standards, ensuring instruments stay sterile and safe.

KEY FEATURES

- Available Colors: Blue, Green, and Transparent.
- Sterilization Indicators: Steam, EO, and Formaldehyde indicators for traceability.
- Custom Sizes: Tailored to meet specific needs for optimal fit.

APPLICATIONS

Used in hospitals, clinics, dental offices, and laboratories for safe instrument sterilization, ensuring sterility and preventing contamination.



09

STERIFAST MEDICAL POUCH PACKAGING

Medical pouches ensure the secure sterilization and storage of medical instruments. Available in multiple colors and customizable sizes, they are designed to maintain sterility and prevent contamination.

KEY FEATURES

- Colors: Blue, Green, Transparent
- Sterilization Indicators: Steam, Ethylene Oxide (E.O.), and Formaldehyde available for traceability
- Custom Sizes: Tailored to fit your specific packaging needs

APPLICATIONS

Perfect for hospitals, dental clinics, medical centers, and laboratories where sterilization is critical.

10



STERIFAST TYVEK HEADER BAG

Tyvek Header Bags are designed for the secure sterilization and storage of medical instruments. Made with a combination of see-through or white film and Tyvek, they provide excellent protection, visibility, and are ideal for E.O. (Ethylene Oxide) and irradiation sterilization.

KEY FEATURES

- Material Composition: See-through or white film combined with Tyvek, offering puncture resistance, breathability, and microbial protection.
- Indicators: E.O. and irradiation indicators available for sterilization confirmation.
- Custom Sizes: Tailored to meet the specific needs of medical devices and instruments.

APPLICATIONS

Sterifast Tyvek Header Bags are ideal for hospitals, surgical centers, and medical device manufacturers, offering excellent protection, visibility, and easy identification for quick access.



1 1

STERIFAST GUSSETED STERILIZATION ROLL

Gusseted Sterilization Rolls provide secure, expandable packaging for medical instruments, ensuring sterility and protection. Their gusseted design accommodates larger or irregularly shaped tools.

- Colors – Blue, Green, Transparent
- Sterilization Indicators – Steam, EO, Formaldehyde (optional)
- Custom Sizes – Available for various instrument dimensions
- Material – High-quality for optimal sterilization performance

Ideal for hospitals, dental clinics, and laboratories, these rolls expand to fit bulkier instruments, ensuring safe storage and transport.



1 2

STERIFAST TYVEK STERILIZATION ROLL

Tyvek Sterilization Rolls are designed for the safe and effective sterilization of medical instruments. Made from Tyvek, known for its strength, puncture resistance, and breathability, they ensure the protection and sterility of items during and after sterilization.

KEY FEATURES

- Color: Transparent for clear visibility of contents.
- Sterilization Indicator: VH2O2 indicator for confirming effective sterilization.
- Custom Sizes: Tailored to meet specific packaging needs.
- Material Composition: Tyvek offers excellent microbial barrier properties.

APPLICATIONS

Ideal for packaging medical instruments requiring VH2O2 sterilization in hospitals and surgical centers, Tyvek Sterilization Rolls offer maximum strength, protection, and convenience with their transparent material and sterilization indicator.



1 2



STERIFAST CREPE PAPER

Crepe Paper, made from %100 cellulose, provides reliable packaging for sterilization. It is ideal for medical instruments requiring steam or E.O. (Ethylene Oxide) gas sterilization, offering durability, flexibility, and breathability.

KEY FEATURES

- %100 Cellulose: Durable, flexible, and breathable for effective sterilization.
- Sterilization Compatibility: Suitable for both steam and E.O. gas sterilization.
- Barrier Efficiency: Creped texture enhances protection against humidity and contaminants.

APPLICATIONS

Used in hospitals, dental clinics, and surgical centers for packaging critical sterilization- instruments like surgical tools, needles, and devices.

1 1



STERIFAST SMS SHEET

SMS Non-Woven Fabric is a high-performance material designed for medical packaging, known for its strength, durability, and barrier properties. Made from %100 synthetic fibers, it is ideal for sterilization packaging, especially in the medical and healthcare sectors.

KEY FEATURES

- Material Composition: Composed of 3 layers of Spunbond and Meltblown materials, providing superior filtration and barrier properties.
- Strength: Robust mechanical strength with high resistance to tearing and puncturing.
- Breathability: Allows airflow while maintaining strength, crucial during sterilization.
- Barrier Properties: Protects against bacteria, dust, and contaminants, maintaining sterility.
- Customization: Available in various sizes to meet different sterilization needs.

15

MEDICAL PAPER

Medical-grade paper ensures sterile barrier protection for medical instruments, meeting strict industry standards.

- Liquid Resistance & Air Permeability – Prevents fluid penetration while maintaining sterility
- Mechanical Strength – High durability in both dry and humid conditions
- Sealing & Closure Integrity – Strong seals with easy, fiber-free peelability
- Biocompatibility & Non-Toxicity – Safe and compliant with healthcare regulations

Sterilization Compatibility:

Steam (Autoclave) | Ethylene Oxide (EO) | Vaporized Hydrogen Peroxide (VH₂O₂) | Irradiation

Available Variants:

85-60 gsm, Tyvek (coated/uncoated), Paper/PE laminates, with custom options upon request.



STERIFAST ALUMINIUM POUCH AND ROLL

Engineered for exceptional protection and sterilization, these pouches and rolls feature a multi-layer construction for superior durability and barrier performance.

- Advanced Materials: Combination of paper, PE, and Aluminium (AL)
- Custom Sizes: Available in various widths and lengths
- Enhanced Protection: Shields against moisture, light, and contaminants



17



MEDICAL FILM

Designed for maximum protection and sterilization, medical films ensure durability and high barrier performance. Available in various materials, thicknesses, and sizes, they are tailored to meet diverse medical needs.

- Material Options: PA, PE, PP, and more
- Thickness Variability: Different levels for optimal protection
- Transparent Design: Ensures content visibility while maintaining sterility
- Custom Sizes: Available in various widths and lengths

STERIFAST BOWIE & DICK TEST

Bowie & Dick Test is a reliable tool for daily steam penetration testing, ensuring autoclave sterilization cycles are effective. It verifies steam penetration through porous loads, maintaining consistent sterilization quality in healthcare facilities.

KEY FEATURES

- Accurate Steam Penetration Test: Ensures efficient sterilization by checking steam penetration.
- Ready to Use: Pre-packaged for immediate use with no preparation.
- Disposable: Single-use design for hygiene and easy disposal.
- Traceability Information: Provides essential data for compliance with sterilization standards.
- Intelligent Ink Technology: Offers clear, visible results to ensure accurate sterilizer performance.



STERIFAST HELIX TEST (PCD TEST)

Helix Test is a reliable process challenge device used to validate and monitor steam sterilization, ensuring effective penetration into hollow or porous items. It plays a crucial role in confirming the efficacy of sterilization procedures.

KEY FEATURES

- Ideal Process Challenge Device: Simulates sterilization for complex, hollow, or porous instruments, indicating steam penetration.
- Non-Toxic Ink: Safe for use in medical environments, with no health or environmental risks.
- EN ISO 1-11140 (Type 2) Compliance: Meets international standards for sterilization validation.



STERIFAST TYPE 4 (I4)

Type 4 (I4) Chemical Indicator is a multi-variable steam indicator that ensures all sterilization conditions, such as temperature, time, and steam presence, are met. It offers a reliable and precise way to confirm the effectiveness of steam sterilization cycles.

KEY FEATURES

- Multi-variable Steam Indicator: Confirms multiple sterilization parameters.
- ISO 1-11140 (Type 4) Compliance: Meets international standards for sterilization monitoring.
- Heavy Metals-Free: Safe, environmentally friendly, and suitable for healthcare environments.

This indicator is essential for verifying sterilization efficiency and supports infection control and regulatory compliance in hospitals and CSSDs.



STERIFAST TYPE 6 (I6)

Type 6 (I6) Chemical Indicator is designed to monitor steam sterilization cycles, providing reliable verification of exposure to required sterilization conditions for medical devices at various time and temperature settings.

KEY FEATURES

- Steam Emulating Indicator: Calibrated for °134C (7,5, 3,5 min) and °121C (15 min).
- Water-Based Ink: Environmentally safe and non-toxic.
- Heavy Metals & Lead-Free: Safe for users and the environment.
- Reliable Performance: Provides clear evidence of successful sterilization.

This indicator is essential for ensuring accurate sterilization and traceability in healthcare and laboratory environments.



STERIFAST EO INDICATOR (E1)

EO Chemical indicator for ethylene oxide (EO) sterilization, providing a clear visual confirmation of successful sterilization. It ensures compliance with ISO 1-11140 standards and verifies that sterilization conditions-temperature, gas concentration, and exposure time-are met.

Sterifast EO Indicator (E1) is crucial for monitoring EO sterilization cycles, particularly for heat-sensitive instruments.



STERIFAST STEAM BIOLOGICAL INDICATOR

Steam Biological Indicators are critical for verifying the effectiveness of steam sterilization. Containing *Geobacillus stearothermophilus* spores, they help confirm that the necessary conditions were met to ensure complete sterilization, ensuring instruments and equipment are safe for use.



STERIFAST EO BIOLOGICAL INDICATOR

EO Biological Indicators are essential for monitoring the effectiveness of Ethylene Oxide (EO) sterilization. Containing *Bacillus atrophaeus* spores, these indicators help verify if sterilization conditions have been met, ensuring the elimination of microorganisms for safe, sterile instruments.



STERIFAST VH2O2 BIOLOGICAL INDICATOR

VH2O2 Biological Indicators are essential for verifying the effectiveness of Vaporized Hydrogen Peroxide (VH2O2) sterilization. Containing *Bacillus subtilis* spores, these indicators help confirm that the sterilization process has eliminated microorganisms, ensuring that medical equipment is sterile and safe for use.



STERIFAST SEAL CHECK

Seal Check is an essential tool for evaluating the integrity and effectiveness of sealed packaging, particularly in the medical and healthcare industries. It ensures that packaging is properly sealed to maintain sterility during storage and transportation.

KEY FEATURES

- ISO 2-11607 Compliance: Meets international standards for packaging and sealing terminally sterilized medical devices.
- Sealing Integrity: Confirms that seal strength meets required standards to prevent contamination and preserve sterility.
- User-Friendly: Simple application and interpretation, ensuring reliable monitoring of sterilization package seals.

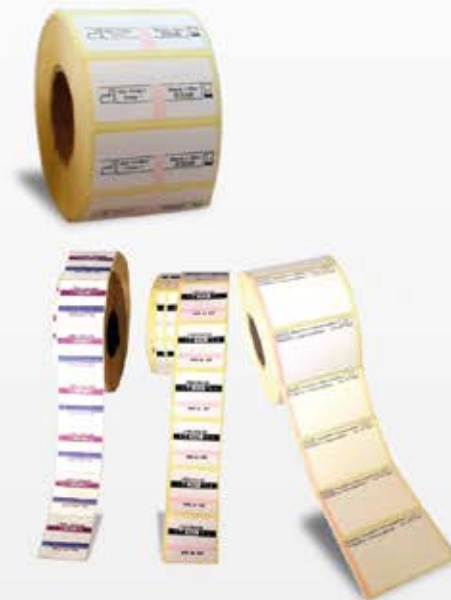


STERIFAST INDICATOR LABEL

Indicator Labels provide clear and reliable sterilization indicators for various processes, ensuring successful sterilization and traceability in medical and clinical settings.

KEY FEATURES

- ISO 1-11140 (Type 1) Compliance: Meets international sterilization standards.
- Indicator Types: Available for steam or VH2O2 sterilization processes.
- Customizable Printing: Allows for printing operator codes, cycle numbers, expiry dates, and more, ensuring clear traceability.



STERIFAST SCBI UNIVERSAL INCUBATOR

SCBI Universal Incubator is an efficient and versatile device for incubating Self-Contained Biological Indicators (SCBIs) used in sterilization monitoring, suitable for steam, VH₂O₂, ozone, and other sterilization processes.

MAIN FEATURES

- Selectable Incubation Temperature: Choose between °37C or °57C for different biological indicators.
- Fast Warm-Up: Heats up in 14-12 minutes for quick use.
- Integrated Digital Thermometer: Accurate temperature monitoring with clear digital display.
- High Capacity: Incubates up to 18 SCBIs simultaneously.
- SCBI Crushing Cavity: Allows controlled crushing of SCBIs for testing.
- Continuous Operation: Designed for 7/24 use in high-demand environments.
- Dual Power Input: Compatible with 110V/220V adapters for global use.



The background features a complex, abstract digital pattern in shades of blue. It consists of numerous thin, overlapping lines and dots that create a sense of depth and movement, resembling a data stream or a network visualization. The overall effect is futuristic and high-tech.

SERVICES

OWN BRAND LABELING (OBL)

Sterifast offers custom packaging solutions for medical device manufacturers, ensuring compliance with regulations while reflecting unique brand identities.

- Sterilization Indicators – Steam, EO, VH_2O_2
- Custom Designs – Tailored to client specifications
- Branding Elements – Product name, logo, and corporate identity
- Technical Information – Material specs, compliance, and regulatory markings

With Sterifast OBL, manufacturers get high-quality, fully compliant packaging that aligns with their brand vision.





DESIGNING CSSD

The design of the Central Sterilization Service Department (CSSD) in hospitals must adhere to both international and national standards to ensure patient and staff safety while preventing the transmission of hospital-acquired infections. CSSD layout is structured based on unidirectional workflow principles to minimize the risk of cross-contamination. The key principles and standards for CSSD design include:

A well-designed CSSD is critical for ensuring operational efficiency, infection control, and compliance with regulatory standards in healthcare facilities.

The Sterifast design team has the capability to develop the required design for any healthcare facility in compliance with these standards.



STERIFAST MEDICAL PACKAGING VALIDATION LABORATORY

Our lab ensures medical packaging meets ISO 11607 and ISO/IEC 17025 standards, delivering accurate testing and compliance validation.

- Material, Process & Equipment Qualification – Ensuring performance and regulatory compliance
- Accelerated Aging – Simulating conditions to test product durability
- Barrier Properties & Seal Strength – Assessing microbial resistance and seal integrity
- IQ, OQ, PQ Validation – Verifying sterilization and packaging process efficiency
- Mechanical Properties Testing – Evaluating strength, flexibility, and reliability

27



STERIFAST AUTOCLAVE CALIBRATION

Certified under ISO 9001 and compliant with ISO/IEC 17025, we ensure precision in testing and calibration for sterilization systems.

- Tabletop Autoclaves: Accuracy validation for small-scale medical use
- Hospital Sterilization: Performance assessment for large-capacity systems
- Laboratory Autoclaves: Calibration for research and clinical applications
- Pharmaceutical Autoclaves: Compliance testing for pharmaceutical sterilization

28



Sterifast

Sterilization & Disinfection

ecoPlasma

INFO@STERIFAST.COM

ZONA INDUSTRIAL DO PADRÃO 343-5460 ,11 BOTICAS, PORTUGAL

+351 276 418 287