

Steam Sterilizer

STR 4407

eryiğit
MEDICAL DEVICES

Technical Datasheet

ERYIGIT's steam sterilizer is offered in a prevacuum configuration and is designed and manufactured for fast and efficient sterilization of textile material, surgical instruments, dressing tools, rubber materials and liquids in a glass container in healthcare facilities.

Size of Chamber	
Chamber Volume	120 Lt.
Chamber Depth	750 mm
Chamber Width	400 mm
Chamber Height	400 mm
Basket Capacity*	2 pcs
STU Capacity **	1 pc

* Basket size (ISO): 600x400x200 mm (LxWxH)

** Basket/container size (STU): 600x300x300 mm (LxWxH).

Dimensions	Single Door	Double Door
Door Type	Vertical Sliding Door	
Depth	1330 mm	N/A
Width	800 mm	N/A
Height	1750 mm	N/A

* Single Door Option is available only.

ERYIGIT STR 4407 steam sterilizer is designed and manufactured in compliance with the following requirements and standards:

Medical Device Directive	: 93/42/EEC as amended by directive 2007/47/EC
Device Classification	: Class IIb, acc. To EC MDD 93/42/EEC 2007/47/EC (Annex IX)
Low Voltage Directive	: EN 60601-2-1
EMC Directive	: EN 60601-1-2
Pressure Equipment Directive	: PED 2014/68 EU : EN 13445-1, -2, -3, -4, -5 (Pressure Vessels)
Sterilization – Steam sterilizers – Large sterilizers	: EN285
Quality Management System Requirements	: EN - ISO 9001:2015
Medical Devices – Quality management systems – Requirements for regulatory purposes	: ISO 13485:2016
Environmental Management Systems – Requirements with guidance for use	: ISO 14001:2015

"Type" tests of ERYIGIT steam sterilizers are performed and certified according to the directives of EN 285 and TS EN 17665-1-2 by The German accreditation company HYG/CEN GmbH.



Device	
Control System	PLC (Programmable Logic Controller)
Operation Mode	Fully Automatic / Button Command and touch screen
Display Type	Color TFT, LCD Touch Screen
Display Sizes Available	7,0"(standard) / 10,0" (optional)
Key Pad	Touchscreen
Printer	40 Character/line, integrated thermal printer
Communication	RS232 Port/USB Port
Warning System	Visual & Audio & Printed
Data Storage	1000 cycles
Monitoring	Addition to Touchscreen, analogue gauges for chamber, jacket, generator and air pressure
Mobility	Easy positioning on 4 castors (2 x swivel) and firm fixing on suspension legs
Steam Control	Through pneumatic and electric valves

Standard Programs			
Medical & Surgical Instruments (134°C)	~ 60 min	Bowie & Dick Test (134°C)	~ 45 min
Textile Materials (134°C)	~ 60 min	Vacuum Leak Test	~ 25 min
Rubber Articles (121°C)	~ 80 min	Customized Program Capacity	20
Liquids in Glass Container (121°C)	~ 60 min	<i>Process times are load-dependent and approximate. They refer to full process including drying with an average load.</i>	
Silicone Implants (134°C)	~ 80 min		
Flash (134°C)	~ 20 min		
Prion (134°C)	~ 90 min		

Safety & Quality Features

√ Protects operator from electrical current leaks.
√ Short circuit protection.
√ Safety valve.
√ Hepa filter for air filtration.
√ Water level control with electrodes in generator.
√ Water level buoy (at water tank).
√ Steam traps for sensitive steam drainage.
√ Leak test.

√ Password protection.
√ Sensors against obstructions on the doors way.
√ Pressured door locks.
√ Unable to open both doors at once in Septic-Aseptic models.
√ Emergency stop button.
√ Post cycle drying.

Temperature

Range	110°C - 141°C (chamber)
Measurement	3 x PT 100 (DIN Class A) Sensors
Location	Chamber (2), Generator (1)

Pressure

Measurement	Pressure Transducer (4)
Location	Chamber (2), Jacket (1), Generator (1)

Vacuum

Source	Pump, liquid ring (2.2KW)
Capacity	60 mbar
Pre-Vacuum	Yes

Construction

Frame/Carcase	Electrostatic powdered profile steel AISI 304 stainless steel (optional)
Outer Panel	AISI 304 stainless steel
Chamber	6.0 mm, AISI 316 L/Ti stainless steel
Jacket	~2.5-3 mm, AISI 316 L stainless steel, partial cover Full cover jacket is optional*
Door	12 mm, AISI 304 stainless steel
Panels Surrounding	AISI 304 stainless steel
Piping	brass AISI 304 stainless steel is optional*
Chamber Polishing	Electro polishing is Optional*

Installation Requirement

Power	30 kW, 3 Phase / 400 VAC ± 10
Water	RO treated deionized water for high performance

Chamber

Test Pressure	5 Bar
Test Temperature	148 °C
Working Temperature	134 °C
Working Pressure	2,2 Bar

Steam Generator

Capacity	60 Lt
Water Level Protection	CRES* / AISI 304 steel box
Power (3 Phase, 400 ± 10 VAC)	20 KW
Test Pressure	7 Bar
Test Temperature	159 °C
Working Temperature	145 °C
Working Pressure	2,8 Bar

* CRES : Corrosion Resistant Stainless Steel

Consumption

Electricity	10 kW/cycle
Water (Approximate)	~ 80 Lt/cycle

Steam

Type	97% Saturated Steam at Abs. Pressure
Source	Built in Steam Generator Central Steam System is optional*
Side of Applied Steam	Lateral

Optional Accessories

2 Shelves including chamber rails
Cart Set (Transport + Loading) with adjustable height option
Single Transport Trolley (Optional Height Adjusting)
Single Loading Cart (AISI 304 Stainless Steel)
STU Basket (AISI 304 Stainless Steel)

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Feeding Water Requirements *

Residue on evaporation	≤ 10 mg/L
Silicate (SiO ₂)	≤ 1 mg/L
Iron	≤ 0,2 mg/L
Cadmium	≤ 0,005 mg/L
Lead	≤ 0,05 mg/L
Heavy metals other than iron, cadmium, lead	≤ 0,1mg/L
Chloride (Cl)	≤ 2 mg/L
Phosphate (P ₂ O ₅)	≤ 0,5 mg/L
Conductivity (at 25°C)	≤ 5 μS/cm
pH Value (degree of acidity)	5 to 7,5
Appearance	Free of sediment, clear, colorless
Hardness (Σ Earth Alkali Ions)	≤ 0,02 mMol/L

* Water quality should be checked by standard analytical test methods by the institution which utilizes the sterilizer

Drainage

Water	Inclined metal pipe to be installed onsite with at least 2 meters of length (diameter: 2" - 3")
Steam (Condensed)	Steam Trap (built in)
Air	Central Air System of Hospital 6 bar pressure



Installation Conditions

At least 60 cm. space is needed on both lateral sides of the device to provide an effective technical service. Exhaust fan or ventilation funnel needs to be placed above the device for an effective evacuation of heat.

For more information, please contact:

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EN 285
EN 17665-1



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