

Steam Sterilizer

STR 4410

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	160 Lt.
Chamber Depth	1000 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	Hinged door with automatic locking	
Depth	1530 mm	N/A
Width	780 mm	N/A
Height	1750 mm	N/A
Door Type	Fully automatic vertical sliding door	
Depth	1530 mm	N/A
Width	800 mm	N/A
Height	1750 mm	N/A

* Single Door Option is available only.

ERYIGIT STR 4410 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	: 2006/95/EC - EN 60601-2-040
EMC Directive	: 2004/108/EC EN 60601-1-2
Pressure Equipment Directive	: 97/23/EC : EN 13445-1, -2, -3, -4, -5 (Pressure Vessels)
Sterilization – Steam sterilizers – Large sterilizers	: EN285:2006 + A2:2009
Quality Management System Requirements	: EN - ISO 9001:2008
Medical Devices – Quality management systems – Requirements for regulatory purposes	: ISO 13485:2003
Environmental Management Systems – Requirements with guidance for use	: ISO 14001:2004

"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 HYGCEN GmbH.



Device	
Control System	PLC (Programmable Logic Controller)
Operation Mode	Fully Automatic / Button Command
Display Type	Color TFT, LCD Touch Screen
Display Sizes Available	5,7" / 7,0" / 10,0"
Key Pad	Touchscreen
Printer	40 Character/line, integrated thermal printer
Communication	RS232 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
Textile Materials (134°C)	~ 60 min
Rubber Articles (121°C)	~ 80 min
Liquids in Glass Container (121°C)	~ 60 min
Silicone Implants (134°C)	~ 80 min
Flash (134°C)	~ 20 min
Prion (134°C)	~ 90 min
Bowie & Dick Test (134°C)	~ 45 min
Vacuum Leak Test	~ 25 min
Customized Program Capacity	20

Process times are load-dependent and approximate. They refer to full process including drying with an average load.

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 precise exhausting.
√ Leak test.
√ Password protection.
√ Sensors against obstructions on the doors pathway.
√ Doors locks under pressure.
√ Unable to open both doors at once in Septic-Aseptic models.
√ Emergency stop button.

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	
Body	Electrostatic powdered profile steel/AISI 304 stainless
Chamber	6.0 mm, AISI 316 L/Ti stainless steel
Jacket	~2.5-3 mm, AISI 316 L stainless steel, full cover
Door	12 mm, AISI 304 stainless steel
Panels Surrounding	AISI 304 stainless steel
Piping	brass, AISI 304 stainless steel
Chamber Polishing	Electro polishing, Optional

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

Feeding Water Requirements *	
Residue on evaporation	≤ 10 mg/L
Silicate (SiO2)	≤ 1 mg/L
Iron	≤ 0,2 mg/L
Cadmium	≤ 0,005 mg/L
Lead	≤ 0,05 mg/L
Heavy metals other than iron, cadmium, le:	≤ 0,1mg/L
Chloride (Cl)	≤ 2 mg/L
Phosphate (P2O5)	≤ 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
Asperity (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	Vacuum Motor (built in)

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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MEDICAL DEVICES

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Chamber	
Test Pressure	7 Bar/Abs
Test Temperature	148 °C
Working Temperature	134 °C
Working Pressure	3,2 Bar/Abs

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/Abs
Test Temperature	159 °C
Working Temperature	145 °C
Working Pressure	4,2 Bar/Abs

* CRES : Corrosion Resistant Stainless Steel

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

Steam	
Type	97% Saturated Steam at 4.2 Bar Abs. Pressure
Source	Built in Steam Generator or Central Steam System
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)	
STU Basket (AISI 304 Stainless)	

