

Steam Sterilizer

Goldberg 160S

Technical Datasheet

ERYIGIT's GOLDBERG 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	700 mm
Chamber Width	350 mm
Chamber Height	700 mm
STU Capacity **	2 pc

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

Dimensions	Single Door	Double Door
Door Type	Vertical Sliding Door	
Depth	1100 mm	N/A
Width	800 mm	N/A
Height	1800 mm	N/A
Empty Weight	~ 680 Kg	N/A
Packaged Weight	~ 750 Kg	N/A

Goldberg 160 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 60601-1; EN 61010-1; EN 61010-2-040
EMC Directive	: EN 60601-1-2; EN 61326-1
Pressure Equipment Directive	: PED 2014/68 EU
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 GOLDBERG 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 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.

Temperature

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

Pressure

Measurement	Pressure Transducer
Location	Chamber, Jacket, Generator

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	3 mm, AISI 304 L stainless steel, partial cover AISI 316L stainless steel is optional* Full cover jacket
Door	6 mm, AISI 304 stainless steel
Panels Surrounding	AISI 304 stainless steel
Piping	brass AISI 304 stainless steel
Chamber Polishing	Electro polishing is Optional*

Installation Requirement

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

√ 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.

Chamber

Test Pressure	5 Bar
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Steam Generator

Capacity	50 Lt
Water Level Protection	CRES* / AISI 304 steel box
Power (3 Phase, 400 ± 10 VAC)	20 KW
Test Pressure	7 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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MEDICAL DEVICES

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