

Steam Sterilizer

Goldberg 120S

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 | 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.

GOLDBERG 120S 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 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. |

| |
|---|
| √ 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 |
| 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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