

# **Large Scale Ethylene Oxide Sterilizer**

## **Model SDE02.0**



## **PRODUCT CATALOG**

## Product Introduction

The SDEO Series Large Ethylene Oxide Sterilizer is a specialized device designed for low-temperature fumigation sterilization using ethylene oxide gas. It operates under specific temperature (low-temperature), pressure, humidity, and duration conditions to sterilize items enclosed within its sealed sterilization chamber. Ethylene oxide gas is a highly reactive chemical disinfectant, offering not only broad-spectrum antimicrobial efficacy but also reliable sterilization performance.

## Features

- ◆ Sterilizes a large number of items at a time;
- ◆ One button fully automatic operation, sterilization record printing;
- ◆ Full range of sensing alarms
- ◆ Automated detection
- ◆ Implementation of human-machine interface;
- ◆ Widely used in thoracoscopy, bronchoscopy, laparoscope, cardiac catheters, surgical equipment, anesthesia bag, mask, protective clothing sterilization;

## Large scale ethylene oxide sterilizer

Ethylene oxide sterilizer is an intelligent all-in-one machine  
Intelligent one-button operation  
mainly in three stages



Technical Parameter Description	
Model & Power	SDE02.0/6KVA
Chamber Size (L * W * H)	1500 * 1000 * 1400mm (allowable deviation $\pm 10\%$ )
Overall Size (L * W * H)	2250 * 1350 * 1950mm (allowable deviation $\pm 10\%$ )
Weight	1100kg
Working Pressure	-70 kPa to 60 kPa, Pressure Holding: 60 min, Leakage Rate < 0.01 kPa/min
Sterilization Temperature	35℃-55℃
Sterilization Humidity	30%-90%
Door Opening Mechanism	Sector door or sliding door (user-selectable).
Inner Chamber Material	Constructed with $\geq 6\text{mm}$ thick Grade 304 stainless steel (national standard), using seamless argon arc welding and flaw detection technology. Durable design with a service life exceeding 10 years.
Exterior Material	Premium brushed stainless steel plate (Grade 304, $\delta$ =1.2mm).
Heating System	Wide PTC silicone heating plates on all six sides, with independent temperature control for uniform heat distribution. Dual temperature protection for sterilization safety.
Sterilizer Door	Single-door structure with pneumatic sealing (automatic smooth sliding mechanism). Safety lock ensures door remains sealed during malfunctions. Sealing Method: Silicone rubber inflatable seal.
Monitoring Instruments	Real-time pressure, humidity, and temperature monitoring with precision of $\pm 1\%$ .
Humidification System	Steam pipelines: SUS304 stainless steel; Integrated automatic steam generator with dedicated sterile-grade filtered injection lines. Real-time humidity monitoring with alarms for deviations. Chamber humidity tolerance: $\pm 5\%$ RH.
Sterilizing Agent	80% ethylene oxide (EO) mixed with 20% CO <sub>2</sub> , delivered via single-canister bottle connection for stable and efficient dosing.
EO Residual Removal System	Filtered air injected into the chamber to restore atmospheric pressure; Programmable vacuum cycles (9 –

	99 repetitions) to evacuate residual EO; Final EO gas extraction via water-ring vacuum pump, ensuring thorough dissolution in water.
<b>Printing &amp; Storage</b>	Built-in mini printer for sterilization records; Internal storage capacity: >8,000 cycles of logs and alarms; USB data export with one-click operation.
<b>Alarm System</b>	Real-time fault monitoring with audible/visual alarms and English error prompts; Power failure protection and memory retention to resume operations post-interruption.
<b>Applications</b>	Suitable for heat-sensitive, moisture-sensitive, vacuum-tolerant, and EO-compatible items, including: Medical devices, endoscopes, rubber/plastic products, pharmaceuticals, textiles, biologics, cultural relics and archives, instruments, hygiene products, etc.
<b>Power Supply</b>	380V AC.
<b>Notes:</b> <ul style="list-style-type: none"><li>◆ Technical terms adhere to ISO standards (e.g., SUS304, PTC, RH).</li><li>◆ Units (kPa, ° C, % RH) follow international scientific notation.</li><li>◆ Safety features (e.g., dual temperature protection, pneumatic sealing) are emphasized for compliance with industrial equipment regulations.</li><li>◆ Functionality (e.g., programmable vacuum cycles, USB export) highlights user convenience and precision.</li></ul>	