

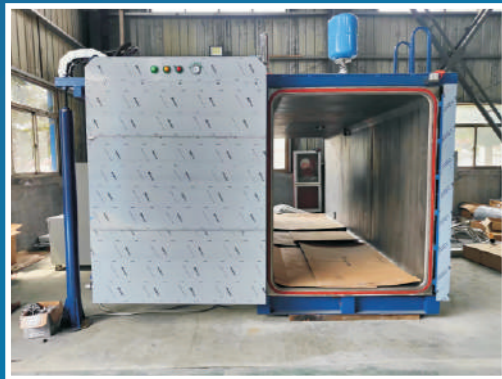


ETHYLENE OXIDE STERILIZER

International Market: Hangzhou Bocon Mechanical & Electrical Equipment Co.Ltd
Address: Room1202, Caitong Zhongxin, Xiasha District, Hangzhou City, Zhejiang Province, China
Tel: 086-571-87977377
Cell: +86 18158114897
E-mail: nancy.huang@hzbocon.com
WeChat: 18158114897
Website: <http://hzbocon.en.alibaba.com>
<http://www.hzbocon.com>

After-sale Service : Zhejiang Bocon Intelligent Equipment Co. , Ltd
Address: Building 6, No. 2699 Keji Avenue, Luoxing Street, Jiashan County, Jiaxing, Zhejiang Province
Cell: +86 15306590288
E-mail: TechnicSupport@hzbocon.com
WeChat: +86 15306590288
Website: <http://hzbocon.en.alibaba.com>
<http://www.hzbocon.com>

Hangzhou Bocon Mechanical & Electrical Equipment Co.,Ltd
Zhejiang Bocon Intelligent Equipment Co.,Ltd



VOLUME	PALLET qty * size(mm)	INTERNAL SIZE (mm)	OUTER SIZE (mm)		
			(SLIDING DOOR)	(REVOLVING DOOR)	(LIFTING DOOR)
1m³	/	1400*700*1000	1750*1270*1520	/	/
2m³	/	1650*1000*1200	2070*2520*1720	2000*1570*1720	/
3.0m³	1*(1200*1000)	1400*1350*1700	1820*3220*2220	1750*1920*2220	1820*1910*3950
4.5m³	2*(1200*800)	2000*1350*1700	2420*3220*2220	2350*1920*2220	2420*1910*3950
5m³	2*(1200*1000)	2250*1350*1700	2670*3220*2220	2600*1920*2220	2670*1910*3950
6m³	3*(1200*800)	2700*1350*1700	2670*3220*2220	2600*1920*2220	2670*1910*3950
8m³	3*(1200*1000)	3500*1350*1700	3920*3220*2220	3850*1920*2220	3920*1910*3950
10m³	4*(1200*1000) 5*(1200*800)	4500*1350*1700	4920*3220*2220	4850*1920*2220	4920*1910*3950
15m³	5*(1200*1000) 6*(1200*800)	5500*1350*2000	5920*3220*2520	5850*1920*2520	5920*1910*4550
20m³	7*(1200*1000)	7500*1350*2000	7920*3220*2520	7850*1920*2520	7920*1910*4550
26m³	9*(1200*1000) 11*(1200*800)	9600*1350*2000	10020*3220*2520	9950*1920*2520	10020*1910*4550
28m³	10*(1250*1220)	12500*1350*1700	12945*3220*2270	/	/
30m³	13*(1200*800)	11300*1350*2000	11720*3220*2520	11650*1920*2520	11720*1910*4550
30m³-2	10*(1200*1000)	5600*2700*2000	6020*5920*2520	5950*3270*2520	6020*3260*4550
35m³	15*(1200*800)	13000*1350*2000	13420*3220*2520	13550*1920*2520	13420*1910*4550
35m³-2	14*(1200*800)	6000*2700*2200	6470*6180*2780	6470*3410*2780	6470*3340*5070
40m³-2	12*(1200*1000)	6650*2700*2200	7110*6260*2780	7110*3450*2780	7110*3380*5130
48m³	12*(1200*1000)	12850*1400*2700	13270*3480*3270	13200*2050*3220	13270*2040*6070
52m³	13*(1200*1000)	13900*1400*2700	14320*3320*3220	14250*1970*3220	14320*1960*5950
55m³-2	14*(1200*1000)	7500*2700*2700	7960*6260*3280	7960*3450*3280	7960*3380*6130
57m³-2	18*(1200*1000)	9650*2700*2200	10110*6260*2780	10110*3450*2780	10110*3380*5130
63m³-2	16*(1200*1000)	8650*2700*2700	9110*6260*3280	9110*3450*3280	9110*3380*6130
70m³-2	18*(1200*1000)	9700*2700*2700	10160*6260*3280	10160*3450*3280	10160*3380*6130
78m³-2	20*(1200*1000)	10750*2700*2700	11210*6260*3280	11210*3450*3280	11210*3380*6130
86m³-2	22*(1200*1000)	11800*2700*2700	12260*6180*3280	12260*3410*3280	12260*3340*6070
101m³-2	32*(1200*1000)	17050*2700*2200	17510*3300*2780	17510*3300*2780	17510*3300*5070
118m³-2	38*(1200*1000)	20200*2700*2200	20660*6180*2780	20660*3450*2780	20660*3380*5070

企业简介

Introduction of our Enterprise



Hangzhou Bocon Mechanical and Electrical Equipment Co., Ltd. was established in 2006, located in Hangzhou, Zhejiang Province, specializes in the research, development, manufacturing, and installation of sterilization equipment. We also provide comprehensive sterilization solutions and MES systems for sterilization stations. With nearly 20 years of sterilization experience and technical expertise, we are dedicated to delivering high-quality, reliable Ethylene oxide sterilizers and associated facilities to our global clients. Our ethylene oxide sterilizer and related equipment with hot water circulation and hot air circulation heating methods use advanced and fully functional control systems to achieve automatic control. Has parameter release function in accordance with ISO 11135. The product undergoes strict quality control and testing to ensure compliance with international requirements such as ISO13485 and EN 1422.

In addition to ethylene oxide sterilizers, we offer a range of ancillary equipment, including preconditioning rooms, aeration rooms, EO gas scrubbers, and pioneering EO gas recovery and energy recovery technologies. To date, our ethylene oxide sterilizers have been sold to 36 countries around the globe. With the continuous expansion of our business and production facilities, we established Zhejiang Bocon Intelligent Equipment Co., Ltd. in 2022. As a company that values integrity and exceptional service, we are eager to establish long-term partnerships with domestic and international clients for mutual growth. We invite you to contact us for more information about our ethylene oxide sterilizer.

产品应用 / Product Application

01. Medical supplies: syringe, infusion device, dressing type, blood collection, intubation catheter, birth control equipment, Surgical Suture, etc.



02. Medical Devices: Endoscope, pacemaker, artificial heart, dialyzer, attractor, oxygenator, etc.



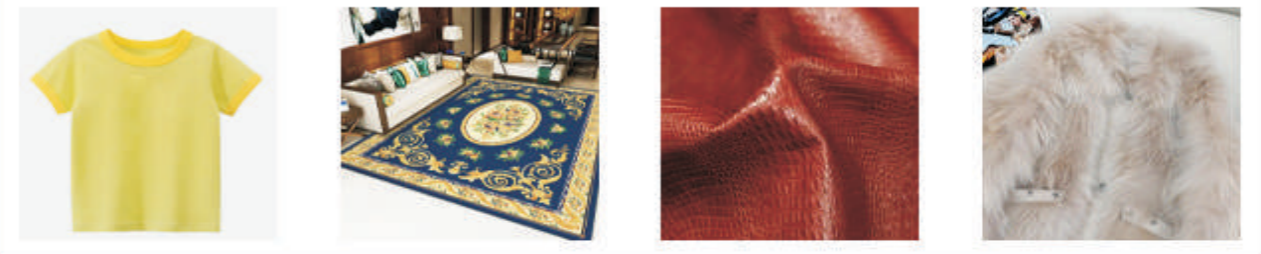
03. Sanitary Products: Women's sanitary napkin, napkin, disposable sanitary tableware, etc.



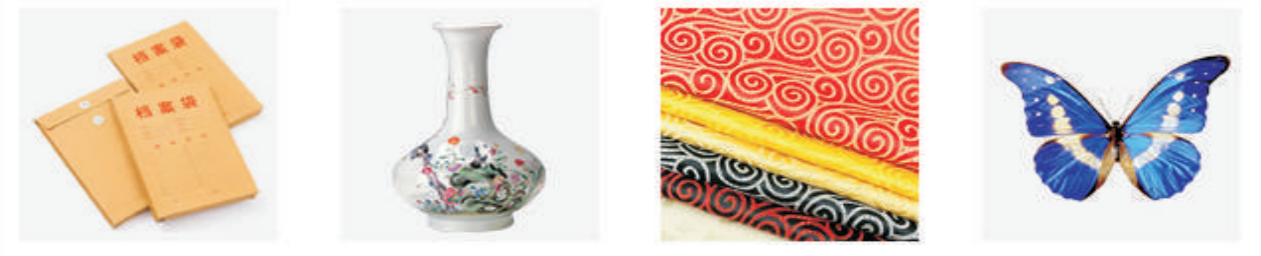
04. Medicine or Cosmetics: Some Chinese medicine western medicine, some cosmetics.



05. Textiles & Biological Products: Cotton wool chemical fiber clothing, carpet, leather, fur products, etc.



06. Valuables: Paper money, ticket, medical records, archives, letters, collection of historical relics, silk satin products, animal specimens, etc.



07. Spices : dried herbs and spices, etc



Advantages of Ethylene Oxide Sterilization

1. Ethylene oxide can be used for sterilization of items not resistant to high temperature and humidity.
2. Ethylene oxide is considered to be a chemical sterilant with a good sterilization effect, which can kill all microorganisms including bacterial spores.
3. It has strong penetrability and can be used for sterilization of parts that are difficult to penetrate: some thin and long conduits cannot be sterilized by other low-temperature sterilization methods, and can only be sterilized by ethylene oxide or irradiation.
4. It causes little damage to items because ethylene oxide kills microorganisms by alkylation rather than oxidation, so it is very suitable for sterilization of items not resistant to heat.
5. It can be packed with various packing materials for storage and transportation, which can avoid cross-contamination.
6. It has standard chemical and biological monitoring methods so that sterilization quality can be effectively controlled and packages with failed sterilization can be found in time.

产品分类 Product Categories

B Series, L Series, G Series, H Series

灭菌柜各系列控制系统功能清单列表 The series sterilizer control system functions list					
序号 Item	通道及功能 Channel and function	Be系列 BE Series	Le系列 LE Series	Ge系列 GE Series	He系列 HE Series
1	柜内温度 (T1) Cabinet inside Temperature (T1)	√	√	√	√
2	柜内温度 (T2) Cabinet inside Temperature (T2)	√	√	√	√
3	柜内压力 (P1) Cabinet inside Pressure (P1)	√	√	√	√
4	柜内压力 (P2) Cabinet inside Pressure (P2)		√	√	√
5	柜内湿度 (RH1) Cabinet inside Humidity (RH1)	√	√	√	√
6	柜内湿度 (RH2) Cabinet inside Humidity (RH2)			√	√
7	水箱温度 (T5) Tank Temperature (T5)	√	√	√	√
8	EO温度 (T6) EO Temperature (T6)	√	√	√	√
9	汽化器温度 (T7) Vaporizer Temperature (T7)	√	√	√	√
10	磁力风机轴承温度(T8) Magnetic Fan Bearing Temperature(T8)			■*1	■*1
11	磁力风机轴承温度(T82) Magnetic Fan Bearing Temperature(T82)			■*1	■*1
12	磁力风机转速 (SPD1) Magnetic Fan Speed (SPD1)			■*1	■*1
13	磁力风机转速 (SPD2) Magnetic Fan Speed (SPD2)			■*1	■*1
14	磁力风机流量 (FL1) Magnetic wind turbine flow (FL1)"			■*1	■*1
15	磁力风机流量 (FL2) Magnetic Fan Flow (FL2)			■*1	■*1
16	柜内温度T3 Cabinet inside Temperature T3			■*2	■*2
17	放空温度T9 Venting TemperatureT9			■*3	■*3
18	放空加热器T10 Venting Heater T10			■*3	■*3
19	恒量真空功能 Constant Vacuumizing		□*3	■*3	■*3
20	恒量放空功能 Constant Venting			■*3	■*3
21	恒量加药功能 Constant Feeding EO			■*3	■*3
22	恒量加N2功能 Constant Adding N2			■*3	■*3
23	蒸汽发生器软控功能 Vaporizer Remote Control		□	√	√
24	内循环风机 Internal Circulation Fan			□	□
25	无害排风功能 Harmless Exhausting		□	√	√

灭菌柜各系列控制系统功能清单列表 The series sterilizer control system functions list					
序号 Item	通道及功能 Channel and function	Be系列 BE Series	Le系列 LE Series	Ge系列 GE Series	He系列 HE Series
26	汽化加热水箱			□	□
27	全程氮气保护功能Nitrogen Protection		□*4	■*4	■*4
28	阀门气源压力检测功能Valve Air Pressure Detection	√	√	√	√
29	门封气源压力检测功能Door Seal Air Pressure Detection		√	√	√
30	进料门门封压力足检测功能Feeding Door Seal Pressure Sufficient Detection		□	√	√
31	出料门门封压力足检测功能Discharge door seal pressure sufficient detection		□	√	√
32	蒸汽压力足检测功能Sufficient Steam Pressure Detection	□	□	√	√
33	真空泵缺水检测功能Vacuum pump water detection function	□	□	√	√
34	阀门位置反馈			√	√
35	尾气处理命令输出功能Tail Gas Removing Command	√	√	√	√
36	尾气处理应答反馈功能Tail Gas Removing Feedback	√	√	√	√
37	防雷功能Lightning protection			□	■
38	工控机IPC		√	√	√
39	和物料管理系统联网功能With Material Management System Networking Capabilities		√	√	√
40	触摸屏或文本显示屏Touch Screen or Text Screen	√	□	□	√
41	UPS电源UPS Power		√	√	√
42	现地数据控制箱Local Data Control Box	√	√	√	√
43	英文版English Version	√	√	√	√
44	厂商软件验证报告Factory Software Verification Report		√*5	√	√
45	控制系统历史数据曲线图Control System Historical Data Graph		√	√	√
46	控制系统详细数据报表Control Systems Detailed Data Report	√	√	√	√
47	控制系统详细数据自动汇总Control System Detailed Data Auto-summary		√*6	√*6	√*6
48	控制系统产品清单表Control System Components List Sheet		√	√	√
49	控制系统数据物联网接口Control system Data IOT Interfaces		□	√	√
50	控制系统物料管理系统接口Control System Material Management System Interface		√	√	√
51	服务器 Servers			√*7	√*7
52	整机质保年限Equipment Warranty Period1	1*8	1*8	2*8	3*6

说明 NOTICE: √--- 标配有此功能 standard configuration ■--- 免费可选功能 optional function - free
 □--- 收费可选功能 optional function - extra charges ☆--- 待开发功能 function to be developed

*1 有内循环风机时，此功能为标配；Only when the equipments have the internal circulation fan, this feature is standard configuration.
 *2 只有柜体尺寸≥50m³时才有此功能可选；Only the equipments, which has the cabinet size ≥50m³, have this optional function
 *3 系统配置有变频器或对应的控制比例阀时才有此功能可选；Only the equipment, which is configured with frequency converter or control valve, has this optional function.
 *4 必须具有氮气阀和氮气设备时才有此功能可选；Only the equipment, which has a nitrogen valve and nitrogen making device, has this optional feature.
 *5 标准化版本可以免费提供，定制化版本需要额外收费；Free provided for standard sterilizer; Customized will charge separately.
 *6 查看不同系列标准化汇总格式表；Check the different series of standardized summary sheet
 *7 此配置需要看具体情况，一般默认请情况为下柜体≥35M3，即会赠送服务器；It's according to the size of the sterilizer, the server will be free for all of the sterilizer size over 35M3.
 *8 具有独立型号的标准产品上如果有独立的质保年限标志时，按照标准产品的自有质保年限质保条约执行；If the standard models of equipments has their independent warranty period, its own standard product warranty period has the priority.
 *9 控制系统质保2年，其他设备质保1年。Control system gaurantee period is 2 years, others 1 year.

产品分类

Product Categories

Table-top sterilizer for hospital and Labtory



Model	BCS-L 78L	BCS-L 138	BCS-L 238
Overall Size	900*710*1400	880*950*1450	1050*1050*1600
Chamber Size	420*300*610	430*380*840	500*500*950
Chamber Volume	78L	138L	238L
Power Supply	220(200)V;50(60)HZ	220(200)V;50(60)HZ	220(200)V;50(60)HZ
Power	1.4KW	2.3 K W	3.4Kw
Chamber Material	SUS304	SUS304	SUS304
Humidity Tank Water Capacity	600L	800L	1500L
Exhaust Mode	direct exhaust/floor drain	direct exhaust/floor drain	direct exhaust/floor drain
Total Weight	320kgs	540kgs	640kgs
Sterilization Pressure	- 60kpa	- 60kpa	- 60kpa
Sterilization Humidity	40%-80%	40%-80%	40%-80%
Sterilization Temperature	37 °C & 55 °C	37 °C & 55 °C	37 °C & 55 °C
Sterilization Cycle (Total)	55 °C:8-10hours	55 °C:8-10hours	55 °C:8-10hours
	37 °C:10-12hours	37 °C:10-12hours	37 °C:10-12hours

柜门分类

Door Categories

Door Categories



Manual Door



Overall Lifting Door



Pneumatic Revolving Door



Pneumatic Sliding Door

柜门分类

Door Categories

Door Categories

The advantages and disadvantages of various doors for sterilizers

About loading door and unloading door of sterilizers, our company currently has four options, each with advantages and disadvantages, also have their own strengths.

The advantages and disadvantages of Manual door:

- ▶ Manual door seal does not need inflating, so seal repair and maintenance is relatively easy;
- ▶ Door opening way is revolving, saving space around the cabinet. It's suitable for space-constrained occasions;
- ▶ Since the cabinet is completely sealed by mechanical seal tightly, so the machining processing is more complex, and cost is higher. It's difficult to repair once there's any fault, for this reason, this kind of door is not recommended.

The advantages and disadvantages of Pneumatic Sliding Door:

- ▶ Pneumatic sliding door uses the inflatable seal. The seal way is more convenient and reliable.
- ▶ Pneumatic sliding door is automatically controlled by cylinders, it's safe and reliable, without manual applying an external switch;
- ▶ Pneumatic sliding door is the most commonly used door control mode at home and abroad;
- ▶ The biggest drawback is taking up a certain level of space, it's not suitable for the space-constrained occasions;

The Advantages And Disadvantages of Pneumatic Revolving Door:

- ▶ Pneumatic revolving door is actually the door with semi-inflatable seal, it's a popular way at home and abroad. A cylinder is used to top up the door 100-200mm higher, so the door separates from the door groove, then it can be open and close manually. It's suitable for large volume equipment.
- ▶ Pneumatic revolving door is simple in structure, it's safe and reliable. It's suitable for space limited on left and right or top and bottom.
- ▶ Pneumatic revolving door's sealing way is inflatable seal. It's easy convenient and reliable.
- ▶ The disadvantage is need human being help to open and close the door.

The Advantages And Disadvantages Of Overall Lifting Door:

- ▶ The overall lifting door is explosion-proof electric lifting door. It's rising the overall door to the top or lowering it to the bottom. It's the most space-saving way. It's full automatic way, does not need any help to open or close.
- ▶ Overall lifting door is also used inflatable sealing method. It's safe and reliable;
- ▶ The overall lifting door is suitable for any cabinet volume;
- ▶ The disadvantage is the cost is high because many security measures have to be added.

Special Notice:

- ※ Our quotation price is acquiescent as pneumatic revolving door.
- ※ If customer would like to choose pneumatic sliding door, the price will decrease 5000RMB/door.
- ※ If customer would like to choose overall lifting door, the price will increase 10000RMB/single pallet door, and 15000RMB/ double pallet door.
- ※ We do not suggest to choose mechanical door.

控制系统

Control System

Control System For Sterilizer



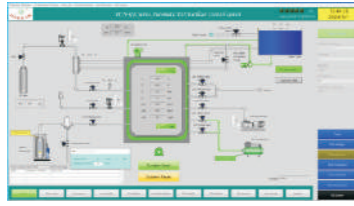
Separate Control System



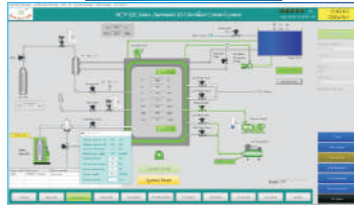
Integrated Control System

Control System for Sterilizer

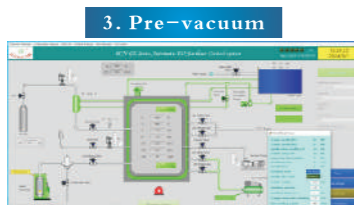
Mixed gas processes (C10)



1. Heating



2. Keep warm



3. Pre-vacuum



4. Leak testing



5. Humidifying



6. Humidity dwelling



7. EO injection



8. EO injection2



9. EO injection 3

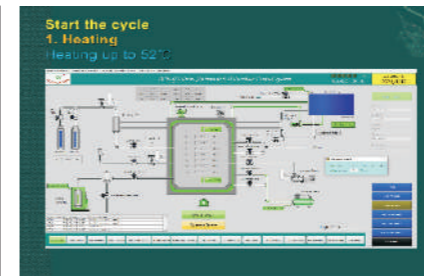
10. EO dwelling

11. EO removal

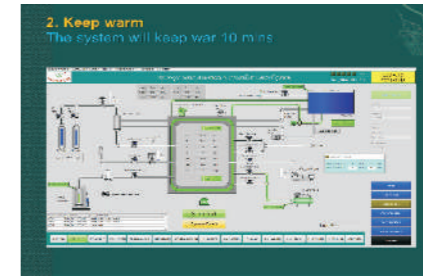
12. Air washing

13. Aeration

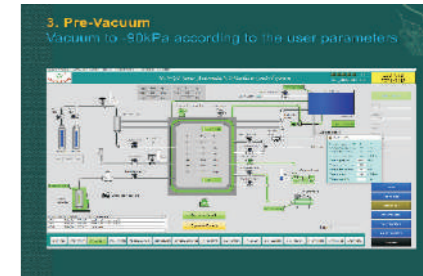
Full Nitride protection Processes (N20)



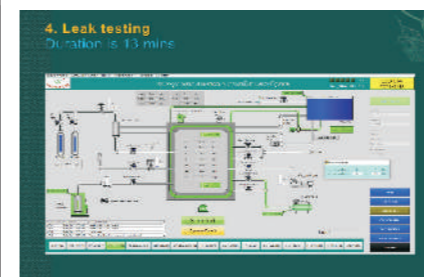
1. Heating
Heating up to 52°C



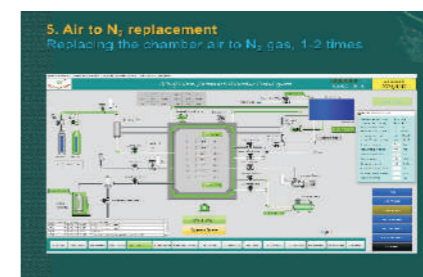
2. Keep warm
The system will keep warm 10 mins



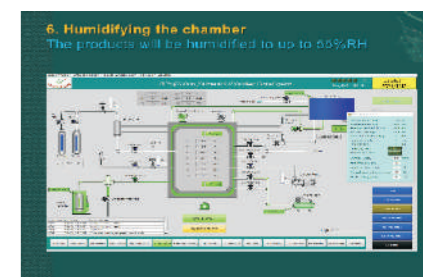
3. Pre-Vacuum
Vacuum to -80kPa according to the user parameters



4. Leak testing
Duration is 13 mins



5. Air to N2 replacement
Replacing the chamber air to N2 gas, 1-2 times



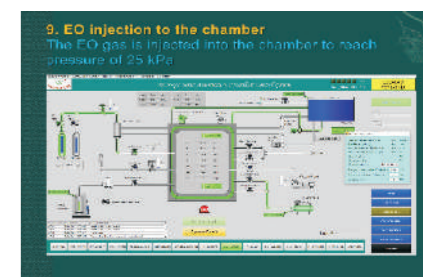
6. Humidifying the chamber
The products will be humidified to up to 55%RH



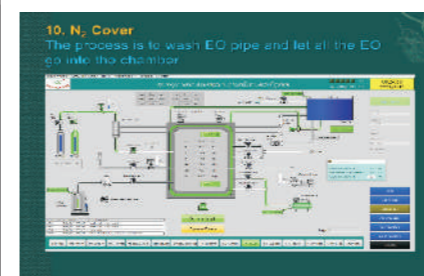
7. Humidity dwelling
Duration is 30 mins



8. N2 blanket to the chamber
EO pipe washing and preparing the chamber for the EO gas injection



9. EO injection to the chamber
The EO gas is injected into the chamber to reach pressure of 25 kPa



10. N2 Cover
The process is to wash EO pipe and let all the EO go into the chamber



11. EO Dwelling
It will hold on 2 hours and 10 mins



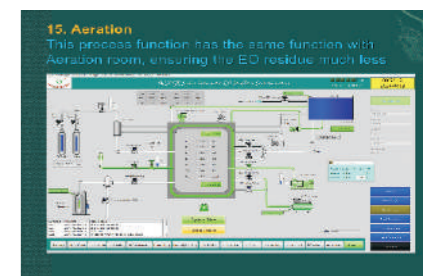
12. EO removal
Removing almost all the EO gas out under vacuum



13. N2 washing
Injection of N2 gas into the chamber to replace all the EO gas for safety



14. Air washing
Washing the products with air, after the air washing process the EO residue becomes very low

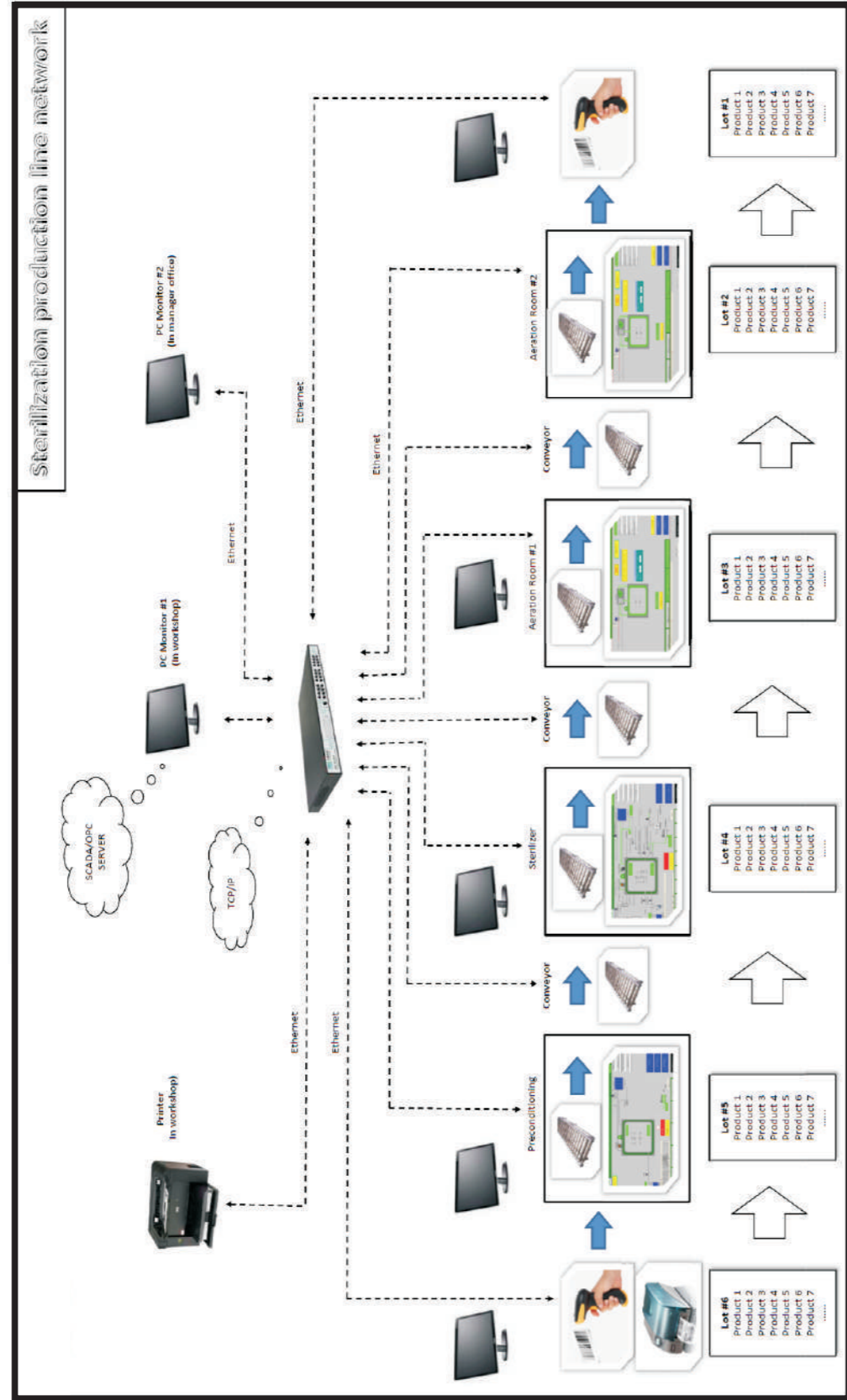


15. Aeration
This process function has the same function with Aeration room, ensuring the EO residue is much less

常规工艺 / Normal Sterilization Processes

控制系统 Control System

MES System



Software Report



控制系统

Control System

Other Control System

zinc plating auto-line



Die-Climbing Control System



The control system for the Die Climbing Machine , which used to build the Suzhou international financial Center, which is the tallest building in Suzhou, is designed by our company .



The control system for the Die Climbing Machine ,which used to build the China Zun , the tallest skyscraper, is designed by our company .

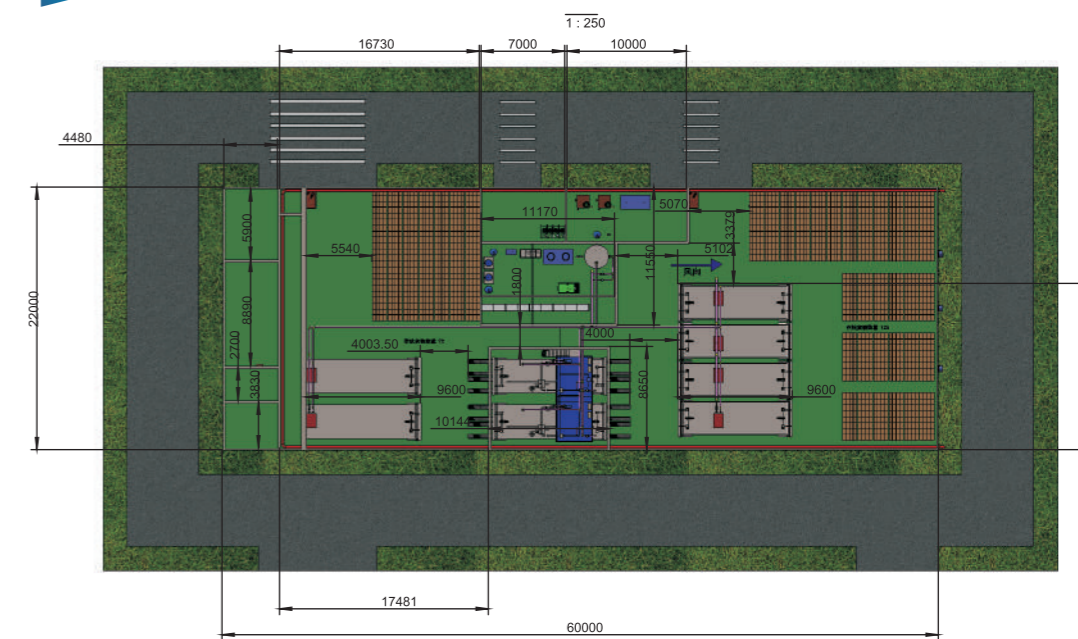


The control system for the Die Climbing Machine ,which used to build the Suzhou international financial Center, is designed by our company .

建站设计

Design Sterilizer Station

Sterilizer Station 3D Design



Providing professional 3D design

professional 3D design

配套产品

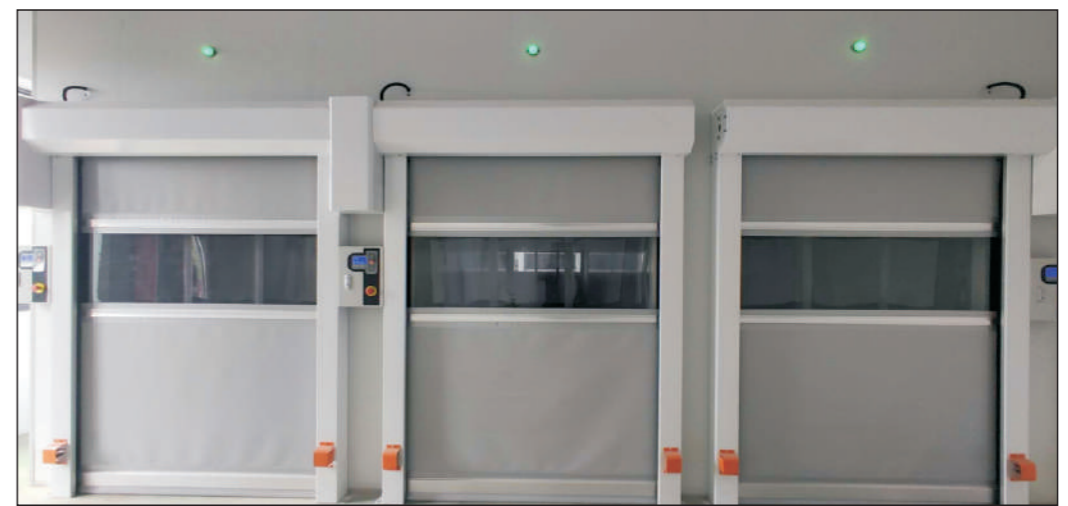
Auxiliary Product



Precondition Room

配套产品

Auxiliary Product



Aeration Room

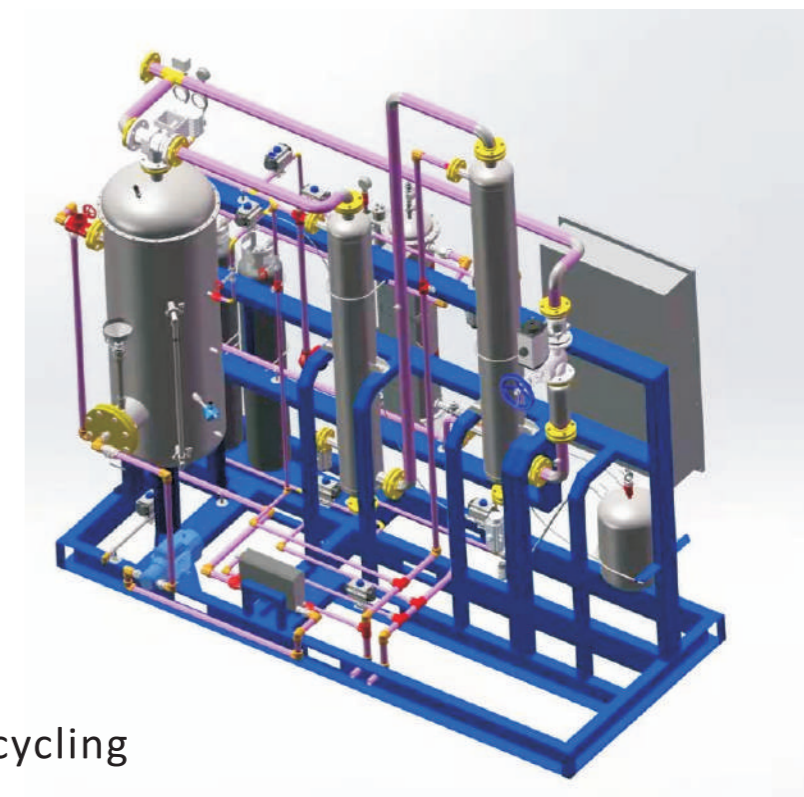
配套产品 / Auxiliary Product



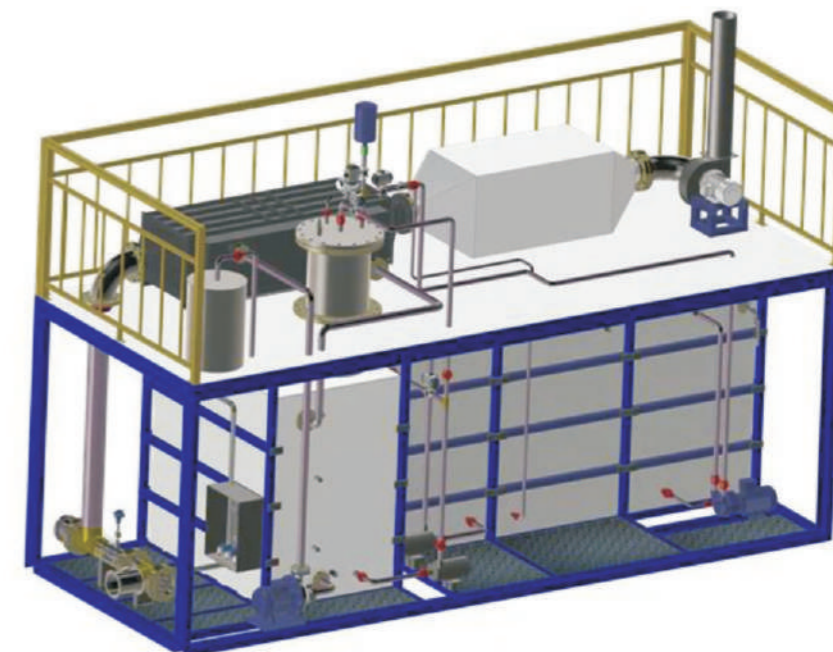
EO Scrubber



配套产品 / Auxiliary Product



EO Recycling



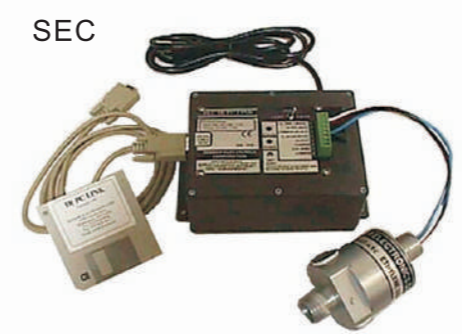
EO Burner

配套产品 / Auxiliary Product



Conveyor

EO Sensor



Specialized for cabinet inspection

Specialized for Environment Inspection

Magnetic Fan



Medical specialized vaporizer



Sterilizer door controller

Patent number: 201*****2061.1



Nitrogen making machine



公司资质

Company Qualification

Certificates



客户交流

Customer Communication

Customer Communication



企业出口市场

Bocon Marketing

