



恒远信达
HENGYUAN XINDA

OZONE GENERATOR



恒远信达
HENGYUAN XINDA

PROFESSIONAL
STERILIZATION SOLUTIONS
SERVICE PROVIDER



OZONE
GENERATOR
臭氧发生器

**Weifang Hengyuan Environmental
Water Treatment Equipment Co.,Ltd.**

Hotline: +86-400-000-3067

Tel: +86-0536-8353339

Add: No. 888, Leshan Road, Weicheng District, Weifang City,
Shandong Province, China

Web: www.wfhengyuanhuanbao.com

The content of this brochure is for reference only, the final interpretation right belongs to Weifang Hengyuan Environmental Protection Water Treatment Equipment Co.

Company profile

Located in the beautiful kite capital of the world-Weifang City, Weifang Hengyuan Environmental Water Treatment Equipment Co., Ltd. is a production-oriented high-tech enterprise integrating research and development, production and sales of water treatment equipment, disinfection equipment and ecological toilets. Founded in January 2011, the company has built a standardized production workshop of more than 30,000 square meters.

The company has environmental protection engineering level 2 qualification, 7 invention patents, 36 utility model patents, 1 appearance patent, 6 software copyrights, 27 water-related approvals, 8 disinfection records and other related qualifications. We have passed ISO9001 quality system certification, ISO14001 environmental management system certification, ISO45001 occupational health and safety management system certification and after-sales service system certification and other authoritative certifications. And was named the national environmental protection equipment manufacturing industry (sewage treatment) standard conditions of the enterprise, high-tech enterprises, the province specializing in new small and medium-sized enterprises, the province innovative small and medium-sized enterprises, an enterprise a technology research and development center and other honorary titles.

The company's main products are: integrated (life, hospitals, breeding, etc.) sewage treatment equipment, air flotation machine (vortex concave, dissolved air, vertical flow, shallow), sedimentation tank (advection, vertical flow), ecological latrines, anaerobic reactor, the center of the rotating scraper, cyclone sedimentation tank sand remover, rotary mechanical grating, sludge treatment (plate and frame filter presses, belt filter presses, stacked screw machine), integrated water purification equipment, Filtration device (activated carbon filter, iron and manganese filter, quartz sand filter), dosing device (PAC dosing device, PAM dosing device, basic dosing device), disinfection equipment

(sodium hypochlorite generator, ozone generator, electrolysis chlorine dioxide generator, chemical chlorine dioxide generator, disinfection doser, slow-release disinfectant, small hospital wastewater treatment machine, oral, outpatient) Sewage treatment equipment, high-efficiency sewage disinfection equipment), dechlorination device (chemical feeder, acid mist absorber, dechlorination device), supporting series (PLC control cabinet, chlorine leakage alarm, residual chlorine detector, microcomputer controller, metering pumps, aeration machine, turbidity meter, water jets and other equipment).

At present, the company's sewage treatment equipment, disinfection equipment service areas covering municipal water supply, municipal sewage treatment, medical systems, residential communities, highways, scenic spots, various types of factories (aquaculture factories, chemical factories, etc.), industrial recycling of cooling water, water reuse and so on. Eco-toilets are widely used in public places such as municipalities, scenic spots, squares, harbors and busy commercial areas. "Hengyuan Xinda" brand series of products sell well throughout the country and in Mexico, Thailand, South Korea, Namibia, Sri Lanka and other countries at home and abroad, and have been well received by customers!

The company has strong technical force, has its own laboratory and a large number of management, scientific research and technical personnel, to provide customers with excellent pre-sales, sales and after-sales service, and according to the customer's water conditions, the design of reasonable water treatment equipment and equipped with the program, so as to achieve economic and practical, high quality and high efficiency.

Weifang Hengyuan Environmental Protection Water Treatment Equipment Co., Ltd. is committed to the water treatment industry in line with the business philosophy of "quality first, integrity-based" and the corporate purpose of "external achievement of customers, internal achievement of the staff" to build a good ecological environment to lay a solid foundation, but also the "green water" of mankind and society. Humanity and society "green water and mountains".



HONORARY QUALIFICATIONS



- ★ Environmental protection equipment manufacturing industry standardized conditions of enterprises

★ High and New Technology Enterprises

★ Provincial Specialized and Specialized New Small and Medium-sized Enterprises

★ Environmental Protection Engineering Specialized Contractor Grade II Qualification

★ Provincial Innovative Small and Medium-sized Enterprises
- ★ 27 approvals related to drinking water

★ 1 appearance patent

★ 7 invention patent

★ 36 utility model patents

★ 6 software copyrights
- ★ Sterilization record 8

★ Quality management system certification

★ Environmental management system certification

★ After-sales service system certification

★ Occupational Health and Safety Management System Certification

LARGE OZONE GENERATOR

PLC control of the whole machine \
Intelligent human-machine interface function

Suitable for space disinfection, sewage treatment, waste gas treatment, chemical oxidation, etc.



Hengyuan large-scale ozone generator system is a high-quality product made by our company by applying the advanced ozone generating technology in the ozone industry at home and abroad and refining it with great care. The whole system is composed of gas source pre-treatment system, ozone generation system, ozone power supply system, central control system and ozone gas application system. At present, the ozone output of our single machine is 0.2-100kg/h, and the concentration of ozone export can reach 20-150mg/L. Compared with other large-scale ozone equipments in China, it has the features of compact structure, small surface area, stable ozone operation and low cost of use.

Working Principle

Large ozone generator preparation principle is the gap discharge method, the power supply unit to provide a high-voltage electric field and make the flow of oxygen through the ozone generator in this electric field. Ozone generator tank itself and the internal discharge chamber for the grounding pole, high-voltage electricity added to the insulator's metal electrodes, metal electrodes added to the outside of the insulating material, so that in the insulating material layer and the ozone generator tank between the grounding pole to form a high-voltage electric field, the oxygen through the high-voltage corona discharge is converted into ozone.

Component systems

Hengyuan xinda brand ozone generator application system is a complete ozone application system composed of gas source supply system, gas source treatment system, gas source quality inspection system, gas source pressure adjustment, flow control distribution system, ozone electrode, ozone power supply, ozone transformer, ozone discharge chamber, ozone cooling system, ozone production inspection and control system, ozone intelligent control cabinet and ozone distribution system, ozone dosage system and ozone exhaust collection and treatment.

● Scope of Application

Municipal tap water deep treatment, sewage treatment, water reuse treatment, chemical oxidation synthesis, pulp bleaching, waste gas, waste water treatment; industrial cooling water treatment, swimming pool, landscape water treatment; pharmaceutical, food industry and other fields.

● Core technology

Ozone-specific medium and high frequency power supply logic circuit control technology; high-efficiency ozone discharge dielectric blocking discharge technology; special thousands of medium and high-frequency transformer key technology; ozone generating system safety operation protection technology; ozone generator system automatic control technology.



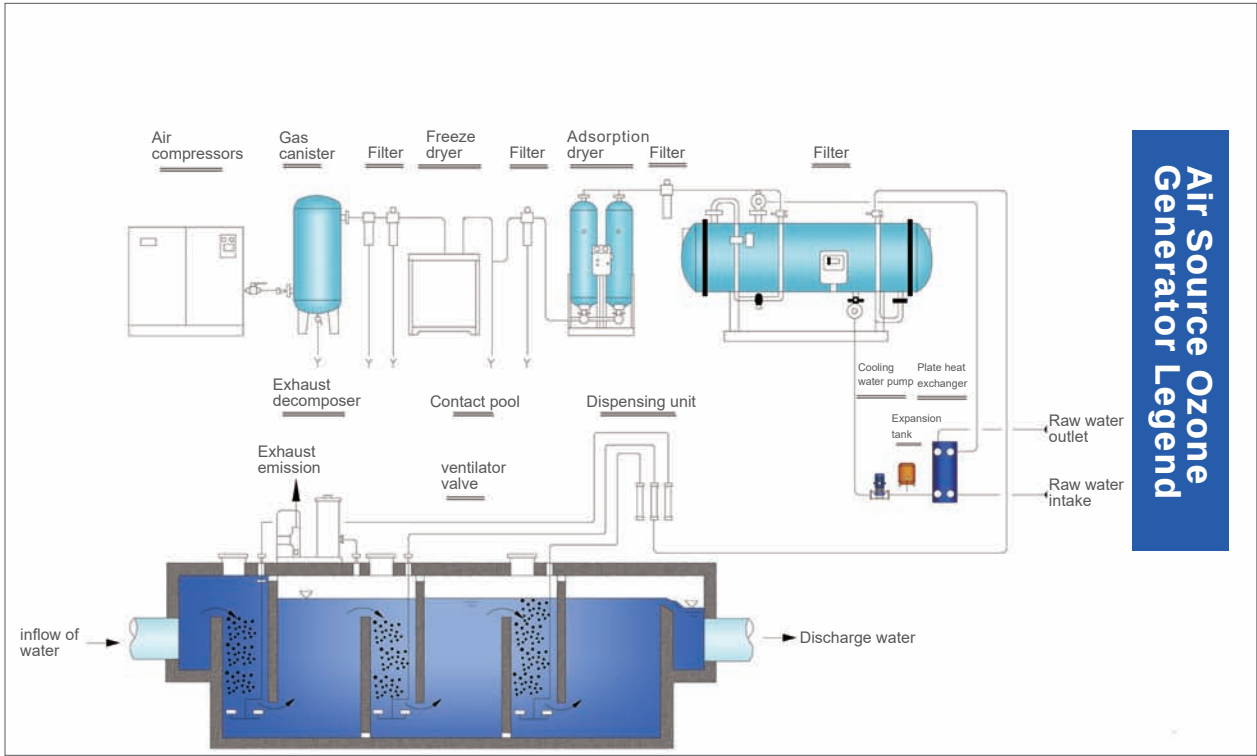
● Performance Characteristics

- Hengyuan xinda large-scale ozone generator room is installed horizontally, which can be directly placed in the room, or installed on the foundation fixed frame. The inside of the ozone generator can be inspected and maintained through the sealing plate with observation holes at both ends. The service life of the ozone discharge chamber reaches more than 10 years;
- High-voltage discharge special technology, targeted and adaptable, high ozone concentration, high yield; micro-gap high-efficiency and high-concentration discharge technology, reducing the cost of use.
- Imported high boron glass and enamel discharge tube has high strength itself, excellent heat resistance, pressure resistance, self-cleaning performance, and convenient maintenance; PLC automatic control technology, ozone production 10-100% adjustable, equipment with current, voltage, temperature, flow, gas pressure, operating conditions and a series of operational monitoring and protection functions, equipment performance is more stable, longer life.



Air source

- Adopting advanced IGBT medium and high frequency inverter technology, the power supply has stronger load resistance and lower energy consumption of the equipment;
- Specialized technology for high voltage discharge, targeted and adaptable, with high ozone concentration and high yield;
- Micro-gap high-efficiency and high-concentration discharge technology to reduce the cost of use;
- The enameled discharge tube itself has high strength, excellent heat resistance, pressure resistance, self-cleaning performance and easy maintenance;
- PLC automatic control technology, ozone production 10-100% adjustable, equipment with current,voltage, temperature, flow, Current, voltage, temperature, flow rate, gas pressure,operation status and a series of operation monitoring and protection functions,equipment performance is more stable, longer life.

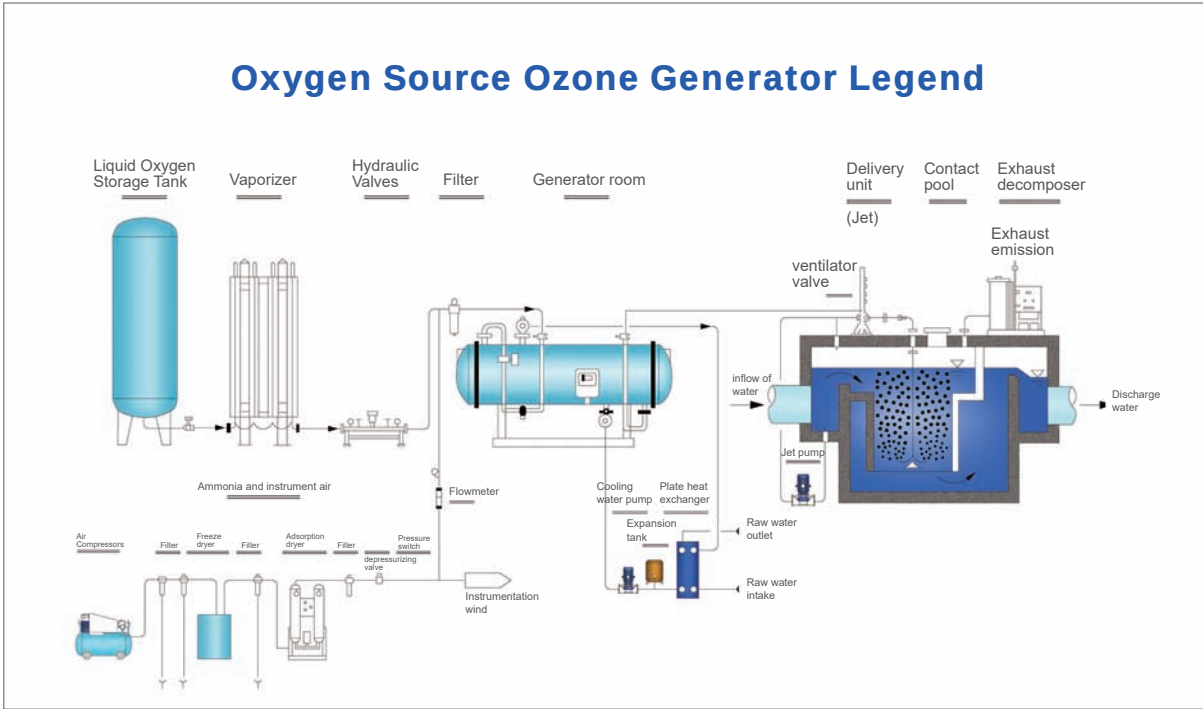


Air source ozone system parameters

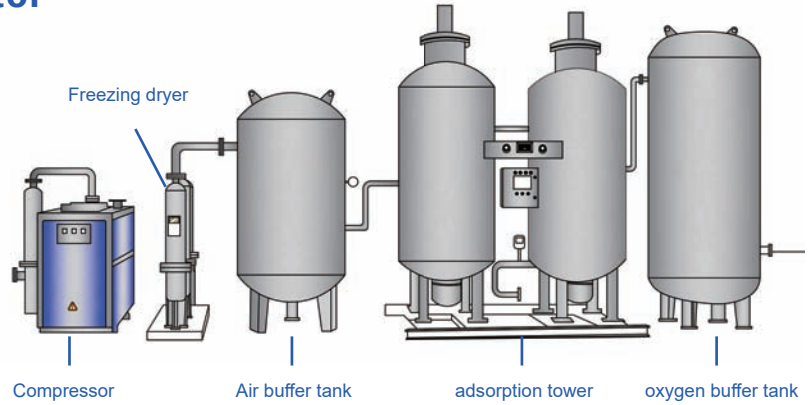
model	production capacity(kg/h)	magnanimity (Nm ³ /h)		Power Co-nsumption (kwh/kgO ₃)	Cooling water volume (m ³ /h)	Air inlet and outlet	inlet and outlet
	2WT% 25mg/l	1.5WT% 20mg/l	2.3WT% 30mg/l				
HY-500G	0.5	28	15	16-18	≤ 2	DN15	DN25
HY-800G	0.8	40	25	16-18	≤ 3	DN15	DN25
HY-1KG	1	50	30	16-18	≤ 4	DN25	DN32
HY-1.5KG	1.5	85	40	16-18	≤ 6	DN25	DN32
HY-2KG	2	100	60	16-18	≤ 8	DN32	DN50
HY-2.5KG	2.5	140	75	16-18	≤ 10	DN32	DN50
HY-3KG	3	160	90	16-18	≤ 12	DN32	DN65
HY-3.5KG	3.5	190	115	16-18	≤ 14	DN32	DN65
HY-4KG	4	220	130	16-18	≤ 16	DN32	DN65
HY-5KG	5	276	160	16-18	≤ 20	DN40	DN80
HY-6KG	6	330	200	16-18	≤ 24	DN50	DN80
HY-7.5KG	8	400	260	16-18	≤ 30	DN50	DN80
HY-10KG	10	550	330	16-18	≤ 40	DN65	DN100
HY-12.5KG	12.5	700	400	16-18	≤ 50	DN65	DN100
HY-15KG	15	750	500	16-18	≤ 60	DN65	DN100
HY-17.5KG	17.5	960	580	16-18	≤ 70	DN65	DN125
HY-20KG	20	1100	670	16-18	≤ 80	DN80	DN125

Oxygen Sources - Liquid Oxygen Sources and Enriched Oxygen Sources

- Adopting advanced IGBT medium and high frequency inverter technology, the power supply has stronger load resistance and lower energy consumption of the equipment;
 - Specialized technology for high voltage discharge, targeted and adaptable, with high ozone concentration and high yield;
 - Micro-gap high-efficiency and high-concentration discharge technology to reduce the cost of use;
 - Imported high boron glass discharge tube itself has high strength, excellent heat resistance, pressure resistance, self-cleaning performance and easy maintenance;
 - PLC automatic control technology, ozone production 10-100% adjustable, equipment with current, voltage, temperature, flow, gas pressure, operating status and a series of operational monitoring and protection functions, equipment performance is more stable, longer life.
- Equipment with current, voltage, temperature, flow, gas pressure, operating status and a series of operational monitoring and protection functions, equipment performance is more stable, longer life.



oxygenator



Oxygen source ozone
system parameters

model	production capacity(kg/h)	magnanimity (Nm ³ /h)		Power Co- consumption	Cooling water volume	Air inlet and outlet	inlet and outlet
	2WT% 25mg/l	1.5WT% 20mg/l	2.3WT% 30mg/l				
HY-1KG	1	10.9	4.9	6-8	≤ 2	DN15	DN25
HY-1.5KG	1.5	16.3	7.4	6-8	≤ 3	DN20	DN32
HY-2KG	2	21.7	9.7	6-8	≤ 4	DN20	DN32
HY-2.5KG	2.5	27.1	11.9	6-8	≤ 5	DN20	DN32
HY-3KG	3	32.5	14.7	6-8	≤ 6	DN25	DN40
HY-4KG	4	43.2	19.2	6-8	≤ 8	DN25	DN50
HY-5KG	5	54	24.3	6-8	≤ 10	DN32	DN50
HY-6KG	6	57	28	6-8	≤ 12	DN32	DN65
HY-7KG	7	67	32	6-8	≤ 14	DN32	DN65
HY-8KG	8	76	37	6-8	≤ 16	DN32	DN65
HY-10KG	10	95	46	6-8	≤ 20	DN40	DN80
HY-12KG	12	112	55	6-8	≤ 24	DN50	DN80
HY-15KG	15	142	68	6-8	≤ 30	DN50	DN100
HY-20KG	20	189	91	6-8	≤ 40	DN65	DN100

New Technologies
for Water/Space
Disinfection

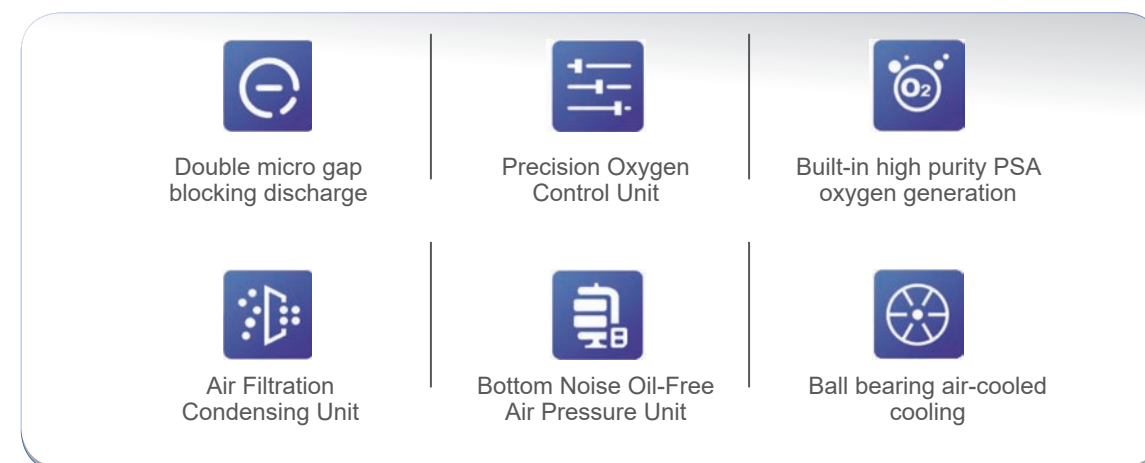
Intelligent ozone generator

Water/Space Sterilization New Technology

Built-in high purity oxygen generator--concentration adjustable
Air Disinfection Disinfection Decolorization Degradation COD
Industrial Medical Wastewater Treatment



Six innovative technologies are fully upgraded



Product Features

- Dual circuit dual switch design, easy and convenient operation;
- Adopting wide voltage high frequency technology, low energy consumption, high O3 concentration, rapid sterilization, adapting to any area of home electricity voltage, long life of the whole machine;
- Ozone concentration can be adjusted to facilitate the use of different areas of concentration requirements;
- The internal air source has been cleaned and dried, adapting to the clean and dry requirements of the air source;
- With gas source conversion interface, you can choose oxygen gas source or air gas source according to your needs;
- Water-cooled design for optimal cooling at all times.

Product Use

- Hospitals: operating rooms, supply rooms, preparation rooms, wards, treatment rooms, outpatient rooms, injection rooms, restrooms, medical equipment and supplies, etc;
- Food factories: workshops, warehouses, packaging material rooms, buffer rooms, locker rooms, laboratories, work clothes, production appliances, etc;
- Pharmaceutical factories (bioproducts factories): aseptic workshops, storerooms, buffer rooms, locker rooms, laboratories, work rooms, etc;
- Breeding industry: chicken factories, animal breeding plants, aseptic inoculation, cultivation, etc.;
- Public places: theaters, hotels, restaurants, entertainment halls, beauty parlors and so on;
- Other: all industries where the indoor air needs to be disinfected and sterilized to eliminate odors, mold and mildew can be used to deal with ozone disinfection and sterilization machine;
- Special sterile environment: ultra-clean studio, animal breeding farms, aseptic inoculation and so on.

New Technologies
for Water/Space
Disinfection

INTELLIGENT OZONE GENERATOR

Water/Space Sterilization New Technology



Oxygen source ozone generator all-in-one product parameters

Product Model	Rated power (w)	Ozone output (g/h)	Ozone (mg/l) concentration	Cooling method	air source
HY-001-10A	700	10	60-80	air conditioning	
HY-001-15A	800	15	60-80	Air-cooled + Water-cooled	Oxygen generation system
HY-001-20A	870	20	60-80		
HY-001-30A	970	30	60-80		
HY-001-40A	2100	40	60-80		
HY-001-50A	2150	50	60-80		
HY-001-60A	2200	60	60-80		
HY-001-80A	3800	80	60-80		
HY-001-100A	3950	100	60-80		

Air source ozone generator all-in-one product parameters

Product Model	Rated power (W)	Ozone output (g/h)	Ozone ^(mg/l) concentration	Cooling method	air source
HY-001-5A	140	5	15-25	air conditioning	Dry clean air source or external oxygen gas source
HY-001-10A	180	10	15-25		
HY-001-15A	300	15	15-25		
HY-001-20A	320	20	15-25	Air-cooled + Water-cooled	
HY-001-30A	350	30	15-25		
HY-001-40A	480	40	15-25		
HY-001-50A	530	50	15-25		
HY-001-60A	680	60	15-25		
HY-001-80A	1020	80	15-25		
HY-001-100A	1140	100	15-25		
HY-001-150A	2000	150	15-25		
HY-001-200A	2300	200	15-25		

Industrial Waste Water Treatment

The composition of petroleum and petrochemical wastewater is complex, high in concentration, and difficult to degrade. Ozone can remove toxic and harmful substances, decompose benzene, phenols, and their derivatives, improve the biodegradability of the wastewater, and also have functions such as decolorization and odor removal. Wastewater discharged from industries such as printing and dyeing, pharmaceuticals, pigments, electronics, and chemical industries contains difficult to biodegrade organic compounds or toxic substances. The strong oxidation ability of ozone can decompose difficult to biodegrade organic compounds, degrade toxic and harmful substances, remove color and odor from water, and make wastewater meet discharge or reuse standards.



Ozone + Combined Process

- ▶ Because of the high concentration of COD, the direct oxidation of ozone is not economical, so combined process is always used;
- ▶ Use ozone to improve biodegradability. The common combined process is ozone +BAF, ozone + catalyst, ozone +H₂O₂, MBR+ ozone, ozone+BAC.

The Role of Ozone

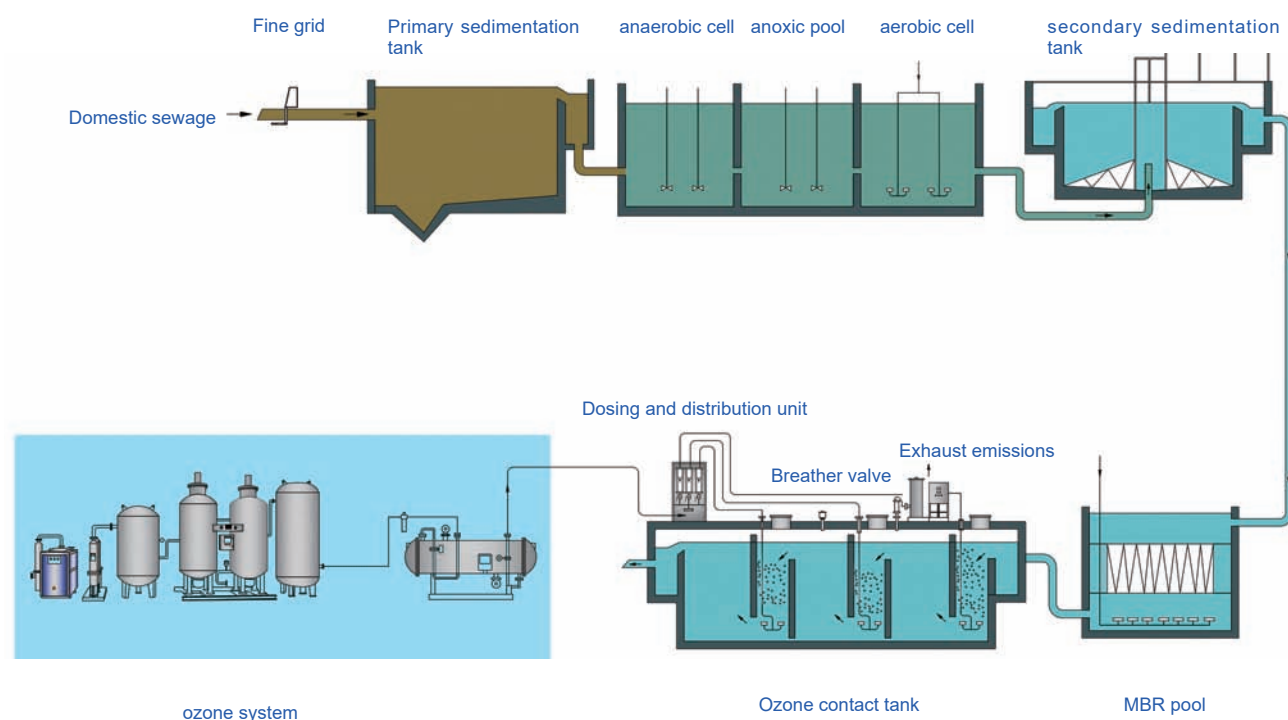
- Broken chain and decompose the macromolecular organic matters which are difficult for biological treatment;
- Open loop, decompose benzene, phenol and its derivatives;
- Detoxification, reduce toxicity of waste water which includes cyanide, pesticides or others.
- Decolorization, interrupting the chromophore group.



Municipal Waste Water Treatment and Reuse

Ozone decomposes organics which is difficult to be degraded in order to improve biodegradability of waste water, Ozone can kill bacteria and virus with resistance to chloridization, as well as decolorize, deodorize and increase dissolved oxygen in water.

Sewage treatment process diagram

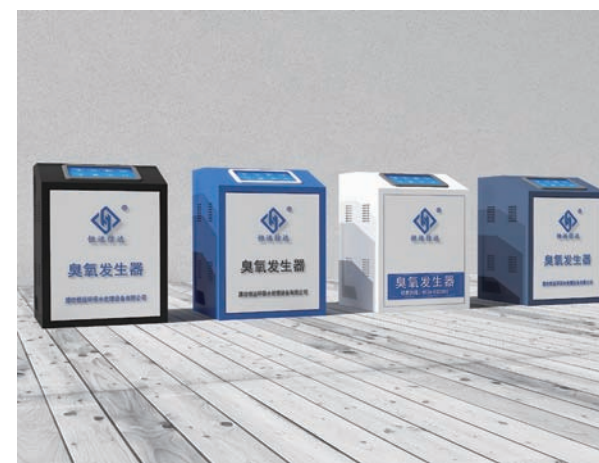


Ozone oxidation process

- Generally it is used for the end of the water out to reduce COD and decoiorization for further step and ensure that the water out index.
- EPC from first level B to first level A.Use ozone+filtration process to achieve it.
- Used for reclaimed water reuse technology for decolorization and deodorization.

The Role of Ozone

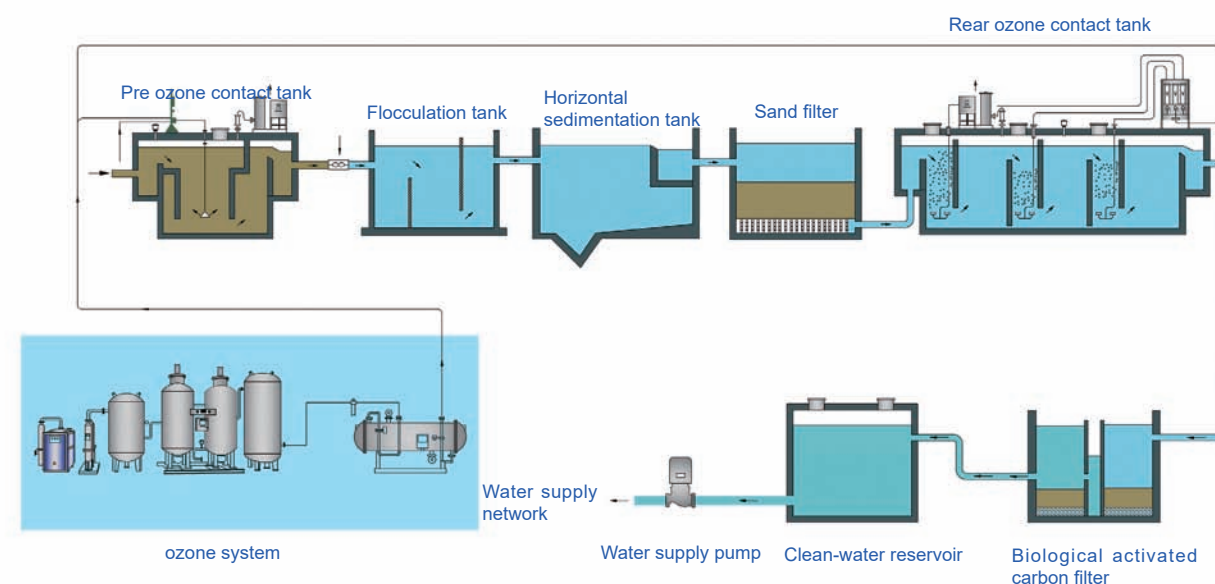
- Further degradation of organic compounds which are difficult for biochemical treatment.
- Reduce the color and turbidity of effluent.
- Kill escherichia coli and virus in water.
- Remove the odor from water.



Municipal Water Supply Treatment

Drinking water advanced treatment uses ozone-activated carbon technology. With strong oxidation ability of ozone, this kind of treatment technology can decompose organics, improve degradation ability of activated carbon to organics, kill bacteria and virus effectively, reduce by-product and remove odor in order to improve water quality and taste.

Sewage treatment process diagram



The Role of Ozone

- Decompose organic and inorganic pollutants which are difficult for degradation, such as benzene, phenol and its derivatives, cyanide, sulfide, manganese, iron, humic acid, pesticides, herbicides.
- Kill chlorine resistant "two worms", bacteria, viruses, algae, decolorization, deodorization and reduce turbidity;
- Decompose endocrine disruptors to avoid generation of halogenated hydrocarbons, chloramine and other carcinogenic matters;
- To improve the Do (dissolved oxygen) concentration in water, the macromolecular organic matter is degraded into small molecules, and improve the degradation efficiency and persistence of COD and ammonia nitrogen in the following BAC process.



Supporting equipment



Porous Diffuser

Porous difuser is made by ceramic or titanium in order to prolong the lfe ime arimprove efficiency.



Ozone Injection System

Ozone will be inhaled into water by negative pressure caused by high velocity fiow anjector based on venturi principal , which is a better way to improve ozone and watemixing efficiency.



Ozone Destructor

With the thermal-catalyst way, the tail gas after ozone destructor meet the dischargestandard.



Oxygen Generator

it can guarantee the quality of feed gas, improve the operating efficiency of ozonegenerator and economical benefit.



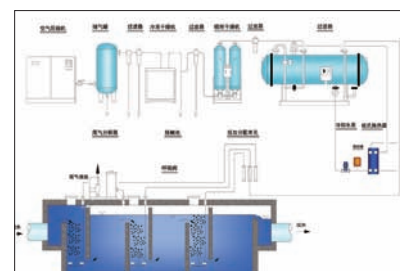
Closed Circulation Cooling Water System

Includes plate heat exchanger, circulating water pump, expansion tank, pressure switch, etc.



power system

A power supply unit that provides high-frequency, high-voltage electrical energy to drive an ozone generator.



Main Control System

It can detect the ozone operation parameter on line and do intelligentized regulationautomatically so that it can improve the stability and safety of equipment operation andreduce the management cost.

Engineering examples



Shandong Dezhou Pharmaceutical Plant Sewage Treatment Project



Jiangsu Huai'an Food Factory Project



Gansu Lanzhou Wastewater Treatment Plant Project



Hubei Wuhan Municipal Water Supply Project



Hebei Gu'an Wastewater Treatment Plant Project



Gansu Lanzhou New Immigrant District Wastewater Treatment Plant Project



Anhui Mingguang Water Treatment Plant Project



Anhui Langxi Dyeing and Printing Wastewater Treatment Project



Hainan Haikou Bullfrog Farming Sewage Treatment Project



Medical Wastewater Treatment Project in Ili, Xinjiang



Fujian Longyan Pig Factory Wastewater Treatment Project



Shandong Binzhou Sewage Treatment Plant Project

选择恒远的企业

Choose a company from Hengyuan

