

## MEDIUM AND SMALL SIZE OZONEGENERATORS

The ozone generator work effectively to save cost.



### Air-Source Medium Ozone Generator Technology Parameter

Type	Ozone Capacity	Feed Gas Flow	Ozone Concentration	Cooling Water Flow	Power Consumption	Dimension mm		
	g/h	Nm <sup>3</sup> /h	g/m <sup>3</sup>	m <sup>3</sup> /h	Kw	W	D	H
POZNA--10	10	0.35-0.5	20-30	0.02-0.03	0.16-0.18	500	400	1300
POZNA--20	20	0.7-1.0	20-30	0.04-0.06	0.32-0.36	600	600	1600
POZNA--30	30	1.1-1.5	20-30	0.06-0.09	0.50-0.55	600	600	1600
POZNA--50	50	1.7-2.5	20-30	0.1-0.15	0.80-0.90	800	600	1600
POZNA--80	80	2.8-4.0	20-30	0.16-0.25	1.28-1.50	1000	800	1700
POZNA--100	100	3.5-5	20-30	0.3-0.4	1.6-1.8	1000	800	1700
POZNA--200	200	7-10	20-30	0.6-0.8	3.2-3.6	1200	800	1700
POZNA--300	300	10.5-15	20-30	0.9-1.2	4.8-5.4	1200	800	1700
POZNA--400	400	14-20	20-30	1.2-1.6	6.4-7.2	1400	800	1700
POZNA--500	500	17.5-25	20-30	1.5-2.0	8-9	1400	800	1700
POZNA--600	600	21-30	20-30	1.8-2.4	9.6-10.8	1400	800	1700
POZNA--800	800	28-40	20-30	2.4-3.2	12.8-14.4	1800	800	1800

### Oxygen-Source Medium Ozone Generator Technology Parameter

Type	Ozone Capacity	Feed Gas Flow	Ozone Concentration	Cooling Water Flow	Power Consumption	Dimension mm		
	g/h	Nm <sup>3</sup> /h	g/m <sup>3</sup>	m <sup>3</sup> /h	Kw	W	D	H
POZNO-10	10	0.09-0.15	80-120	0.02-0.03	0.08-0.10	300	250	500
POZNO-20	20	0.18-0.26	80-120	0.04-0.06	0.16-0.20	500	300	1000
POZNO-30	30	0.27-0.40	80-120	0.06-0.09	0.24-0.30	500	300	1000
POZNO-50	50	0.45-0.65	80-120	0.1-0.15	0.40-0.50	500	300	1200
POZNO-80	80	0.75-1.1	80-120	0.16-0.25	0.64-0.80	800	600	1600
POZNO-100	100	0.9-1.5	80-120	0.2-0.3	0.8-1.0	800	600	1600
POZNO-200	200	1.8-2.6	80-120	0.4-0.6	1.6-2.0	1000	800	1700
POZNO-300	300	2.7-4.0	80-120	0.6-0.9	2.4-3.0	1000	800	1700
POZNO-400	400	3.6-5.2	80-120	0.8-1.2	3.2-4.0	1200	800	1700
POZNO-500	500	4.5-6.5	80-120	1.0-1.5	4.0-5.0	1200	800	1700
POZNO-600	600	5.4-7.8	80-120	1.2-1.8	4.8-6.0	1200	800	1700
POZNO-800	800	7.2-10.5	80-120	1.6-2.4	6.4-8.0	1400	800	1700



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## PROJECT CASE

### Industrial Sewage Treatment



### Petroleum And Petrochemical Industry



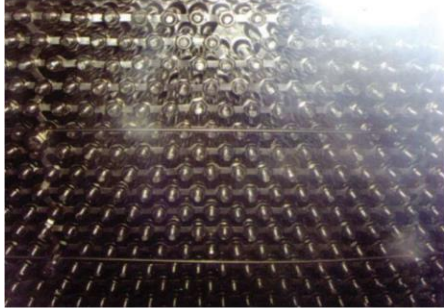
### Flue Gas Denitrification





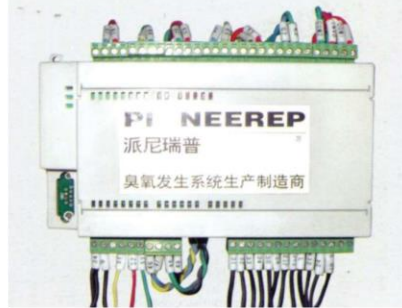
## Ozone

### CORE TECHNOLOGY



#### Discharge Chamber

Special glass tube discharge chamber (patent No. ZL2011 20385785.0). The double air gap discharge technology, high quality import glass tube, which can give full play to the discharge efficiency and guarantee the big output high concentration and low power consumption.



#### Control circuit board

The Ozone generator control board system is research and design by Pioneer Co.,Ltd. It control the normal work of the ozone generator power supply, and it can anti-interference, protect the electric circuit and the components. Output and concentration of ozone can be smooth adjustment according to actual needs.



#### Transformer

High voltage transformer converts the output of the inverter circuit to the high voltage power which is suitable for the dielectric barrier discharge to produce ozone. In order to match the capacity of the load of the chamber, the requirement of the parameters is different from that of the common transformer. Due to the load capacitance of discharge chamber is change in the running process, it require transformer has a certain leakage to balance the change to protect the electronic components.

### SUPPORTING EQUIPMENTS



#### High Efficiency Non-block Ozone Aeration Device

Carmen effect and boundary layer separation, resulting in high efficiency of mixing jet water, while the micron scale bubble can be highly dissolved in water. No blocking and lower maintenance cost.



#### Ozone Oxidation Tower / Aeration Plate

The titanium ceramic / metal aeration plate can produce uniform of small bubbles, in order to obtain larger bubbles and water interface, to ensure the maximum rate of material transfer.



#### Ozone destructor

Ozone destructor system characteristics: high efficiency, Low energy consumption, long life, small size, no need to maintain.



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## SUPPORTING EQUIPMENTS



### Ozone pre-treatment system

Ozone will be inhaled into water by negative pressure caused by high velocity flow of injector based on venture principal, which is a better way to improve ozone and water mixing efficiency.



### Close circulation cooling water system

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



### OXYGEN GENERATOR ADSORPTION AIR DRYER

It can guarantee the quality of feed gas, improve the operating efficiency of ozone generator and economical benefit



### NITROGEN SUPPLEMENT SYSTEM

Adding a certain amount of nitrogen gas can improve the operating efficiency of ozone generator and extend the life of dielectric tube when pure oxygen is used as feed gas.



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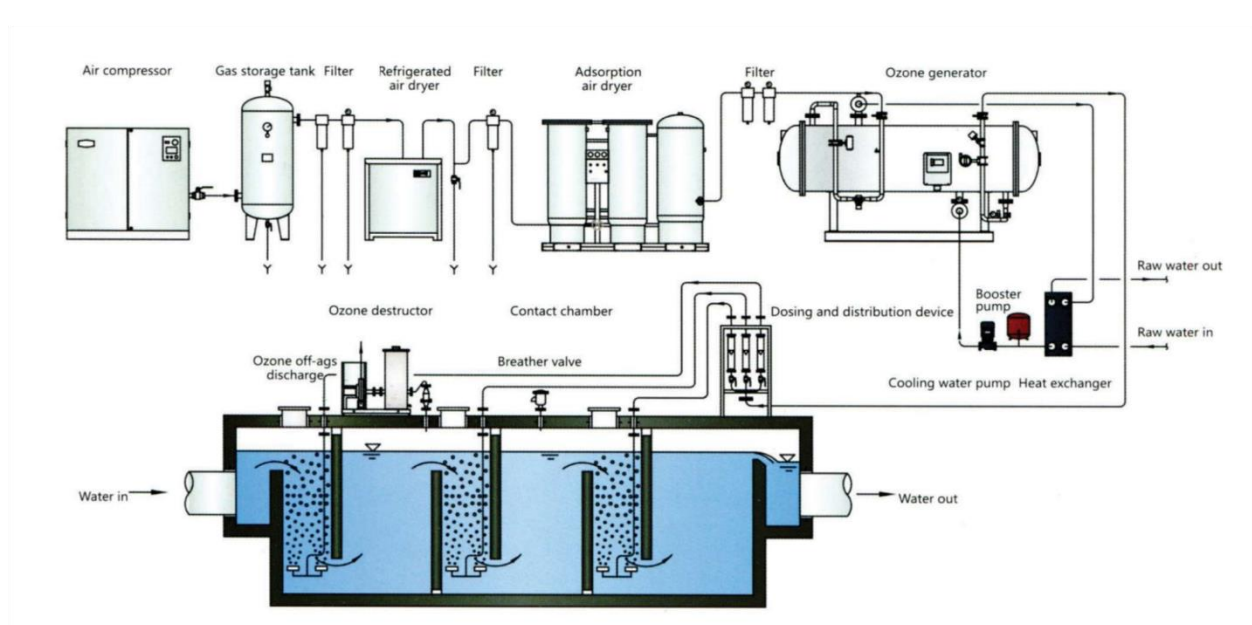
## COMPOSITION OF OZONE GENERATOR



## SYSTEM TECHNICAL PROCESS

### Ozone generator with air source

Air Compressor → gas storage tank → water separator → refrigerated air dryer → oil elimination filter → adsorption air dryer → dust elimination filter → pressure reducing valve → ozone generator



### Ozone generator with liquid oxygen source

Liquid oxygen storage tank → carburetor → pressure reducing device → dust elimination filter → ozone generator

