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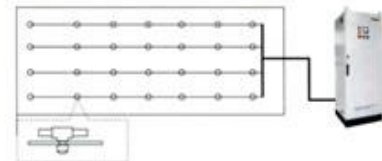
SPACE DISINFECTION OZONE GENERATOR

Application

Ozone sterilization principle is: oxidation the bacterial cell wall, so that the cell inside cytoplasm will flow; killing intracellular enzymes; decomposition the genetic material DNA and RNA.

Ozone are broad-spectrum sterilization, it has strong killing effect for E. coli, Salmonella, Staphylococcus aureus, hepatitis B virus, dysentery bacteria, mold, Bacillus and so on.

Ozone disinfection principles: In normal condition, ozone (O₃) is instable, it can decompose into oxygen and single oxygen atoms which have strong oxidation ability to kill the bacteria, the rest oxygen atoms can be combined into oxygen, so the ozone is called as "Clean disinfectant"





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PROJECT CASE

Industrial Sewage Treatment



Petroleum And Petrochemical Industry



Flue Gas Denitrification





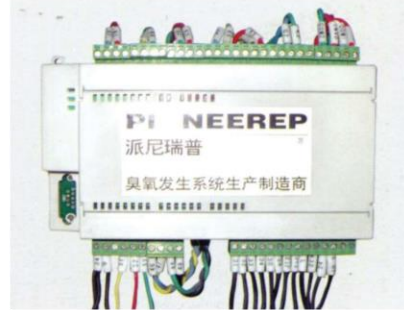
Ozone

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



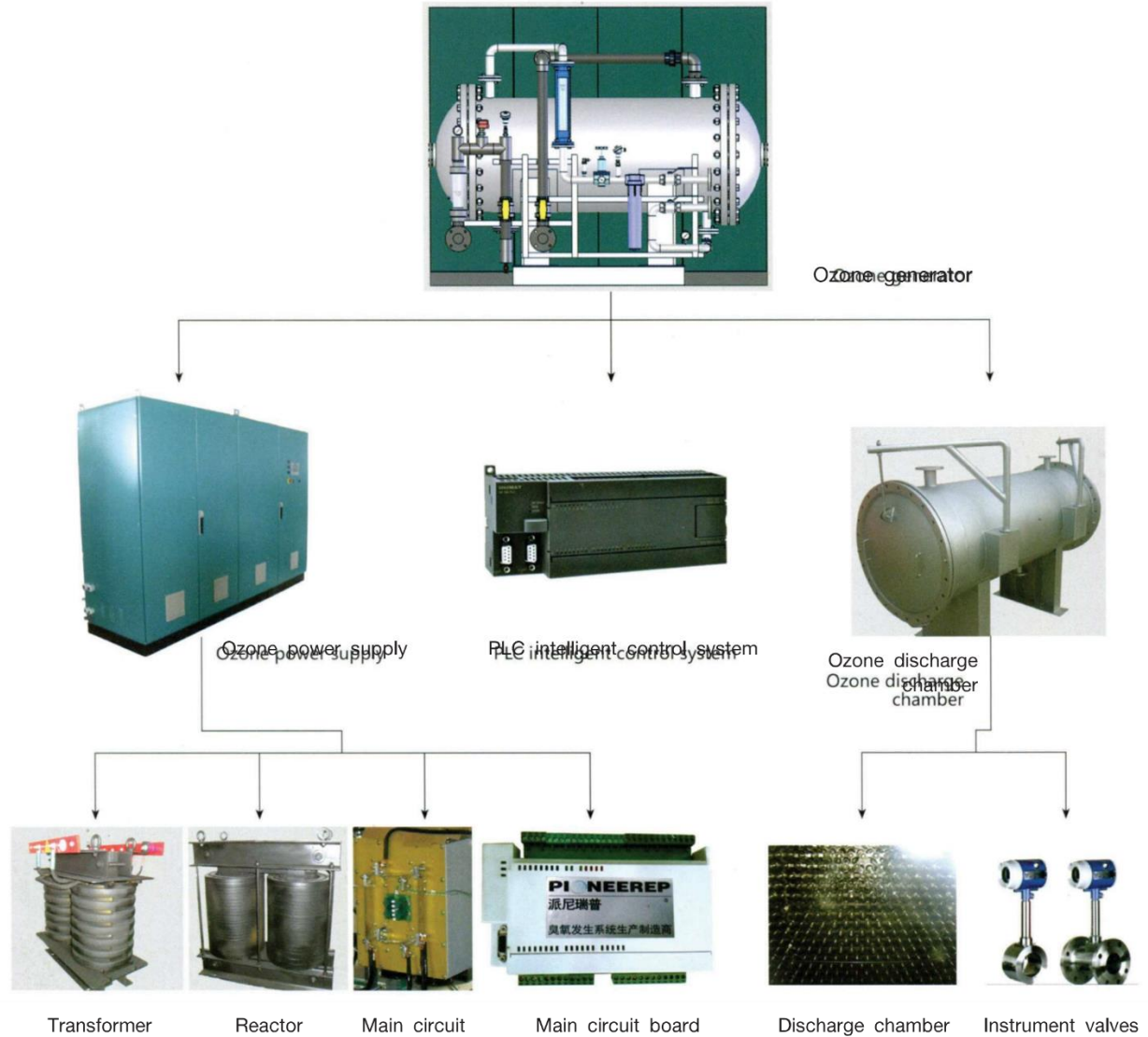
NITROGEN SUPPLEMENT SYSTEM

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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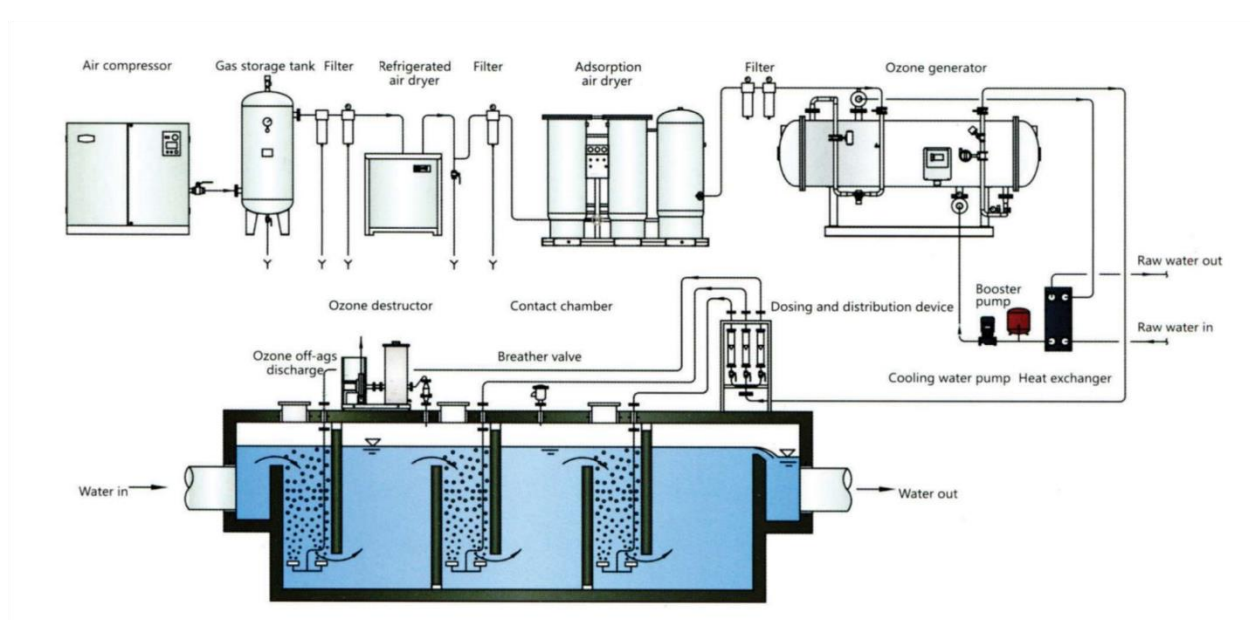
COMPOSITION OF OZONE GENERATOR



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

