



# Ozone Disinfection

## Product Application

Ozone's  $O_3$  structure was discovered in 1865. Ozone Disinfection for water treatment is a chemical water treatment technique based on the infusion of ozone into water. Ozone is a gas composed of three oxygen atoms ( $O_3$ ), which is one of the most powerful oxidants, Ozone in the water & wastewater applications is widely used in industrial, commercial and even in residential applications:

- Drinking Water
- Pharmaceutical
- Food and Beverage Industry
- Wastewater Treatment

## Process Description

By exposing air or oxygen to a controlled, high-voltage discharge at a set frequency, high concentrations of ozone are produced. This ozone is then used by water treatment plants to treat wastewater. After ozone gas is generated, it is pumped into chambers to mix with water. Since ozone is an unstable gas that can destroy microorganisms cells, Ozone ( $O_3$ ) in water release the weaker oxygen molecule and penetrate the cell and destroy the cell components (enzymes, proteins, DNA).

Ozone treatment mainly used for:

- Drinking Water
- Sewage Wastewater
- COD Reduction
- Air Purification

## Product Benefits:

- Very strong oxidation agent lead to very effective disinfection with shorter contact time than Chemical Disinfection Dosing System
- Compact design with minimal footprint
- No chemical requirements
- Easy operation with less human interference
- More stable & provide higher residual time

## Service and Features:

- Supply as part of integrated system to achieve the performance guarantee values
- Fast track delivery
- Retrofit for existing treatment
- Installation & supervision commissioning
- Operation & maintenance services

