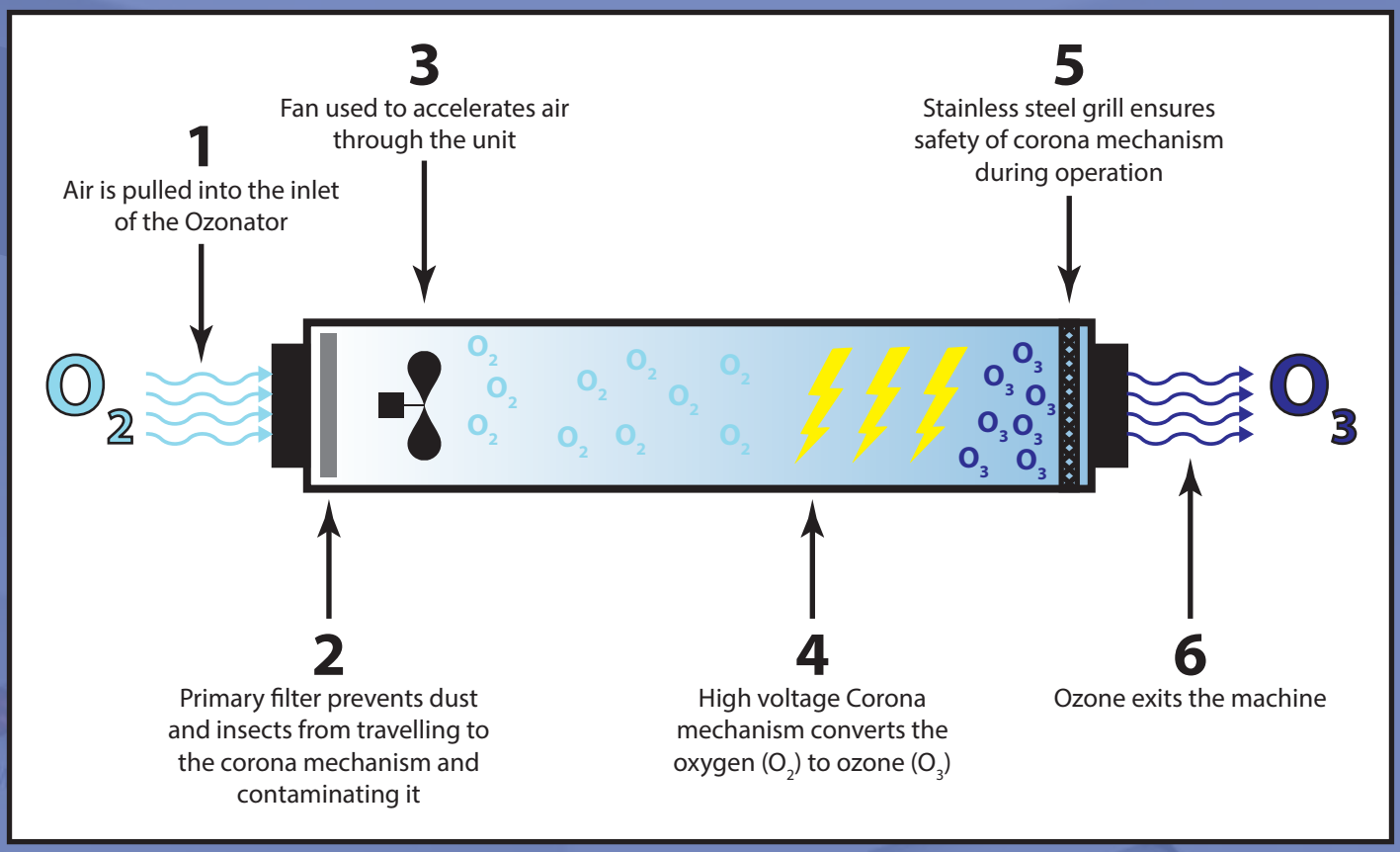
KANKU KENYA LTD

WATER, CHEMICAL & ENERGY SPECIALISTS

Air Ozonator

Ozone Characteristics and Formation

Ozone is a triatomic allotrope of oxygen and is formed through the recombination of oxygen atoms. In the atmosphere, ozone is formed naturally under high pressure and temperature conditions such as lightning and thunderstorms. Synthetic ozone is created by applying the same principle under a process called the Corona Discharge Process.



Ozone is a colourless gas with a mild odour detectable at very low concentrations. It is approximately 3,000 times more powerful at oxidising compounds than chlorine. This powerful oxidising property enables ozone to be a highly effective disinfectant, deodoriser, decolouriser and oxidiser.

How Ozone Works

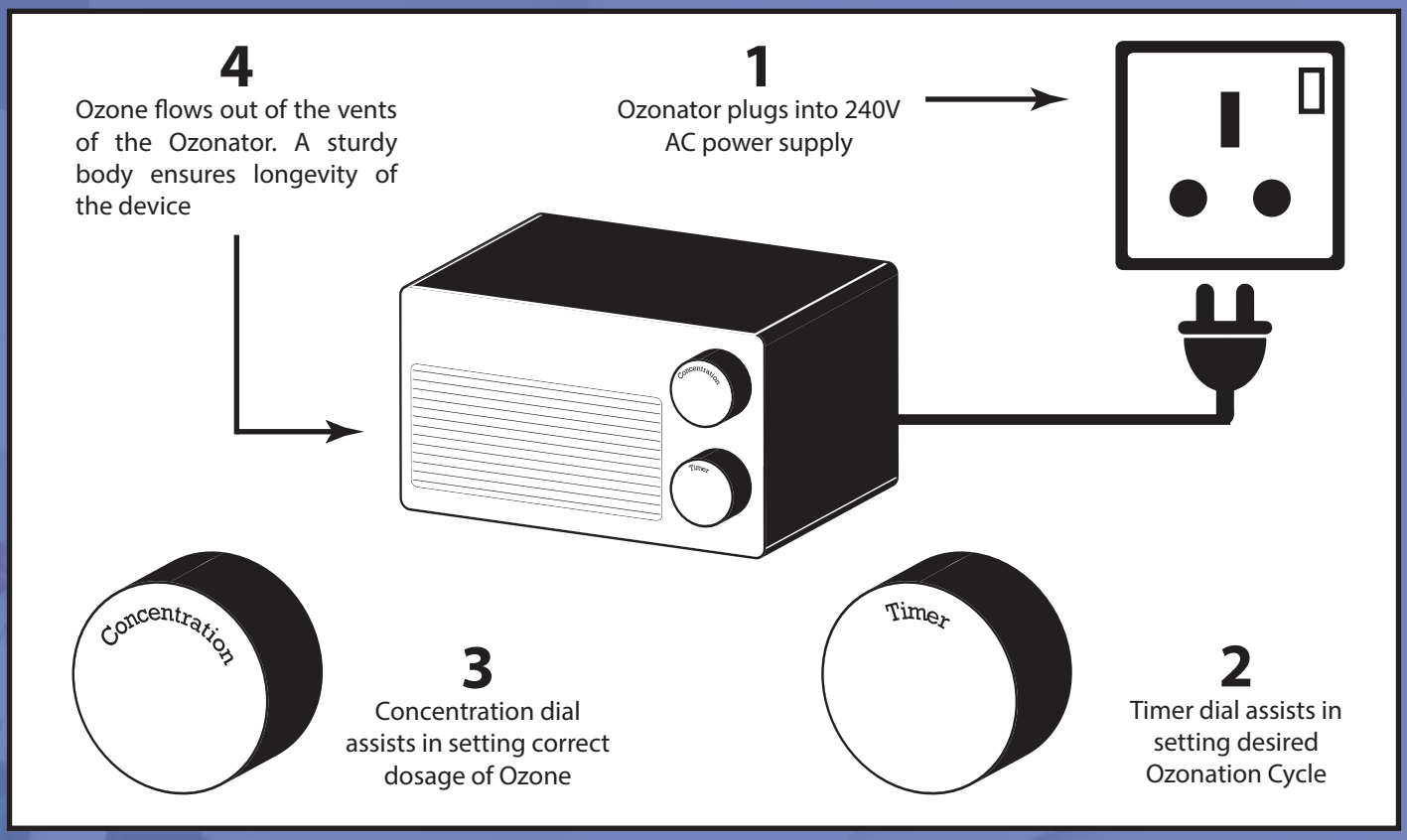
Ozone has strong oxidising properties. It reduces itself to oxygen gas leaving behind a nascent oxygen atom. This oxygen atom is the key oxidising agent and can oxidise the cellular structure of micro-organisms thereby rupturing them instantly unlike the slower effects of chemical disinfectants. It can also oxidise chemicals compounds into non-harmful components.

Ozone application for water treatment works in a similar fashion. The stray oxygen atom causes oxidation of harmful compounds such as salts, colloids, dissolved ions whereby they lose electrons and convert into their individual components.

Operating the Air Ozonator

The diagram below shows how to use the Air Ozonator. First we plug in the Ozonator into a 240 Volt power supply. Depending on the requirement, a timer is set so as to control the ozonation cycle. In adition to this, a Concentration dial is also provided which allows for the dosage of ozone to be controlled.

Depending on the severity of pollution in the immidiate surroundings, ozone concentration can be set accordingly.



Applications of the Air Ozonator

- **Residential**
  Homes and living areas, kitchens, Toilets and washrooms, Wine cellers, Garages
- **Hospitals**
  Patient rooms, Wards, Emergency rooms, Surgical theatres, Nursing homes
- **Hospitality Industry**
  Hotel rooms, Waiting loby, Restaurants, Kitchens, Toilets and washrooms
- **Pharmaceutical Industry**
  Biochemical &Microbiology laboratories, Medical packaging facilities

- **Manufacturing and Processing Industry**
  Offices and meeting rooms, Food processing plants, Meat processing plants
- **Agricultural Industry**
  Milk & Dairy plants, Chicken farms, Egg incubation facilities, Abatoirs, Fisheries
- **Commercial Facilities**
  Shopping malls, Restaurnants, Theatres & Cinemas, Gymnasiums
- **Retail Food Industry**
  Vegetable racks, Poultry and Meat shelves

Advantages

- Chemical Free
- Simple operation
- No moving parts
- Low maintenance
- Low operation cost
- Highly Effective Disinfectant
- High oxidation properties
- Reduced health risks

Models and Specifications

Specification	Mark I & II	Mark III	Mark IV
Room Capacity (ft³)	1000 - 1500	2000	2500 - 3000
A.C. Voltage (V)	230V at 50Hz	230V at 50Hz	230V at 50Hz
Power (W)	60	75	100
Ozoniser Type	Corona Discharge	Corona Discharge	Corona Discharge & U.V. Disinfection
U.V. Disinfection Germicidal Lamp	No	No	254 nm UV-C, 6W Lamp. Avg. life 6000 Hrs.
Power Line Filter	RFI / EFI	RFI / EFI	RFI / EFI
Electrical Protection	Fuse	Fuse	Fuse
Ozone (mg/hr)	1 & 2	3	4
Timer Dial	Yes	Yes	Yes
Concentration Dial	Yes	Yes	Yes
Filtration (micron)	20	20	20
Filter Type	Particle & Carbon	Particle & Carbon	Particle & Carbon
Dimension (mm)	330 X 215 X 160 & 400 X 215 X 160	460 X 215 X 160	330 X 370 X 160 & 400 X 370 X 160
Material of Construction	Tope Cover – ABS Body - Coated Steel	Tope Cover – ABS Body - Coated Steel	Tope Cover – ABS Body - Coated Steel

P.O. Box 27525-00506, Nairobi, Kenya
(254) 786 533 330 ; (254) 733 955 992
kankukenya@gmail.com