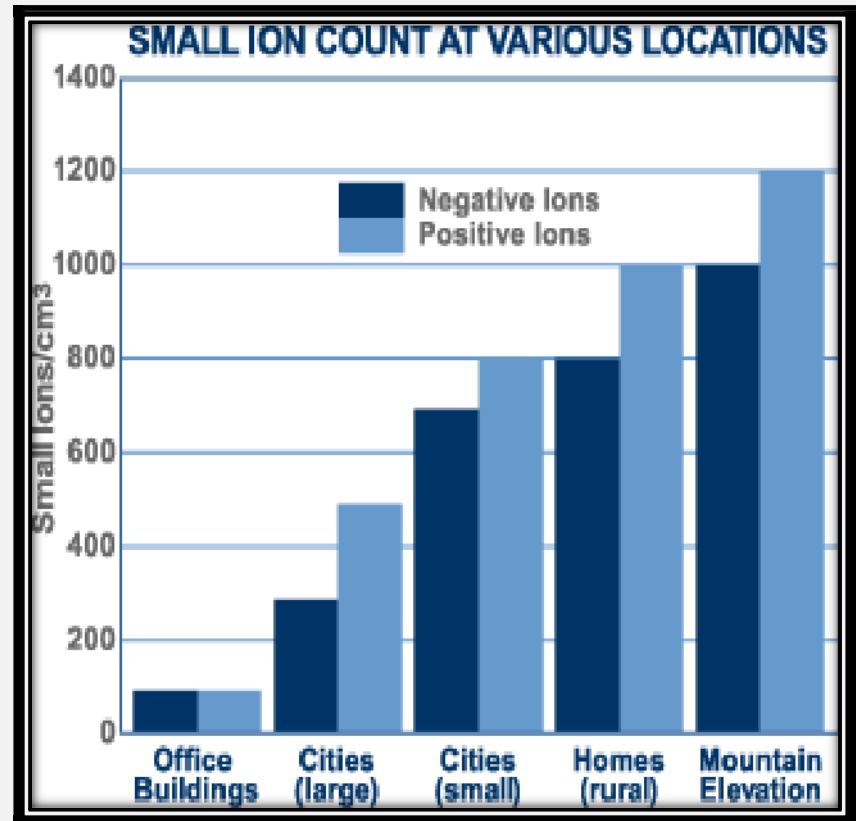


Bi Polar Basics

The Plasma Air technology reproduces mountain elevation ion levels indoors.

This is done by increasing the quantity of charged oxygen ions to “fresh air” levels, oxygen molecules can once again become active and therefore improve air quality.



THE POSITIVE EFFECTS OF A HIGHER ION COUNT

- Activated oxygen ions:
- Charge particles causing them to stick together. Larger, heavier particles then fall to the floor or get caught by the system filter.
- Inhibit the growth of mold and bacteria by penetrating the cell's split zone
- Oxidize odorous gases
- Break down VOCs* and chemicals into CO₂ and H₂O
- Balance static electricity
- Neutralize the symptoms of Sick Building Syndrome



*Volatile Organic Compounds

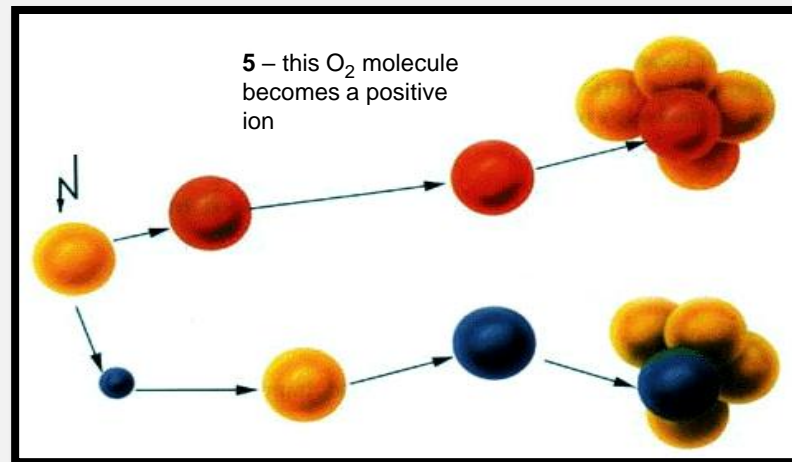
PRODUCTS



HOW IT WORKS

- Molecular activity

1 - Energy is imparted to a neutral oxygen molecule



2 - the molecule is "ionized" (emitting an electron)

3 - this electron is captured by another O₂ molecule creating a negative ion

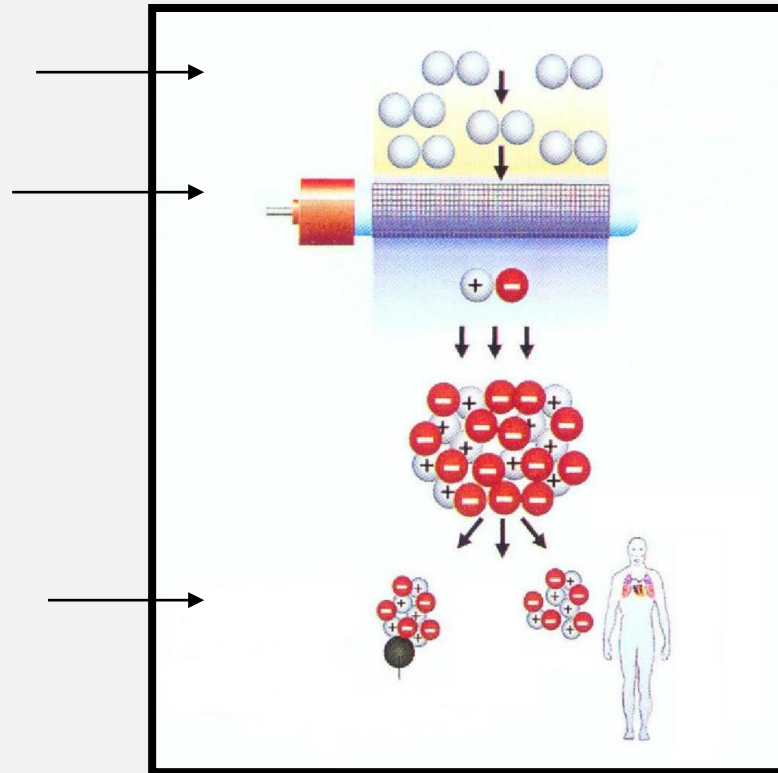
5 - this O₂ molecule becomes a positive ion

4 - These charged ions combine with other O₂ molecules forming clusters

HOW IT WORKS

HVAC system airflow carries oxygen molecules over the Plasma Air ionization tube
The ionization tube produces positive and negative oxygen ions

Bi-polar ions are sent through the duct system into the occupied space where they can attack the problem.



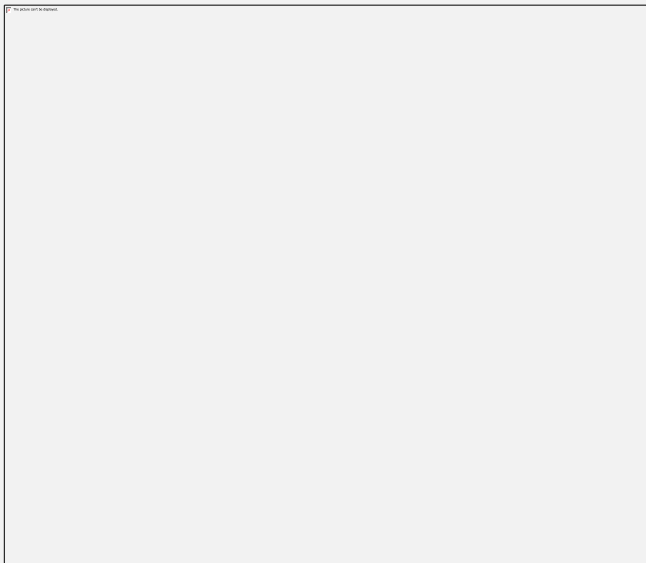
HOW IT WORKS

Bipolar technology
reproduces
mountain elevation
ion levels indoors

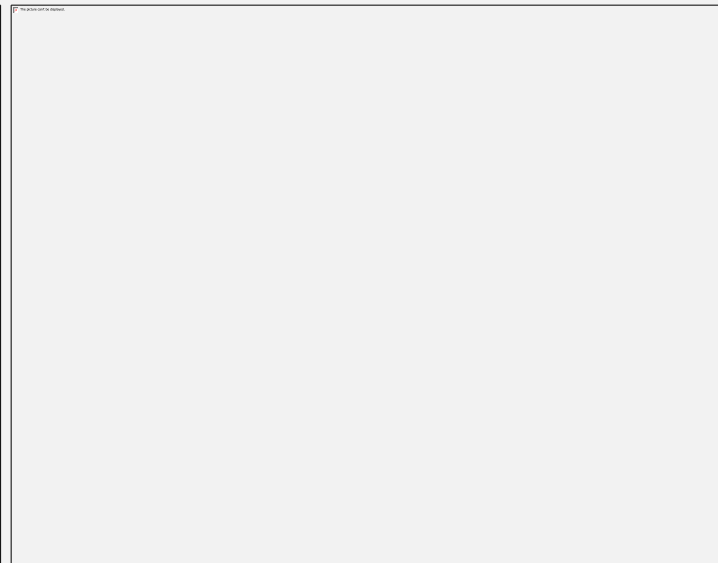


PRODUCT PERFORMANCE – LABORATORY TESTING

Effectiveness on Airborne Particles



Natural Decay 12.8% **Bi-Polar Ionization**
85.8%



Natural Decay 67.1% **Bi-Polar Ionization**
91.1%



REPORT
INTERTEK, ETL SEMKO
3933 US ROUTE 11 CORTLAND, NEW YORK 13045

PRODUCT PERFORMANCE – LABORATORY TESTING

Effectiveness on
Airborne Bacteria

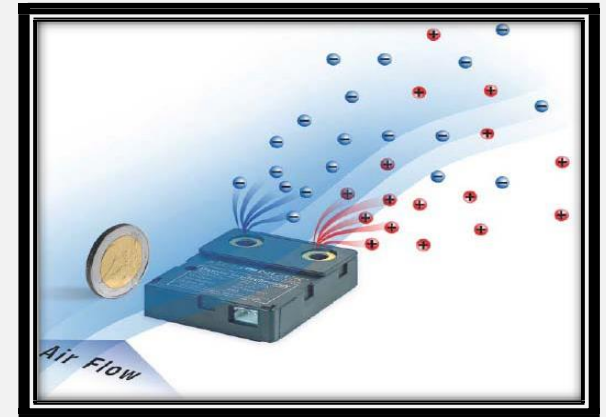


COMMERCIAL SELECTION GUIDE



Bi Polar Ionization...

- ✦ Mounts in PTAC and Air Handling Units
- ✦ Reduces Mold & Bacteria via Cell Oxidation
- ✦ Eliminates Odors
- ✦ Produces Positive and Negative Ions to Neutralize Airborne Pollutants
- ✦ Sends Pollutants to Floor, away from Breathing Level



Cradle to Grave Cycle

UV kills all contaminants located within and passing through an air handling unit to keep cooling coil & condensate pan clean for efficiency and to purify the air

Pollutants are neutralized by the charged ions and circulated into the air handling unit

Bipolar Ionization charges the ions in the purified air

To Ultimately Breathe...



CDC RECOMMENDATION

- Because of the results of numerous studies (116-120) and the experiences of TB clinicians and mycobacteriologists during the past several decades, the use of UVGI has been recommended as a supplement to other TB infection-control measures in settings where the need for **killing or inactivating tubercle bacilli** is important (2,4,121-125).
- Commercially available UV lamps used for germicidal purposes are low-pressure mercury vapor lamps (127) that emit radiant energy in the UV-C range, predominantly at a wavelength of **253.7 nm** (128).