

Technologies Group, Inc.

# INTERNATIONAL OZONE TECHNOLOGIES GROUP, INC.

Manufacture of Titan Hydroxyl Generators and Total Zone Ozone Generators used for air purification and odor control.







#### **ABOUT US**

International Ozone Technologies Group, Inc. is the premier manufacture of air purification equipment in the Restoration Industry. We have been in business since 1999!

Our lines of Total Zone Ozone Generators and Titan Hydroxyl Generators are utilized in many applications to remove odors, purify the air, and improve indoor air quality.

Our equipment is manufactured in the USA to meet rigid quality, durability, and safety standards.

Whether you are a homeowner looking to improve your indoor air quality or a restoration contractor needing to clean entire buildings, we have something that will get your job done!

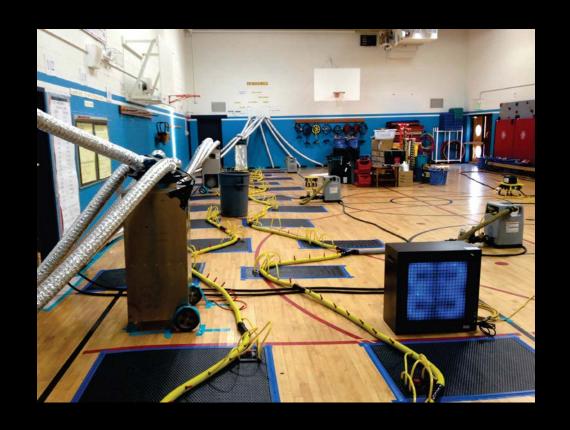
#### Total Zone Ozone Generators

### Titan Hydroxyl Generators



#### Titan Hydroxyl Generators and Total Zone Ozone Generators Remove Odors - Kill Germs - Clean the Air

Smoke Remediation Odors Cigar & Cigarette Odors Pet Odors Mold & Mildew Odors Cooking Odors Offensive Body Odors Germs, Bacteria & Virus Painting Odors Construction/Demolition Odors New Carpet Odors Smelly Shoe Odors Musty, Stale Odors Beauty Shop Odors Gym Odors Garbage / Dumpster Odors Bathroom Odors Etc... Etc... Etc...



## TITAN HYDROXYL GENERATORS

REMOVE ODORS - KILL GERMS - CLEAN THE AIR SAFE FOR USE IN OCCUPIED AREAS

Titan 4000



Titan 2000

Titan 1000

Titan Hydroxyl Maximizer







# TITAN HYDROXYL GENERATOR TECHNOLOGY

REMOVE ODORS - KILL GERMS - CLEAN THE AIR SAFE FOR USE IN OCCUPIED AREAS

- Utilize titanium dioxide (TiO2), UVA light, and H20 to create hydroxyl radicals
- Requires minimum 60% humidity at intake to be most efficient
- The 365nm to 385nm UVA Rays emitted from Titan's TiO2 Photocatalytic Lamps pass through a Permanent Anatase TiO2 Coated Super Reactor Screen which is designed to hold the maximum amount of Highly Reactive Nano Sized Anatase Titanium Dioxide, and as a result, electron hole pairs are formed that react with H20 and O2 in the air and produce Free Electrons and Hydroxy! Radicals that when dispersed by the fan will decompose organic and inorganic gases and air pollutants into carbon dioxide and water.

# TITAN HYDROXYL GENERATORS BENEFITS AND SELLING POINTS

REMOVE ODORS - KILL GERMS - CLEAN THE AIR

SAFE FOR USE IN OCCUPIED AREAS

- 100% safe for use in occupied areas
- No ozone
- Designed to be used while workers present
- Homeowner can stay in their home
- 4 machines in 1 Air purifier, 5,000cfm air mover, air scrubber, and dehumidifier
- Technology developed by NASA to purify the air in the space station
- Technology approved by FDA safe for use in hospitals including neonatal wards
- One year parts and labor warranty / Lifetime output warranty

# TITAN HYDROXYL GENERATOR MAINTENANCE / SERVICE

REMOVE ODORS - KILL GERMS - CLEAN THE AIR SAFE FOR USE IN OCCUPIED AREAS

- 82% efficient, washable, electrostatic filter (Titan 4000 20" x 20" x 1" and Titan 2000 9" x 9" x  $\frac{1}{2}$ ")
- Titan TiO2 Photocatalytic Lamp is self-cleaning and will perform at its optimum for a period of up to 8000 hours
  - (Average of 3 years) (Replacement lamps cost about \$80.00)





## Titan Hydroxyl Generator Operating Protocol

Remove Odors - Kill Germs - Clean the Air Safe for use in occupied areas

- Titan Hydroxyl Generators require at least 60% humidity at the intake of the units
- Units can treat areas up to 40,000cu/ft
- Hydroxyl Generators are intended for odors including, smoke, fire, mold, mildew, urine, decomposition, household odors, and many more.
- For severe jobs scale treatment area accordingly (Example: Titan 4000 will cover 40,000cu/ft of light smoke odors and 20,000cu/ft severe fire/smoke damage)
- Typical job ranges from 3-5 Days
- Billed through Xactimate code #CLN-DODHY at an average of \$225.00 per day for a Titan 4000
- Hydroxyls need to be dispersed quickly so additional air movement is beneficial
- Simply place a Titan Hydroxyl Generator in the center of the treatment area, place a Titan Hydroxyl Maximizer at the intake, add any additional air movers if possible, and allow to run until the odors are removed.

### TITAN 4000 HYDROXYL GENERATOR

| MODEL              | TITAN 4000                |  |
|--------------------|---------------------------|--|
| SIZE               | 26" X 26" X 12"           |  |
| WEIGHT             | 38 LBS                    |  |
| FAN OUTPUT         | 5,000 CFM MAX             |  |
| PRIMARY VOLTS/AMPS | 110/4                     |  |
| MAX TREATMENT AREA | 40,000 CUBIC FEET         |  |
| CYCLES             | 50/60                     |  |
| FILTRATION         | 20" X 20" X 1/2" WASHABLE |  |





### TITAN 2000 HYDROXYL GENERATOR

| MODEL              | TITAN 2000             |  |
|--------------------|------------------------|--|
| SIZE               | 12" X 12" X 16"        |  |
| WEIGHT             | 12 LBS                 |  |
| FAN OUTPUT         | 900 CFM MAX            |  |
| PRIMARY VOLTS/AMPS | 110/2                  |  |
| MAX TREATMENT AREA | 20,000 CUBIC FEET      |  |
| CYCLES             | 50/60                  |  |
| FILTRATION         | 9" X 9" X .5" WASHABLE |  |





### TITAN 1000 HYDROXYL GENERATOR

| MODEL              | TITAN 1000        |  |
|--------------------|-------------------|--|
| SIZE               | 6" X 9" X 12"     |  |
| WEIGHT             | 8 LBS             |  |
| FAN OUTPUT         | 100 CFM MAX       |  |
| PRIMARY VOLTS/AMPS | 110/2             |  |
| MAX TREATMENT AREA | 10,000 CUBIC FEET |  |
| CYCLES             | 50/60             |  |
| FILTRATION         | 4" X 4" WASHABLE  |  |





#### TITAN HYDROXYL MAXIMIZER

Cold Ultrasonic Vapor Humidity Injector

True Hydroxyl Generators utilize water vapor in the atmosphere to create Hydroxyl Radicals. The Titan Technology works by creating a reaction between UVA, TiO2, and H20 to break apart water molecules and create a Hydroxyl Radical (OH).

The Titan Hydroxyl Maximizer uses ultrasonic technology to produce a very fine water vapor. The Maximizer is placed directly behind the Titan Hydroxyl Generator and will increase direct intake of humidity which increases hydroxyl production.





#### TOTAL ZONE OZONE GENERATORS

REMOVE ODORS - KILL GERMS - CLEAN THE AIR INTENDED FOR USE IN UNOCCUPIED AREAS

TZ-8 / TZ-4



TZ-2 / TZ-1



TZUV-600 / TZUV-300



# TOTAL ZONE OZONE GENERATORS BENEFITS AND SELLING POINTS

REMOVE ODORS - KILL GERMS - CLEAN THE AIR INTENDED FOR USE IN UNOCCUPIED AREAS

- #1 ozone generator for disaster restoration and remediation on the market today
- Total Zone patented corona discharge technology powered by our patented "SP-ARC" module, Silicate Polarized Arc
- No plates to replace or clean
- Produce much higher levels of ozone then any competitive model with little or no maintenance
- 12 Hour timer
- One year parts and labor warranty / Lifetime output warranty
- Designed for restoration contractors and built for the utmost reliability in the harshest environments
- Durable, industrial powder coat, sheet metal case
- UV units also available

# TOTAL ZONE OZONE GENERATORS TECHNOLOGY

REMOVE ODORS - KILL GERMS - CLEAN THE AIR INTENDED FOR USE IN UNOCCUPIED AREAS

#### What is Ozone?

Ozone (03) is a naturally occurring substance found in nature that we cannot live without. Ozone is an activated form of oxygen (02) with three atoms where regular oxygen has two. Ozone in the upper atmosphere filters out harmful UV rays from the sun without which all life on earth would cease to exist. Closer to home ozone is produced by lightning in thunderstorms. I'm sure you have experienced the freshness in the air after a storm. Ozone is very unstable and has an average half life of 20 minutes, this is why ozone must be produced at the point of use and cannot be stored in a container for later use.

#### **How Does It Work?**

Ozone will cast off it's third atom onto any other organic element thereby oxidizing it or converting it to another substance. In the case of odors it will convert a foul-smelling substance into an non-odorous substance naturally with no unhealthy chemicals to buy, store or use. Once ozone has done it's job it converts back to oxygen. Ozone will also deactivate and destroy molds, bacteria, virus, fungus, and mildew.

# TOTAL ZONE OZONE GENERATORS MAINTENANCE / SERVICE

REMOVE ODORS - KILL GERMS - CLEAN THE AIR INTENDED FOR USE IN UNOCCUPIED AREAS

- Little to no maintenance
- Simply clean out filter periodically
- Will need service if run in high humidity
- If broken, may need new "SP-ARC" Module (due to rough use and dropping)





# TOTAL ZONE OZONE GENERATORS OPERATING PROTOCOL

REMOVE ODORS - KILL GERMS - CLEAN THE AIR INTENDED FOR USE IN UNOCCUPIED AREAS

- Total Zone Ozone Generators work best in low humidity, lower temperature environments
- Units available to treat up to 720,000cu/ft
- Ozone is intended for unoccupied areas and has been a staple for odor control for years
- A typical job requires a treatment time of a few hours and is usually completed in one day
- Ozone can be charged at a rate of \$0.02 \$0.03 per cu/ft
- Ozone can affect natural rubbers and bleach damp materials
- Total Zone Ozone Generators can be set directly inside the treatment area and for best results place the units in front of the central air return, remove the air filter, and let the ozone flow throughout the duct-work and disperse into the entire area.
   Additional air movement is also beneficial.

### TOTAL ZONE TZ-4 / TZ-8 OZONE GENERATOR

| MODEL                | TZ-4   | TZ-8   |
|----------------------|--|--|
| SIZE                 | 12 1/2" X 16" X 20"  | 12 1/2" X 16" X 20"  |
| WEIGHT               | 26 LBS 5 OZ  | 33 LBS 6 OZ  |
| TIMER                | 12 HOUR WITH HOLD  | 12 HOUR WITH HOLD  |
| GENERATOR            | PATENTED "SP-ARC"<br>Silicate polarized arc<br>Corona discharge Technology | PATENTED "SP-ARC"<br>Silicate Polarized arc<br>Corona discharge Technology |
| FAN                  | 4 - 100 CFM<br>ABEC #5 BEARINGS  | 4 - 100 CFM<br>Abec #5 Bearings  |
| OZONE OUTPUT         | 1500-6000 MILLIGRAMS<br>Per Hour - Variable                                | 3000-12000 MILLIGRAMS<br>Per Hour - Variable                               |
| PRIMARY VOLTS/AMPS   | 110/3  | 110/4  |
| SECONDARY VOLTS/AMPS | 4X 14000/35MA  | 8X 14000/35MA  |
| CYCLES               | 50/60  | 50/60  |
| CASE MATERIAL        | ANODIZED ALUMINUM<br>.060/14 gauge   | ANODIZED ALUMINUM<br>.060/14 gauge   |
| FINISH               | FINGERPRINT FREE<br>TEXTURED POWDER COAT                                   | FINGERPRINT FREE<br>Textured powder coat                                   |
| WARRANTY             | ONE YEAR PARTS & LABOR   | ONE YEAR PARTS & LABOR   |





### TOTAL ZONE TZ-2 / TZ-1 OZONE GENERATOR

| MODEL                | TZ-1   | TZ-2   |
|----------------------|--|--|
| SIZE                 | 12 1/4" X 9" X 6"  | 12 1/4" X 9" X 6"  |
| WEIGHT               | 7 LBS 9 0Z   | 9 LBS 3 OZ   |
| TIMER                | 12 HOUR WITH HOLD  | 12 HOUR WITH HOLD  |
| GENERATOR            | PATENTED "SP-ARC"<br>Silicate Polarized arc<br>Corona discharge Technology | PATENTED "SP-ARC"<br>Silicate Polarized arc<br>Corona discharge Technology |
| FAN                  | 100 CFM<br>ABEC #5 BEARINGS  | 100 CFM<br>Abec #5 Bearings  |
| OZONE OUTPUT         | 1500 MILLIGRAMS<br>Per Hour  | 3000 MILLIGRAMS<br>Per Hour  |
| PRIMARY VOLTS/AMPS   | 110/1  | 110/2  |
| SECONDARY VOLTS/AMPS | 14000/35MA   | 2X 14000/35MA  |
| CYCLES               | 50/60  | 50/60  |
| CASE MATERIAL        | ANODIZED ALUMINUM<br>.060/14 gauge   | ANODIZED ALUMINUM<br>.060/14 gauge   |
| FINISH               | INDUSTRIAL POWDER COATING  | INDUSTRIAL POWDER COATING  |
| WARRANTY             | ONE YEAR PARTS & LABOR   | ONE YEAR PARTS & LABOR   |





### TOTAL ZONE TZUV-600 / TZUV-300 OZONE GENERATOR

| MODEL              | TZUV-300   | TZUV-600   |
|--------------------|--|--|
| SIZE               | 12 1/4" X 9" X 6"                                    | 12 1/4" X 9" X 6"                                    |
| WEIGHT             | 6 LBS 12 OZ  | 7 LBS 12 OZ  |
| TIMER              | 1 HOUR   | 1 HOUR   |
| GENERATOR          | TZUV / ULTA-VIOLET CHAMBER<br>185-254 NM WAVE-LENGTH | TZUV / ULTA-VIOLET CHAMBER<br>185-254 NM WAVE-LENGTH |
| FAN                | 100 CFM  | 100 CFM  |
| OZONE OUTPUT       | 300 MILLIGRAMS<br>Per Hour                           | 600 MILLIGRAMS<br>Per Hour                           |
| PRIMARY VOLTS/AMPS | 110/.5   | 110/1  |
| CYCLES             | 50/60  | 50/60  |
| CASE MATERIAL      | 0.60 ANODIZED ALUMINUM                               | 0.60 ANODIZED ALUMINUM                               |
| FINISH             | INDUSTRIAL POWDER COATING                            | INDUSTRIAL POWDER COATING                            |
| WARRANTY           | ONE YEAR PARTS & LABOR                               | ONE YEAR PARTS & LABOR                               |





### APPLICATIONS AND JOBS

- Hotels
- Used cars can be odor free, easier to sell.
- All fire and water damage companies use ozone.
- Apartment complexes can save on carpet replacement and extensive cleaning services after tenants move out.
- Restaurants, Bars, etc. can cut down on offensive odors and give their patrons a much more enjoyable atmosphere to dine and socialize in.
- Realtors can remove odors from homes they are trying to sell.
- Painters can remove the offensive paint odor much sooner so that their customers do not complain.
- Carpet installers can get rid of odors and unhealthy VOCs (Volatile Organic Compounds) put off by new carpet.
- Rental cars can be deodorized and have smoking odors removed before the next rental.
- Health clubs and gyms don't have to smell like health clubs and gyms anymore.
- Dry cleaners use ozone to deodorize draperies and upholstered furniture.
- Homeowners can have their homes treated on a regular basis to keep it fresh, clean smelling and much healthier.
- Boats can be kept odor, mold, and mildew free.
- Ozone will kill or deactivate mold, mildew, fungus, bacteria virus, germs, etc.
- Sick buildings can benefit immensely from regular ozone treatments. This is much cheaper than replacing drywall, carpet, AC duct work, etc.
- Allergy sufferers can live in a purified environment free from mold, mildew, spores, VOCs, fumes, etc.
- Businesses can benefit by cutting down on employee sick days by ozoning after hours to rid the work environment of unhealthy substances.
- Factories can oxidize unlawful and unhealthy chemical emissions from their exhaust systems

### Thank you for your time!

For additional information please reach out: www.kleenkuip.com sales@kleenkuip.com

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