

THE ODOROX HYDROXYL GENERATOR

“Neutralizing Odors the Natural Way”

By Tom McArdle

The Odorox Hydroxyl Generator is a complete odor elimination, air decontamination and purification system. The manufacturer, HGI Industries Inc., is a U.S. based company whose hydroxyl technology is at the forefront of high-volume air processing. They have units that range from residential, to commercial, to industrial and agricultural applications. There is no job too large that these systems can't handle.

The Odorox generators use a two part treatment process to eliminate a long list of biological and chemical pollutants. One part involves directing contaminated air through a sanitizing chamber. This chamber harnesses multiple nanometer wavelength and frequency ranges. The first segment of the optics deodorizes the air flow, while the second segment destroys bacteria and other micro-organisms and prevents them from multiplying. The result is purified air which is then recycled back into the environment. These wavelengths also combine with ambient air humidity to create hydroxyls, which are the key to the second part of the decontamination process.

Hydroxyls (-OH) occur naturally in our atmosphere when sunlight hits water vapor. They are so small that ten billion would fit into a drop of rain. Despite their diminutive size, hydroxyls are probably the single most important cleansing agent for our environment. They are 33% more effective at oxidizing pollutants in the air than ozone, and 2.5 times more germicidal and fungicidal than chlorine. This makes them the most effective method of eliminating bacteria, viruses, germs, mold, volatile organic compounds (VOC's), chemical fumes, gasses, vapors and unpleasant odors that you can buy. The problem is that hydroxyls are not produced indoors, therefore, due to the absence of the hydroxyl, indoor air quality is said to be 10 to 100 times more polluted than outside air.

The Environmental Protection Agency states, “...people spend approximately 90 percent of their time indoors. Thus, for many people, the risks to health may be greater due to exposure to air pollution indoors than outdoors.” This helps explain why chronic lung disease affects over 35 million Americans and is the third

leading cause of death in the United States. Asthma alone affects about 20 million Americans, 6.3 million of which are children. Annual health-care costs for acute respiratory infections were about \$30 billion, and resulted in another \$35 billion in annual sick leave. This is why the U.S. Department of Energy reports that improving buildings and indoor environments could reduce these costs and increase worker performance for an estimated productivity gain of \$30 - \$150 billion annually. Sick Building Syndrome, Multiple Chemical Sensitivities, Chronic Fatigue Syndrome, challenged immune systems and asthma are just a few of the challenges we face today. The Odorox Hydroxyl Generator can help battle these problems.

By mimicking the natural production of hydroxyls in the atmosphere, this technology will help to create a safe indoor environment for all who desire a healthy lifestyle. The Odorox clean air systems are not hazardous to people or pets, generate no accumulative ozone (<0.01 ppm), use no harsh chemicals, require low maintenance and use very little power. The hydroxyls it produces are clearly a vital component to clean air, and it is no wonder they are often referred to as "Mother Nature's Broom". Now, because of the Odorox Hydroxyl Generators, we can all experience cleaner and fresher air in our indoor environment as well.