

About the company and Technology

The company origin and purpose

The establishment of A-oneTech can be traced back to the 2003 Shah's explosion. At that time, SARS took away hundreds of precious lives. Through the history of SARS's heavy casualties, we realized that the constant virus mutation made the virus more destructive and unpredictable, and even some bacteria, they have evolved resistance to antibiotic pharmaceutical preparations, and it is difficult to eradicate them medically. Because of this, the company has established its mission to use nuclear energy to protect fragile but valuable lives and to avoid similar virus outbreaks. After SARS's, the company received government funding to develop the Plascide technology. After years of experimentation, the technology has matured, and many places with high traffic such as the Hong Kong International Airport Control Tower and the Hong Kong-Shenzhen Hong Kong Railway Transit Station and other sites have installed the Plascide sanitization technology. A-oneTech has not forgotten its original mission to protect human health. The company is continually trying to develop different air sterilization devices. At present, it has applied the plascide technology in portable, stand-alone and installed series products to protect humans from germs at all times.

“ We create coz we Care”

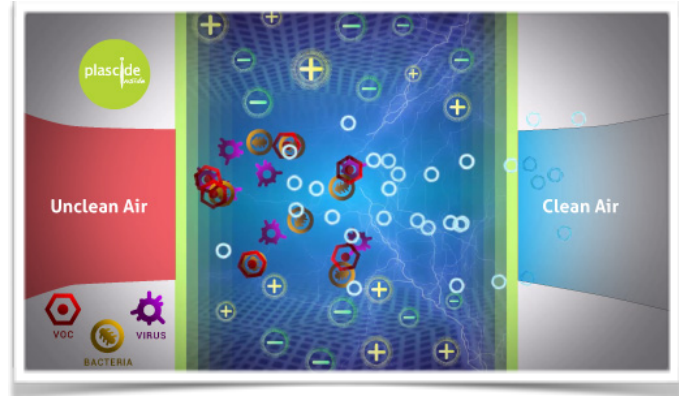
About the Plascide technology

The company created the word "Plascide." With "Plasma" and "-cide" as suffixes, "-cide" means killer, which involves using plasma to kill pathogens in the air. The Plascide technology has applied for global patents, which is 100% developed and designed by Hong Kong.

Plasma is the fourth state of matter, which is higher than the energy of gas and is a high-energy ionized gas composed of charged positive ions and negative ions. The plasma field



generated within the Plascide device can excite air particles into a high energy state. The excited electrons produce micro-lightning, which effectively neutralizes organic compounds and disassembles the pathogens in the air, thereby eliminating the pathogens of air, such as influenza, Staphylococcus aureus, tuberculosis, and others. Besides, the form of lightning is not limited to the elimination of specified pathogens or compounds and can kill mutated bacteria. More, the technology does not release any positive, negative ions or plasma into the air, which can maintain the long-term cleansing effect.



Plascide technology has been tested and validated by the internationally recognized laboratory SGS and by microbiologists at the University of Hong Kong and the City University, knowing that Plascide technology can be sterilized quickly and efficiently.

Technology Comparison

Plascide sanitization technology is innovative today, and its effectiveness is incomparable with other technologies. Also, Plascide is faster than other technologies to kill germs, which no need to change filters and reduce maintenance costs.

HEPA filters can trap larger germs and particulates but not virus and tiny aerosols. Trapping has no sanitation effect. Germ filled filters need to be disposed of carefully and replacement is financial costly over the long run.

Ultra violet (UV) light requires long irradiation (10s of minutes or longer) on germs that is impractical for air disinfection. Diminishing intensity over distance and shadowing effect further limit the efficacy.

Ionic technology (ion generator, Ionizer) works by electrically charging air molecules and particulates. The charges can facilitate airborne particles to

adhere to any surfaces thereby taking them out of the air temporarily but they do not destroy germs nor VOCs.

The air ions can also lead to some weak secondary air treatment effect through the presence of radicals.

Photo-Catalyst Oxidation (PCO) or Photoelectrochemical oxidation (PECO) use UV to activate a catalytic coating to generate radicals which can inactivate some germs and VOCs in contact. The efficiency is low because not all germs and VOCs will be within range of the catalyst, and is degraded by dust settlement.

Ozone is not effective unless the concentration is at a health hazardous level of greater than 3,000 ppb (According to Environmental Protection Department guidelines, the threshold limit of ozone is around 50 ppb). It can only kill airborne microbes efficiently at the cost of human health. Also, ozone has very low or nil effect on reducing VOCs.

Award-winning Plascide technology

Plascide sterilization and purification technology has received positive public response. It has won the "My Favorite Creative Life New Invention Competition" sponsored by the Hong Kong Government and the Merit Award of the "Hong Kong Environmental Product Award" sponsored by the Business Environment Council, and the "Hong Kong Awards for Industry and Commerce: Technology Achievement Award" hosted by the Hong Kong Government.

