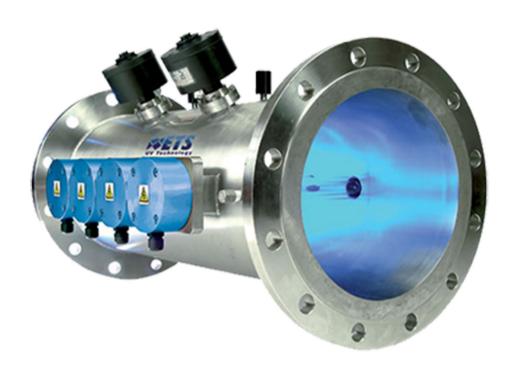


UV DISINFECTION SYSTEM





Process application:

Ultraviolet disinfection method uses short-wavelength ultraviolet (UV-C) light to kill or inactivate microorganisms by destroying nucleic acids and disrupting their DNA, leaving them unable to perform vital cellular functions. UV is used in a variety of applications, such as food, air, and water purification.

UV-C light is weak at the Earth's surface as the ozone layer of the atmosphere blocks it. UV devices can produce strong enough UV-C light in circulating air or water systems to make them inhospitable environments to microorganisms such as bacteria, viruses, molds and other pathogens. UV can be coupled with a filtration system to sanitize air and water.

The application of UV to disinfection has been an accepted practice. It has been used primarily in medical sanitation and sterile work facilities. It has been employed to sterilize drinking and wastewater, as the holding facilities are enclosed and can be circulated to ensure a higher exposure to the UV. It has renewed application in air purifiers.

Construction:

In small capacity, it is manufactured from SS pipe where the UV light producing device is fixed in glass tube co axially installed at the centre of pipe. The fluid flows around the glass tube & during its path the UV light penetrate the fluid which kills the bacteria. For the large capacity SS chamber is constructed & UV producing tube is installed such that the light penetrates through every drop of water to obtain 100 % efficiency.