**Classification of filters by filter media**

According to the filtration medium is divided into: air filter， liquid filter， network filter， light filter

Water quality filter

1.Air filter

Air filter development The prototype of air filter is the breathing protection apparatus used by people to protect breathing. According to records， as early as the first century in Rome， people used a mask made of coarse hemp for protection when purifying mercury. In 1827， Brown discovered the law of motion of tiny particles， people have a further understanding of the mechanism of air filtration. The rapid development of air filters is closely related to the development of the military industry and the electronics industry. During the First World War， due to the use of various chemical agents， asbestos fiber filter paper as a smoke filter layer of military gas masks came into being. Glass fiber filter media for air filtration was patented in the United States in October 1940. 50s， the United States on the production process of glass fiber filter paper for in-depth research， so that the air filter has been improved and developed. 60s， HEPA filter was introduced; 70s， the use of micro-fiber glass filter paper as a filter media HEPA filter， 013 micron particle size Particle filtration efficiency up to 99.9998%. Since the eighties， with the new test methods

Schematic diagram of filter structure

The emergence of the HEPA filter， the improvement of the evaluation of the use and the improvement of the requirements for filtration performance， it was found that there were serious problems with the HEPA filter， so there was a higher performance of the ULPA filter. At present， countries are still working on research， and it is estimated that more advanced air filters will soon appear. [1] Air filter performance Make the contaminated air is cleaned to the state needed for production and life， that is， to make the air reach a certain degree of cleanliness. Air filter how to filter air: general air purification equipment to filter air is probably divided into the following methods and steps. 1、Multiple filters ---- prevent dust and germs in the air from entering the room Multiple activated carbon filters effectively intercept dust and germs， filter the air and ensure that the air entering the room is clean. 2， titanium oxide to kill ---- degradation of indoor air pollution of formaldehyde， benzene and other organic toxic gases nanoscale titanium dioxide activated by ultraviolet light， to filter the air to effectively degrade the air of formaldehyde， benzene and other organic toxic gases radioactive pollution. 3， negative ion oxygenation ---- increase the oxygen in the indoor air to the right amount and keep the content stable negative ion generator to indoor air oxygenation， to ensure that the air entering the home to maintain a sufficient amount of oxygen， vibrant and strengthen the filtration

Water quality filter

Air> 4. PTC ceramic heating ---- heating indoor air to a comfortable temperature PTC ceramic heater for winter into the indoor fresh air to assist in preheating， appropriate to increase the temperature of the room， so as to filter the air， so that the home warm and comfortable. 5. Ultraviolet sterilization ---- strong to kill the epidemic virus bacteria in the air Ultraviolet light source has strong to kill the epidemic virus bacteria in the air， so that people away from the source of infection， to filter the air and care for the health of the whole family. It is usually installed at the inlet end of pressure reducing valves， pressure relief valves， water leveling valves or other equipment to avoid impurities in the medium to protect the normal use of valves and equipment. When the fluid enters the filter cartridge with certain specifications， the impurities are blocked， and the clean filtrate is discharged from the filter outlet.

2.Liquid filter

To make the contaminated liquid clean to the state needed for production and life， that is， to make the liquid reach a certain degree of cleanliness.

3.Network filter

It is set up to block spam so that the information appearing on the computer screen meets the requirements as much as possible. The same principle of absorption separates the light of different colors.

4.Light filter

Absorb some unwanted light.