

Applications of Porous Plastic Products



Shanghai CMI Environmental Technology Co., Ltd.



Pipeline Water Filter

The filters are installed in the pipes of supplying water and with polymer microporous film pipe filter inside. The advantages are large flow, long life and easy to change. Pipe potable water filter s(tube) are designed to optimized the balance between ax. flow rate and impurity removal. The active carbon inside the filter can eliminate the pertinence impurity. The filter do not only have high efficiency in the minimum back pressure and minimum flow state, but also make high efficiency performance of the active carbon inside.





Waste Water Treatment

Microporous materials are widely applied in waste water treatment and waste gas treatment, because of their good price function ratio. By adding various kinds of functional materials, for example active carbon, we can effectively remove harmful substances in environmental gases and liquids, such as peculiar smell and organic matters etc. Potassium titanate whiskers, for example, can exchange the heavy metal ions contained in waste water, thus they have excellent performance in sewage treatment. Pool and Spa filters are rigid and lightweight, and they offer a variety of advantages: maximized surface area and flow rates, optimized backwash processing, excellent chemical and physical resistance to clean and reuse to support a long serviceable life. Radial, tube and sheet filters are easy to install into existing pool and spa filtration systems, but our filters can be customized to meet individual water filtration system requirements.









Breath Alcohol Detector Filter

Alcohol tester filter is made by spotless, no contamination polymer polypropylene material. It is with high filtration precision, uniform pore size distribution, small filtration resistance, big air flow and so on, which can effectively prevent human oral saliva, impurity into instrument but to make human body breathe out alcohol gas effectively.



Air Filter

Air filter can effectively filter the dust, impurities, water and other materials in the air. If the filters are installed in pneumatic system, it can reduce dust and impurity friction to the wall and piston during working process, and prolong mechanical life. If the air filters are used in automobile, it can effectively purify the air and prevent toxic material damaging your health.



Vacuum Filtration Core

They are mainly used in centralized vacuum pressure air filtration system, which can prevent impurity pollution to air suction systems. They are high molecular polyethylene microporous filter with skeleton structure material. The material have good advantages like cheap cost, high efficiency, acid resistance, alkali resistance, non-toxic, no smell, no medium release and so on.



Compressed Air Oil-Water Separator

With its features of ventilation but water resistance, it can filter the water and oil in compressed air, to ensure the purity of pneumatic compressed air. Compared with traditional sintered metal powder filter, the cost could be lower.





Muffler

In pneumatic system, the compressed air supply to cylinder actuators by changing valve, after action is finished, the compressed air will be discharged to atmosphere by change valves again. Rapid expansion of compressed air and pressure changes will produce high frequency dissonant noise. With muffler, the exhausted noise can be dropped about 20-40dB. Polymer microporous filter chip is within the muffler, with large ventilation and low noise. It replaces the traditional sintered metal and reduces the cost.



Gasoline/diesel filtration core

It is high molecular polyethylene microporous filter with skeleton structure, cheap cost and high efficiency. The UHMWPE microporous filter has the advantages of no medium release and can solve the traditional felt filter's medium release problem.



Coating permeability test substrate

With high molecular polyethylene microporous materials, the coating permeability test base has many advantages, such as good and consistent permeability, high flatness, stable dimension and high strength. It can ensure that the paint in the substrate be coated uniform and level off. It is used at home outfit coating permeability test and fill the blank in China.



Medical Treatment

Resistance liquid bolt can filter and pass air in dry state, once encounter water would immediately jam. The resistance liquid bolt assembling in the filter, can help hospital subatmospheric pressure system to provide the subatmospheric pressure and clean demand for many equipment in the operation process. When collected fluid contacts the filter, the filter will automatically cut off the subatmospheric pressure airflow to protect the subatmospheric pressure system not be waste pollution.





Oil Filtering

With the special structure and easy manufacturing characteristic of polymer material, polymer microporous oil filter could be flexibly designed, high efficient, low cost to replace the traditional wool or the sintered metal oil filter.



Storage Battery Industry

The filters are widely used in communication, electric power, transportation, computer backup power supply, automobile. Agriculture and life commodities, etc. For example, the PP/PE microporous acid filter are used in communication and maintenance-free batteries of automobiles can prevent hydrogen explosion during battery charging and overflowing of electrolyte fluid that may erode the vehicle, for the excellent anti-explosion and acid-proof characteristic.



Daily Use:

- Odor absorbers: Odor absorbers made of microporous plastic are widely used to eliminate odor in refrigerators and car cab, etc.
- Perfume release device: Using polymer microporous capillary, perfume from sealed containers could be slowly released into the air, it won't jam as time flies.
- Swimming pool and hot spring filter cartridge: Swimming pool and hot spring filter cartridge have many good performance, durable in use, light and large filtration area, fast water flux, and also have the back-washing function and long service time. It can be easily install in the existence filter system, no matter the pleated, tubular and the plate filter. Of course all these filter cartridges can be special customized to meet the individual requirements.
- Sport water bottle/ Dust Container Filter/ Shower filter

