ACTIVATED CARBON FILTER

Working Principle

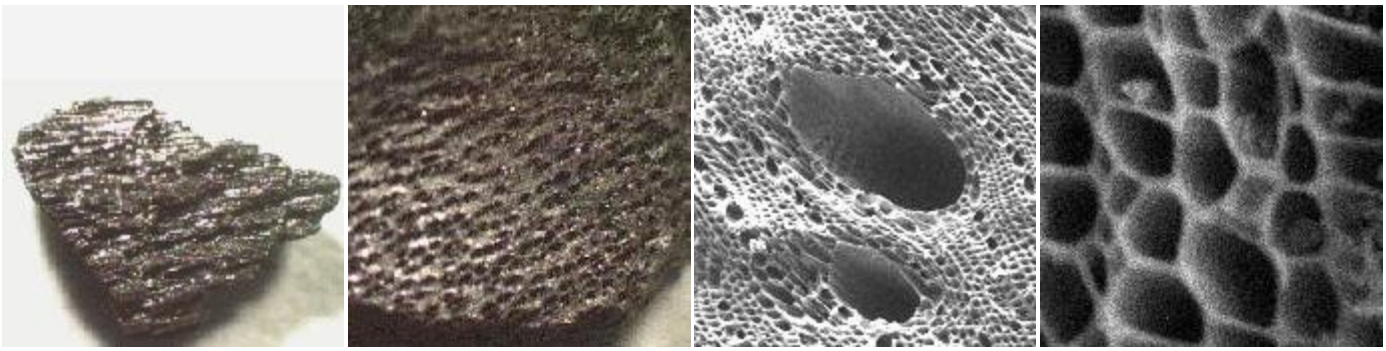
Working Principle is same like pressure sand filter. Filtering media is Activated Carbon Granules. Given Below are details for Activated carbon characteristics and data.

Close-up of Sample Activated Carbon Particles

Activated carbon is useful in drinking water treatment because it acts as an adsorbent, and can effectively remove particles and organics from water. These organics are of great concern in water treatment because they react with many disinfectants.

Adsorption and how it works

Adsorption is the process by which Activated Carbon removes substances from water. Defined, adsorption is "the collection of a substance onto the surface of adsorbent solids." It is a removal process where certain particles are bound to an adsorbent particle surface by either chemical or physical attraction. Adsorption is often confused with Absorption, where the substance being collected or removed actually penetrates into the other solid.



The reason that activated carbon is such an effective adsorbent material is due to its large number of cavernous pores. These provide a large surface area relative to the size of the actual carbon particle and its visible exterior surface.

An approximate ratio is 1 gram = 100 m^2 of surface area.

Characteristics of importance in choosing carbon types include pore structure, particle size, and total surface area and void space between particles. After selection of a source, preparations for use are made.

Aqua Clean Systems offer wide range of GAC (Granular Activated Carbon) or PAC (Powdered Activated Carbon) according to your product application inclusive of removal of pesticides residue.