

MULTI-MEDIA FILTERS

PARTICLE FILTRATION

Description

Multi-Media Filtration is a proven design concept whereas the coarse media layers that are in the top of the tank trap large particles, and successively smaller particles are trapped in the finer layers of media deeper in the bed.

The result is a highly efficient filtering since removal takes place throughout the entire bed. Multi-Media depth filters typically remove particles 5-15µm in size or larger. All media included in our filters are carefully selected according to client's requirement, so the media retains its stratification during backwash and rinse. Automatic backwashing system removes the trapped contaminants within the filter bed and washes them down the drain. Typically we utilize a combination of gravel, quartz and anthracite in our filters.

Our range of **Media Filters** can contain several types of media and gravel under bedding depending on the application.

The size of vessels and valves used as well as the type of media used will depend on the specific client application.



General Features – Small Systems

- ⊕ Pentair Autotrol 268 Valves or Magnum Valves
- ⊕ Park Pressure Vessels



Autotrol 268 Valve



Magnum Valve



Park Pressure Vessels

Dimensions / Capacity

- ⊕ Maximum vessel size in GRP is 3280mm diameter by 2150mm high.

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Special Media for Specific Applications

Apart from the removal of particles and turbidity we can use special media for specific applications.

⊕ BIRM

BIRM is used for the removal of iron and manganese. High chlorine levels in the water can damage the media.

⊕ GREENSAND

Greensand is used for the removal of soluble iron, manganese, hydrogen sulphide, arsenic and radium. High chlorine levels in the water can damage the media. Minimum pH for use of this material is 6.2

⊕ MTM

MTM is used for reducing iron, manganese, hydrogen sulphide, arsenic and radium. High chlorine levels in the water can damage the media. This media requires regeneration with KMnO_4 .

⊕ ACTIVATED CARBON

Activated carbon is used to remove contaminants and impurities, utilizing chemical adsorption. Carbon filters are most effective at removing chlorine, sediment, and volatile organic compounds (VOCs) from water.

⊕ CALCITE

Calcite is a natural crushed and screened calcium carbonate media which is used to neutralise low pH waters. Calcium carbonate is slowly dissolved into the water reducing the risk of corrosion.

⊕ GFH

Granular ferric hydroxide (GFH) is an adsorbent material used for the selective removal of arsenic, phosphate, selenium and other heavy metals.

Note

- ⊕ A consultation from TUA Engineering is necessary in order to determine the customer specific requirements. A proposal will then follow, with the appropriate size and media required.