

## Granular Activated Carbon (GAC) Filter

### Product Application

Another element is added to the filtration process using activated carbon, in granular form, as a filter media. GAC filtration is very effective in eliminating impurities and contaminants causing bad taste and foul odors, sediments, chlorine other organic compounds.

GAC Filters are commonly used for water purification, air filtering and other industrial gas processing:

- Drinking water
- Condensate water treatment
- Applied after multimedia filter to protect RO membranes from chlorine
- Industrial water treatment
- Polishing filter for iron removal
- VOCs & H<sub>2</sub>S gas removal

### Process Description

Activated carbon works via a process called adsorption, wherein a highly porous pattern in the granulated carbon media adsorbs and entraps contaminants from the water. The contaminant particle is diffused into a pore and become adsorbed. The higher the contaminant concentrations the greater the removal capacity of the activated carbon, however, it may require longer contact time with the media.

The same operation principle as the Multimedia Filter is applied to Activated Carbon Filter. Water flows from the top of the vessel passing through the activated carbon bed, treated water is collected from the bottom and backwash is initiated once the pressure drop increased or the efficiency of the filter declines.

### Product Benefits:

- Manual and Automatic Operation
- Easy operation and maintenance
- Low operating costs
- Removes water contaminants but retains good minerals in water
- Long operational lifetime

### Service And Features:

- Supply customized design with wide range of capacities.
- Supply as part of integrated system to achieve the performance guarantee values
- Fast track delivery
- Retrofit for existing filters by replacing GAC media with superior efficiency.
- Installation & supervision commissioning
- Operation & maintenance services

