

GRANULAR ACTIVATED CARBON (GAC) UNIT



Activated carbon is used in water treatment predominantly to remove organic materials from water. Generally this will manifest in the form of hydrocarbon and PFAS treatment, however it can also be used to reduce organic nitrogen content, remove total organic carbon, and remove offensive colours and odours. GAC can also be used to remove hydrogen sulphide and residual free chlorine.

GAC can be implemented in any media filter, from small, pool filter-sized units for low-flow applications, to containerised vessels that combine to hold seven cubic meters of GAC that can process 15 – 20 L/s. In practice GAC units will usually operate at the end of any treatment train, after primary filtration. In this scenario, without the need for backwashing, water will be passed through the media bed until it becomes saturated with the contaminants of concern. At this point the GAC becomes ineffective and must be swapped out for new media. On projects where continuous operation is crucial, redundancy must be built in to allow for plant downtime associated with media swaps.

KEY FEATURES

- Simple to run.
- Can be implemented in almost any media filter.
- Low consumables cost (dependent on current market price).
- Zero power needs: only the feed pump requires a power supply.
- Highly effective at removal of organic compounds.
- Disposal costs of spent material will need to be factored into project

TECHNICAL DATA

LARGE

Dimensions (L x W x H)	6000mm x 2400mm x 2900mm
Gross Weight	12000kg
Consumables	Granular Activated Carbon. Price subject to market fluctuations
Optimum Flow	10-15 L/s
Max Flow	20 L/s
Containment	Skid mounted or containerised, depending on size
Operating System	No power required (unless application necessitates backwashing)

SMALL

Dimensions (L x W x H)	1200mm x 1200mm x 1150mm
Gross Weight	200kg
Consumables	Granular Activated Carbon. Price subject to market fluctuations
Optimum Flow	2 L/s
Max Flow	3 L/s

