



Rapid Gravity Filters

Brochure



Colloide

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Rapid Gravity Filters (RGF) Designed by experts



Why choose Our Systems

Colloide's Rapid Gravity Filter (RGF) offer a very robust and proven water purification solution with low operating and maintenance cost, commonly used as part of a multiple stage treatment system.

Each of our filters are engineered to meet the specific performance requirements of individual water treatment plants.

Colloide's Rapid Gravity Filters are designed as a single or multi media solution to meet the application with an overall depth of between 500 -3000mm.

RGF's are used in many different applications within a potable water treatment – as roughing filters, post clarification filtration, direct filtration, carbon filtration on the back end of works, etc. These filters provide an effective barrier to many drinking water contaminants, with excellent removal of turbidity, metals, microorganisms and colour.

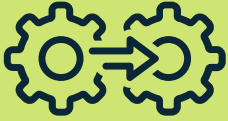


Common media include;

- Silica sand
- Manganese dioxide
- Anthracite
- Granulated Activated carbon

Discover the full RGF System Process





The water travels downwards through the filter bed, the solids are captured by the filter media and the clean water is discharged through the base of the filter. As a result of the filter capturing these solids, over time the filter will start to block at which point it will be taken off line for a backwash in order to ‘clean’ the filter before returning it to service – a process which takes approximately 20 minutes to complete. We use a state of the art backwashing process to achieve this clean.

The filters are controlled using actuated valves to control the flow of influent, backwash water and air to the filters. The plant room housing the blowers and Motor Control Centre (MCC) is often provided. The MCC will have a PLC and HMI to allow control and monitoring of the plant.



Our Experience

We have a wealth of experience in providing both new RGF solutions and upgrading existing RGF's. Our new filters can be provided within concrete structures or as prefabricated systems.



Our Capabilities Meet Your Needs

We understand each project is unique with bespoke requirements. That is why for 20 years our capabilities have expanded to enable the delivery of a wide range of options.

Capabilities

Supply chain

We have sourced suppliers and developed a reliable relationship, with suppliers based across the UK and Ireland. Our supply chain is accredited to high Quality, Health and Safety and Environmental standards.

We have the capability to deliver your requirements anywhere across the UK, Ireland, Scotland, and Wales.

Location

Availability

We have the capacity to engineer equipment on a short lead time, due to our ability to design and build off-site.

Our standardised design can be adapted to meet bespoke requirements for drinking water sites and a range of industries.

Flexibility & adaptability

Our range of Rapid Gravity Filter Options

We offer a variety of filter underdrain systems – from conventional lateral type to monolithic floor to modern dual lateral type. In this way, we can provide our Clients with a range of options. Through Colloide's technical knowledge and experience, we can provide alternative backwash regimes to suit each application, with a focus on extending run times and reducing backwash water.

We offer our RGF's as packaged filters which can be built off site OR as concrete filters which have their shells constructed on site with Colloide then installing the equipment within these on site.

Contact our sales team for further info on all specifications.



Our Product Range



Activated Sludge Treatment



Anaerobic Digestion



Biomass Heating and Heat Pumps



Chemical Dosing



Bridge Scraper Systems



Clarifier Systems



Control Systems



DAF



Deep Bed Sand Filters



District Heating & Energy Centres



Dynamic Sand Filters



MBBR



MBR



Membrane Filtration



Multi Cell Media Filtration



Pressure Filters



Pumping Stations



SBR



Tekleen Filters



Rapid Gravity Filters



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