

Gravity sand filters

autonomous and valveless

AGF

the simplest automatic sand filter



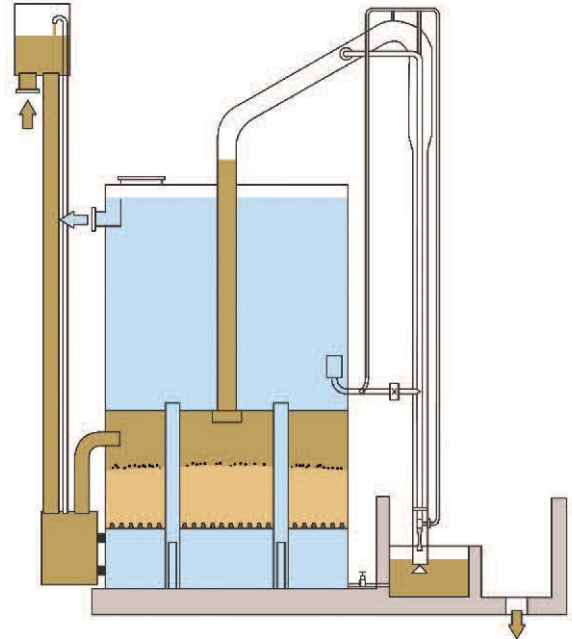
Municipal drinking water



Mining industry

AGF is a fully automatic gravity sand filter that is used in a number of differing industries to remove suspended solids from water. Among its applications are.

- Iron and manganese removal
- Make-up water for cooling systems
- Plant and process supply water
- Potable water
- Side-stream filtration of sea and ground water cooling systems
- Tertiary treatment and final effluent filtration



Features

Construction and installation

- Supplied in a wide range of diameters
- Optimised design parameters
- Straightforward installation
- Double bed version available

Operation

- Extremely simple operation
- Autonomous mechanical operation
- Automatic backwash only when necessary on loss of head principle
- No backwash pumps or automatic valves needed for operation
- No pressurised water required
- Minimal running costs and operator involvement
- Larger flow rates through a single unit compared to other designs
- For standard applications no air required for backwashing

Maintenance

- Minimum wear and tear, reduced maintenance

Benefits

- Covers a wide range of flow rates
- Constant efficient operation
- Configuration as per customer requirements
- Twice the flow for the same footprint
- More manageable backwash
- More cost efficient

- Fit and forget filters
- Ideal for use in zoned hazardous areas
- No electrical requirements for operation
- Human error eliminated as filters can not backwash too early or too late, too fast or too slow
- Stores own reservoir of backwash water for backwashing purposes when required
- Either gravity flow or low lift pumps to get feed to inlet tank
- Lifetime costs lower than other systems
- Less units required
- Manual or automatic air scour facility can be built in when required, e.g. final effluents



Oil & gas industry



Municipal drinking water

- Less manpower required

Application

Side-Stream Filtration of re-circulating ground water cooling system

Location

Power Station, South Africa

Operating data

1 x 4.2m diameter, single bed, maximum flow 140m³/hr

**Application**

Bore-Hole water, iron, manganese and solids removal for drinking purposes

Location

Municipal Water Treatment Works, UK

Operating data

2 x 7.5m diameter, single bed, maximum combined flow 890m³/hr

**Application**

River water solids removal for process requirements

Location

Gold mine, West Africa

Operating data

2 x 3.0m diameter, single bed, maximum combined flow 140m³/hr

**Application**

Final Municipal Effluent solids removal to meet consent levels before discharge to river

Location

Municipal Waste Water (Sewage) Treatment Works, UK

Operating data

3 x 4.5m diameter, single bed, maximum combined flow 480m³/hr



Technical Data

- Areas of application
- Flow rates - Single Bed Units
Double Bed Units
- Nominal line sizes
- Flange connections
- Filtering levels
- Operating pressures
- Temperature -At sea level
At 3000m
Intermediate
- Materials of construction
- Manufacturing
- Corrosion protection
- Filter medium
- Backwashing medium
- Controls

Filtration of water, final effluents and process liquids

Up to 1130m³/hr

Up to 2260m³/hr (Unlimited in multiple units)

50 to 800 mm

As per requirement

Influent max. \pm 50 mg/l

Atmospheric

Up to 70°C

Up to 30°C

Between above

Carbon steel, Stainless Steel

Sound engineering practice

Painting as per requirement

Sand, Anthracite and others as per application

Filtrate

For standard cooling, drinking and process applications - none. Where biological containments are present, for example in final effluents, manual or fully automatic air-scouring available.

Technical details above are typical.

Automatic backwashing / No hassles / Low maintenance - Sound interesting?

If you are looking for filters with a difference that give all of the above and more, together with proven track records, backed up by solid references and many years of product history then...

For all your water filtration and purification needs contact the specialists